

The Japan Field Study Trip 2019 May 11-19, 2019





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Date Visiting Places

May 13 Courtesy Visit on Mr. Yohei Sasakawa of The Nippon Foundation

Courtesy Visit on Maritime Bureau, MLIT

May 14 Port and Airport Research Institute

JAMSTEC - Yokosuka Headquarters

May 15 TOKYO MINATORIE

Miraikan – The National Museum of Emerging Science and Innovation

May 16 Port of Tokyo

Mitsui E&S Shipbuilding Co., Ltd. Okayama Gakugeikan High School Hinase Satoumi Research Institute

May 17 Nippon Maru

SASAKURA Engineering Co.. Ltd.

Site Visit Report

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Visiting

Courtesy Visit on Mr. Yohei Sasakawa of The Nippon Foundation Courtesy Visit on Maritime Bureau, MLIT



Courtesy Visit on Mr. Yohei Sasakawa of The Nippon Foundation



Courtesy Visit on Maritime Bureau, MLIT

Courtesy Visit on Mr. Yohei Sasakawa of The Nippon Foundation

KUMAR, Rajinder (India)

- 1. A visit to the headquarters of the Nippon Foundation was one of the highlights of the field study trip to Japan, wherein, Sasakawa Fellowship students got an opportunity to meet Dr. Yohei Sasakawa. This visit was also an official commencement of the field study trip which has introduced us about the rich and magnificent culture of Japan.
- 2. A visit to the Nippon foundation was planned for our group of 29 students who represents 27 different countries and almost all the continents of the world, Prof. Laura Carballo and Mrs. Susanna Perlheden as a part of field studies trip to Japan. It was one of the most important days of the field trip to Japan as we were going to meet Dr. Sasakawa on this day. All the students were filled with enthusiasm when they were seated in the conference hall of the Nippon Foundation premises. All of us were eagerly waiting to meet him and have an interaction. As Dr. Sasakawa entered the room we greeted him and he was welcomed by Professor Carballo. She convey sincere thanks on behalf of WMU for his valuable contribution to the University. Also, she took this opportunity to thank him for providing fellowship to the students and support to Sasakawa Global Ocean Institute. She conveyed the gratitude on behalf of Dr. Cleopatra Doumbia-Henry, President of World Maritime University.
- 3. The afternoon session in the Nippon Foundation conference room started with the brief introduction of the students to Dr Sasakawa. In a short span of one minute each, we gave a short introduction with our background and aspirations for the future. We were welcomed by Dr Sasakawa and he explained his expectations from us in his speech. He has brought out the various projects which are part of Nippon foundation and how such projects are serving the humanity. He explained the efforts by the foundation to make the earth a better place of living and importance of the international cooperation. In his informative speech he explained the importance of the oceans and the danger we are posing to the them. He emphasized on the sustainable development and appropriate use of seas. The importance of collaboration and understanding among countries for maintaining world peace was explained. Also, he has explained his relationship with the Sasakawa fellows and his strong bonding with them through a series of letters. He wished that we should graduate from WMU as ambassadors of Nippon Foundation. His speech was motivating for all of us and we understood his philosophy of development of the world through sustainable oceans. He introduced the future projects of the Nippon Foundation to improve the living conditions of the people by providing education and improving medical facilities for the people. He advised us to stay connected and make a strong network with the Sasakawa fellows. He wished us all the best for our studies and blessed us to earn the graduation in time.
- 4. On completion of his speech a token of gratitude as a few words of thanks are given by Ms, Thema Ward. At the end of the session we got an opportunity to have a photograph with Dr. Yohei Sasakawa. It was an unforgettable moment for all of us and the session ended with a group photo in Nippon Foundation.

Courtesy Visit on Mr. Yohei Sasakawa of The Nippon Foundation

WARD, Thema Jamila (The Federation of St. Kitts and Nevis)

The 2019 Japan field study trip of the Sasakawa Fellowship students officially commence with a courtesy visit to the headquarters of the Nippon Foundation. Each year, the Sasakawa Peace Foundation through the Nippon Foundation organized a field study trip that allows the students the opportunity to visit Japan and explore its culture, history, people and the work of the Nippon Foundation.

This year the trip comprised of 29 students from 27 countries, along with 2 World Maritime University (WMU) staff members, Professor Laura Carballo and Mrs. Susanna Perlheden. The student and WMU staff members were all seated by 13:30 in the Nippon Foundation Conference room as they anticipatedly awaits the arrival of Dr. Yoshi Sasakawa with enthusiasm. Dr. Sasakawa was greeted with a round of applauds as he entered the room.

Professor Carballo made the opening statement as a representative of World Maritime University. She thank Dr. Sasakawa, the Sasakawa Peace Foundation and the Nippon Foundation for their continuous support to the students as well as the university. She expressed the gratitude and thanks from Dr. Cleopatra Doumbia-Henry, President of World Maritime University for his continued support of the Sasakawa Peace Foundation and the Nippon Foundation towards the students, the university and the WMU- Sasakawa Global Ocean Institute and the marine sector.

This was followed by the individual introduction by each of the Sasakawa fellowship students, their country of origin, their specialization as well as their motivational and future goals. Dr. Sasakawa later followed by first welcoming the fellowship students, Professor Carballo and Mrs. Susanna Perlheden for traveling to Japan. Dr. Sasakawa commented on the importance of continuing work to protect our oceans from issues of pollution and the global dependency of the world ocean for sustainability. Dr. Sasakawa educated the students on the history as well as the future endeavors the Nippon Foundation has ventured into from the maritime and shipping sector as well as social welfare, public and education. He highlighted the continued work the Nippon Foundation with developing nations such as Ghana and wish for more co-operations and partnerships with other developing nations. He later stressed the importance of each fellowship student to use the connections gathered throughout their studies as well as the Japan field study to strengthen their relationships that will continued well after graduation from World Maritime University.

After Dr. Sasakawa inspiring speech, I, Ms. Thema Ward gave the vote on thanks on behalf of 2019 Sasakawa Fellowship students and expressed our immense gratitude to be forward such great opportunity to be selected by the Sasakawa Peace Foundation to study at the World Maritime University and have a field study to Japan. I expressed despite being from different countries, having different languages and cultures, we are one family and would cherish the opportunity given to us by the foundation to continue building on our networking well after graduation.

The afternoon ended with a group and individual photography session with Dr. Sasakawa.

Courtesy Visit on Maritime Bureau, MLIT

IRAWATI (Indonesia)

On the second day in Japan, right after courtesy meeting with Mr. Yohei Sasakawa in The Nippon Foundation office, we went to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). There, we were greeted by Ms. Ashu Ikeda who then gave us brief introduction about Maritime Bureau of MLIT. Mr. Yasuhiro Urano was also there to gave us explanation about Japan's policy on maritime safety and security. Not only those two people, the person who drafted the Hong Kong Convention, Dr. Otsubo was also there to give us a welcome speech.

MLIT Overview - By Ms. Ashu Ikeda

Japan, with 126 million populations has approximately 34000 km coastline and 378 km² of land area which 66% of it is a forest. With its EEZ area totally 4,479,358 km², Japan is the 6th largest in the world after United States, France, Australia, Russia, and Canada. There are several challenges faced by Japan, those challenges are: natural disasters, less natural resources, low birth rate and aging population, how to sustain growth in economy, and climate change. All of these issues are the issue which is part of the MLIT responsibility.

The missions of MLIT Japan are:

- 1. to utilize, develop, and conserve land in Japan in an integrated and systematic way,
- 2. to develop infrastructure necessary for attaining the goals,
- 3. to implement transportation policies
- 4. to promote the progress of meteorological tasks,
- 5. to maintain marine safety and security.

Maritime Bureau, as one of the bureau in the MLIT is one of the most important administrator related to maritime issue in Japan. This bureau consists of 9 divisions with different task, as follows:

- 1. General affairs division,
- 2. Safety policy division,
- 3. Ocean development and environment policy division,
- 4. Seafarers policy division,
- 5. International shipping division,
- 6. Coastal shipping division,
- 7. Shipbuilding and ship machinery division,
- 8. Inspection and measurement division,
- 9. Seafarers license and maritime promotion division.

Japan's contribution to the International Maritime Organization (IMO)

The second presentation at MLIT was presented by Mr. Yasuhiro Urano as the Deputy Director of Safety Policy Division in Maritime Bureau.

Japan plays an important role in the international maritime cluster. The reasons are, firstly, Japan holds the 3rd position in related to shipbuilding volume (measure by tonnage). Secondly, in terms of dead-weight tonnage,

Japanese merchant fleet is on the second highest number after Greece. Hence, this makes Japan as the leader in discussion at IMO as a major shipping and shipbuilding country. Japan is also the Council Member of IMO since the establishment of the Organization. Japan contributes to the IMO Funds and is the 12th largest among all the Member States. The important thing is 2 chairs of the IMO meetings are Japanese. Mr. Hideaki Saito as Chair of MEPC (Marine Environment Protection Committee) and Dr. Susumu Ota as Chair of SSE (Ship Systems and Equipment). The role of Japan not only that, Dr. Shinichiro Otsubo is the person behind the development of the Hong Kong Convention.

Current stance at IMO. Now, Japan is the top 10 countries who submitted the documents with the total of 334 documents submitted in the last five years. The CO₂ emission reduction, NOx emission reduction, and finalization of Hong Kong Conventions are the examples of outcomes from the IMO led by Japan.

Maritime digitalization in Japan. As of now, the automation and digitalization are becoming hot topics in maritime. Japan has 31 projects related to this digitalization in order to boost the productivity in various area related to shipping. In this regard, Maritime Bureau of MLIT plays an active role with the launching of "ishipping". This project will focus on the acceleration of digitalization in maritime sector and enhancement productivities such as design (quicker design spiral), production (smart shippard), and operation of ships (safer, more reliable, and attractive ships).

Japan and Maritime Autonomous Safety System (MASS). Related to MASS, Japan developed a roadmap for MASS with 3-phase approach. Phase I is ongoing now up to 2020, then continue by Phase II until 2025, and Phase II from 2025 onwards. All the phases will involve the development of conventional ships from the ships with IoT (internet of things) which is already exist to the ships that capable to perform tasks autonomously without seafarer's approval.

The recent development in Japan related to MASS are: remoter control navigation; autonomous navigation or collision avoidance; and automated berthing.

Lastly, the visit at MLIT was concluded by taking a group picture together.

Courtesy Visit on Maritime Bureau, MLIT

AL-MAHARIQ, Enas Nadi Hamed (Jordan)

Overall contents

We visited the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). In the beginning, MLIT has introduced its own organization that consists of many bureaus including maritime. MLIT try to attain its goals, implement transportation policies, promote the progress of meteorological tasks, and maintain marine safety and security through utilize, develop and conserve land in Japan in an integrated and systematic way, which is not only transport but also infrastructure, land and tourism.

Secondly, MLIT has explained and elaborated some of the facts about Japan, for example, EEZ (4479358 km²) which is considered as the sixth largest EEZ in the world, and the population is (126 Million) with a land area (378 km²), (66%) as a forest. Furthermore, coastline (43000 km²). Strength and Challenge for strategy toward marine environment protection the government had a great contribution to rule-makings for marine environment protection in IMO. For instance, Japan plays a pivotal role in the rule-makings at IMO, with regard to the regulation on CO₂, which is promoted the R&D projects to achieve 50% CO₂ reductions. NOx emission reduction, in this area Japan based on the front-runner technologies in Japanese manufactures. In addition, Japan finalized the legal framework in the Hong Kong Convention. The number of documents that have been submitted to IMO since the past 5 years is 334, which the number is higher than other country's submission. This is because Japan maritime cluster, which consists of industry, academia and government, has been well established and promoted cooperation to enhance the level of standards based on technological background. As long as the high level's standards based on advanced technologies are accepted in IMO, the Japanese industry will be able to develop further than other countries' maritime industry by taking advantage of advanced technologies.

On the other hand, there are challenges, which face Japan and should be dealing with in order to develop constantly. For example, a shortfall in human resources is probably a serious problem to keep high standards of performance in international society. Moreover, this situation occurs not only in government but also in the maritime industry. Nowadays, those who have excellent technology are getting older and young people are lack of sufficient technical capacity.

Thirdly, Japan plays as a major player at the IMO; it is contribute as a 12th largest among of all member states. Moreover, Japan leading discussions at IMO as a major shipping and shipbuilding country. Which is occupied the second position in the world (by ownership by dead-weight tonnage). In addition to that, occupied the third position in the world by gross tonnage.

The hot issues in safety and security in Japan

Japan tries to be in the top by highlighting several kinds of research and ongoing projects for entirely or partly unmanned maritime autonomous surface ships (MASS). Whilst technological solutions are being developed and deployed, In Japan view, there is a lack of clarity about how to regulate MASS by international instruments such as SOLAS and COLREG.

Japan working in trial projects in MASS, which is Autonomous Navigation /Collision Avoidance, Remote Control Navigation, and Automated Berthing.

Future Work

MLIT is now facing many challenges so that they should pull in the right people who are competent. Moreover, MLIT should consider reviewing its policy to support the maritime industry in a way that allows it to move gradually in that direction to take the right measures.

In conclusion, the approach in MLIT inspired me to learn more, the MLIT intrigues us and set a good example as a highly professional institution. I learned the importance of the ocean, global environmental issues that we currently face. A new research institute would be fruitful for us to understand the ocean very well. Moreover, we learned that Sasakawa global network will be important to deal with some issues and would contribute to maritime society.

Courtesy Visit on Maritime Bureau, MLIT

WACHIRA, Margaret Wanjiku (Kenya)

The WMU Sasakawa Fellows 2019 paid a courtesy visit to The Ministry of Land, Infrastructure, Transport and Tourism on 13th March 2019. It was the first day of our field study visit to Japan. A warm welcome was accorded to us of which we will be forever grateful for. MS Ashu Ikeda gave us a brief orientation on MLIT. The main topics covered include MLIT mission, Organization and the divisions of the Maritime Bureau. The topics also highlighted the facts about Japan and the challenges it faces at the moment.

A detailed review of the facts about Japan included its population, the land area coverage, coastline dimensions and its prefecture. It was very interesting to discover that the Exclusive Economic Zone(EEZ) of Japan covers an area of 4,479,358 square kilometers is the 6th largest in the world. In addition, despite the occurrence of natural disasters, low birth rate and the fact that Japan is poor in terms of natural resources it was very interesting to note that Japan one of the most technologically developed nations in the world and has also immensely developed through the development of seaborne trade. This is majorly attributed to its heavily dependency on maritime transport for both national and domestic seaborne trade. Japan is also the No 1 shipbuilding industry technology since 1956.Ms Ashu also gave a brief explanation of what MLIT stands for, its legislative responsibility and its divisions.

MLIT is one of the largest ministries in Japan and consists of 16 internal bureaus. Maritime Bureau is one of them. The Maritime Bureau's mains mission is to ensure safety and security of ships and seafarers. It consists of 9 divisions which covers issues on General affairs, Safety matters, Ocean development and environment policy, seafarers, international shipping, coastal shipping. Shipbuilding and ship machinery, inspection and measurement and seafarers and maritime promotion.

A presentation of Japan policies on Maritime Safety and Security was done by Mr.Yasuhiro Urano,the Deputy Director of the Safety Policy Division of MLIT. Mr.Yasuhiro is a WMU graduate of 2012 and a Sasakawa fellow. He has over 15 years' experience in working with MLIT before becoming the deputy director of the safety policy division in 2018. In his presentation, Mr.Yasuhiro gave an overview of International Maritime Organization(IMO) as the umbrella body. This included the overall objective of the IMO, and its structure. It was interesting to note that out of the IMO staff,4 of them are from Japan. In addition, one of the served secretary generals of IMO between 2004 and 2011 was from Japan too.Mr.Yasuhiro gave an outline of the organization of IMO sub-committee meetings and also outlined the functions of IMO members states participants in such meetings. An overview of Japan as a major player in the IMO was outlined and also its main contributions was also given. It was interesting to note that Japan is 2nd position in the world in terms of fleet ownership by deadweight tonnage and 3rd position worldwide in terms of shipbuilding volume by gross tonnage. The chair of the MEPC committee and Safety and Security of equipment sub-committee is taken by Mr. Hideaki Saito and Dr.Susumu Ota consecutively who are also Japanese.

In terms of Japan's current stance on IMO issues, the country has taken a paradigm shift in its engagement in IMO meetings. This is by way of playing the pivotal role in the rule-makings at the IMO in a more positive manner by promoting domestic industries participation based on existing expertise and also by promoting research and development projects. This has resulted to a great reduction of Carbon emissions and finalization of the Hong Kong convention legal framework. Japan was among the top ten countries which submitted the documents to the IMO within the past 5 years. I consider this as a major achievement.

Mr.Yasuhiro continued by giving an overview of hot issues on safety and security in Japan. Among the key hot issues given was Maritime autonomous surface ships(MASS), Development of intact stability criteria, Safety of mooring operation, safety of onboard lifting appliances and winches and Fire safety of Ro-Ro passenger ships.

On Maritime autonomous surface ships, Mr.Yasuhiro recognized various researches and ongoing projects on the topic in various countries which include Japan. However, he added that Japan is of the view that there is lack of clarity on how to regulate MASS by use of international instruments such as SOLAS, COLREG etc.

The Development of Intact Stability Criteria was also recognized as a hot topic mainly due to stability related incidents due to wave force occurrences. In addition, the existing criteria cannot allow the flexibility of different designs for big ships that have emerged of late. In that regard, IMO is therefore currently highly motivated to establish a more physics-based intact stability criteria which includes higher flexibility in terms of ship design. He concluded this specific topic by referring that more information can be found on IMO docs. The third hot topic was the safety of mooring operation. On this topic, new measures for the safety of mooring operations have been widely discussed at the IMO level. This is mainly due to the large number of accidents experienced during mooring operations. Recently, European states have proposed the development of regulations for the design of mooring operations while Japan proposed the maintenance of mooring lines instead.

The fourth hot topic in discussion involves the safety of onboard lifting appliances and winches. This is due to the increase of accidents occurrences onboard lifting appliances on a worldwide perspective. For instance, in Japan, a fatal accident of the same manner occurred due to the failure of a cargo handling crane installed onboard. During the session of the safety and security of equipment's sub-committee session 6, Japan advised for further guidelines that prescribe measures related to the agreed draft SOLAS regulations for considerations under the aforementioned subcommittee.

The 5th and the last hot topic for discussion regards the fire safety of Ro-Ro Passenger Ships. In that regard, the International Maritime Organization(IMO) started discussions on further measures to reduce fire accidents on both new and existing Ro-Ro passenger ships. The SSE sub-committee recently initiated a discussion to consider the interim guidelines to the SOLAS amendments under the close coordination of the state of Japan. However, recently the SSE subcommittee recently finalized the draft interim guidelines for minimizing incidences and consequences of fires on Ro-Ro vessels of new and existing Ro-Ro passenger ships.

Mr Yasuhiro finalized with analyzing different digitization projects in the maritime sector. Various projects have been initialized in various areas. The Maritime Bureau launched the i-shipping project in 2016 in its mission to accelerate the digitization in the maritime sector and further enhance productivities in the design and operation of ships. Other research and development projects that have been put into place include Utilization of Big data analysis where data will be collected, analyzed and monitored to prevent collisions in ships. Operational support, hull monitoring and machine monitoring are also part of the research and development approach to ensure safety onboard ships.

Japan anticipates to achieve the automation of surface ships by 2025 and has subdivided the phases into 3. Phase I includes the development and implementation of Internet of things and has already been implemented. In phase II, Japan aims to develop a technology whereby ships can perform tasks upon seafarer's approval while phase III will be whereby ships can perform tasks even without the seafarers approval by 2025. New trial projects envisioned that are geared towards the achievement of phase II include the autonomous navigation for collision avoidance, remote controlled navigation and automated berthing.

Other issues discussed included Maritime cyber security whereby key projects by Japan to address cyber securities were raised in MSC 94,96 & 98 sessions at the IMO.A resolution captured in MSC .428(98) resorted that cyber risk management should be incorporated in an approved SMS under the ISM code. However, it only prescribed the general components of cyber security management but does not prescribe to the extent in which shipowners and operators should take action. Moreover, the project has been completed and is in use in the shipping industry in Japan at the moment.

The third part of the session of MLIT visit involved a speech by Mr.Natig Hasanov, WMU student council and also a sasakawa fellows for 2019. In his speech, he thanked the Nippon Foundation most importantly for the scholarship opportunity and the opportunity for the field trip and also to the MLIT for great hospitality accorded to the sasakawa fellows in our visit. He gave an assurance that the network of sasakawa fellows will continue to grow even after graduation.

In a nutshell, it was a great opportunity for us to acquire a real life experience application of what we have learnt in our studies so far. We were also able to interact with WMU Alumni who have already acquired the knowledge at WMU and are now applying it in their respective maritime fields. We also had a great opportunity to ask questions concerning the application of what we are learning from our coursework and also regarding various topics on our ongoing dissertations. This was truly a memorable visit and I recommend it for future sasakawa fellows.

Courtesy Visit on Maritime Bureau, MLIT

HATIKULLAH BIN AHMAD ONG (Malaysia)

During our first day field trip in Japan on 13 May 2019, we visit to Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT). The courtesy visit was start with orientation about Japan and the introduction about MLIT and Maritime Bureau division by Ms. Ashu IKEDA. After the orientation about Japan, we have been greeting by Dr. Otsubo, Senior Deputy Director General from Maritime Bureau.

To give better understanding about MLIT we have been given briefing regarding the mission and organization structure of MLIT. The MLIT mission is to utilize, develop and conserve land in japan and integrated and systematic way. MLIT also responsible to develop infrastructure like airport, harbor and railway line. In term of maritime, MLIT responsible to maintain marine safety and security in Japan. There are 19 bureaus under MLIT consist, road, housing, railway, maritime, port ad harbor, aviation and coast guard. Under Maritime Bureau, there were 9 different division that responsible to dealing with maritime sectors. The divisions are like General affair division, safety policy division, ocean development and environment policy division, seafarer policy division, international shipping division, coastal shipping division, shipbuilding and ship machinery division, inspection and measurement division and seafarers license and maritime promotion division. Shipping and maritime sectors important for continues development of Japan. Most of the material and resources brought to Japan are by ships.

After the orientation and welcome speech, we have been introducing to Japan policies on maritime safety and security by Mr. Yasuhiro Urano, Deputy Director, Safety Policy Division Maritime Bureau, MLIT. He is also Sasakawa Fellow Class of 2012. The Presentation start with the introduction of himself and the overview of the IMO. Before he holds the position as Deputy Director, he works at IMO as Junior Professional Officer (JPO) from 2016 to 2018.

Japan is one of the major players at the IMO. Japan became council member at IMO since its establishment. Japan is the 12th largest contribution to the IMO fund. Japan leading discussions at IMO as a major shipping and shipbuilding country. Currently Japanese fleet at 2nd position ranking in the world as per ownership and by dead-weight tonnage meanwhile, in term of shipbuilding Japan in 3rd position.

Many outcomes and rule adopted at IMO is led by Japan likes CO2 emissions reduction, NOx emissions reduction and Hong Kong Convention. In the past 5 years Japan has submitted 334 documents to IMO. Among the top 10 countries in submitted the documents.

After the introduction, Mr. Yasuhiro Urano explain the current issue happening in Japan maritime sector. Japan conducting researched and work on project related to MASS. The next level of shipping technology that will contribute to safer shipping environment in the future. Japan also trying to work on how to clarify regulation regarding MASS because under SOLAS, COLREG there were no such regulation or chapter to dealing with MASS. So, this will be the challenging task for Japan and IMO.

Another issue worked by Japan is regarding the development of intact stability criteria. We have been briefed regarding the existing criteria intact stability was derived from experienced base, without considering wave-induced force. Stability related accident due to wave force frequently occurred and the emerging of big size and new design ships also will affect the existing criteria of intact stability. So, Japan has been leading the discussion with persuasive comments, corporation with universities, ship building companies and maritime institutes in Japan to dealing with this issue.

Apart from that issue, japan government through MLIT is focusing on maritime digitalization in japan. Maritime bureau has launched I-Shipping project in 2016 to accelerate digitalization in the maritime sector and to enhance productivities by design, production and operation of ships.

The effort has been taken by Japan government through Maritime Bureau under MLIT to improve maritime technology for better solution in energy saving is impressive. With the issue climate change facing globally and the calling to reduce the emission from shipping sectors, Japan is leading through their research and development (R & D) and the cooperation between other stakeholder like shipping company, maritime technology manufacture and government is strong.

Visiting Port and Airport Posses

Port and Airport Research Institute (PARI) JAMSTEC - Yokosuka Headquarters



Port and Airport Research Institute (PARI)



JAMSTEC - Yokosuka Headquarters

Port and Airport Research Institute (PARI)

SUBHAWICKRAMA, Prasad (Sri Lanka)

The PARI is one of the most important institutions which conducts continuous research in the port and airport construction sector in order to explore sustainable and cost-effective solutions to apply during the practical implementation of the projects. Japan, as a country with minimum natural resources and a large number of natural disasters, the role of the PARI is crucial in the project implementation of the respective sectors in view of achieving the feasible outputs. The innovative solutions blending with the new technology is vital in new projects to make sure the structures are capable to withstand against natural disasters. Further, the optimum usage of material and testing the applicability of hybrid composite materials are essential to increase sustainability. The number of testing facilities is maintained in the PARI premises and conducting various researches to achieve the above objectives.

The long term exposure experiment facility in one of the important processes conducting in PARI undergoing testing since 1966. The behavior of the material is tested with time in view of understanding the changes and exploring the new solutions for improvements. Especially, the exposure to the marine environment is tested using the sea water circulation tanks and seawater shower exposure test site. The durability of materials such as concrete and steel are tested with the effect of tidal zones, splash zones and underwater to identify the possible deteriorations. The evaluation of the results of these experiments is vital to upgrade the new designs and maintenance procedures in port facilities.

The large scale testing facility is another important laboratory which investigates mechanical properties of the port, coastal and airport structures, and their components by conducting loading test on large scale models. The facility consists of strong rigid floors and walls which could be utilized to test two directional load-bearing tests. Depending on the test results, the necessary corrective measures are applied to the initial designs in view of constructing safe and strong structures that could be able to bear the actual loading at the operational stage. Further, the identification of appropriate materials based on the loading level also possible under this facility.

The testing facility with a 3-Dimensional underwater shake table is utilized to investigate the stability of different types of foundations against the process of liquefaction during the earthquake. Especially, in a country like Japan located in a seismic zone, the construction of structures that resist the earthquake is essential. The applicability of the different types of foundations such as caissons, sheet piles, concrete blocks and concert piles for quay walls, breakwaters, and seawalls with various backfilling materials could be tested in this facility for the process of liquefaction during the earthquakes. Accordingly, the most suitable type of foundations and backfilling materials can be identified depending on the magnitude of the earthquake.

Japan is a country that is regularly under threat of tsunami and typhoons. Therefore, the coastal structures are needed to be designed considering the effects of the adverse loading of such natural disasters. Accordingly, the PARI conducts this kind of test in a large hydro-geo flume (LHGF) facility. The different types of wave heights can be generated in this facility and the resistance of coastal structures such as breakwaters and seawalls is tested for those waves. Depending on the test results in relevant measures applied to the initial designs considering the worst possible wave heights. Therefore, this facility is essential to understand the necessary loads and conditions in view of building a safe and strong coastal structure against the tsunami and typhoons.

The technological innovations utilized in researches at PARI are beyond contemporary thinking, and they help to provide sustainable solutions for port and airport construction projects. Especially, the application of modern technology in research methods is an eye-opening fact during the visit to PARI. Further, the necessity of studying the effects of natural disasters on port and marine structures is one of the important lessons lent from the visit at PARI.

The technical know-how and the friendliness shown by the staff of PARI encouraged us to explore the information in detail by inquiring more questions throughout the whole visit. It was very useful to understand the practical application of outputs of researches and applicability of the same techniques in our respective countries.

Port and Airport Research Institute (PARI)

POONTAI, Yatimaporn (Thailand)

On the third day of the trip, 13th May 2019, we visited Port and Airport Research Institute (PARI). PARI is a part of the National Institute of Maritime, Port and Aviation Technology as a National Research and Development Agency and is a part of the Ministry of Land, Infrastructure, Transport, and Tourism. PARI is located in Yokosuka City, about 50 km south of Tokyo, and about an hour from Tokyo. The institute is placed in Kurihama Bay, where Perry arrived in 1853 and can overlook the beautiful Tokyo Bay Uraga Channel and the Boso Peninsula. The research institute has many experimental and research management buildings in a site approximately 400m long and 200m wide and has a staff of 100 and much-related personnel. The Port and Airport Research Institute is called Port Air Research and is known worldwide as Port and Airport Research Institute (PARI).

PARI has dedicated research and development of ports and airports to ensure smooth and efficient construction and related technology improvements. PARI aims to improve technology development relating to the effective and efficient development of port and airport by achieving investigation, research, and technology development on port and airport development. They devised a plan in medium to long term. The research and development of PARI such as Promotion of Cross-sectoral Research of the three former institutes, Research and development (R&D) of Technologies Related to Port, Waterways, Coastlines, and Airport, Passing on research results to society and Promotion of Global Strategic Activities.

First, they started to introduce research facilities as long-term exposure experiment facility, which is the only one explosive experiment facility in Japan. It combines with simulating a tidal zone and underwater area as seawater circulation tank, simulating a splash as Seawater shower exposure test site and sea atmosphere exposure site. Seawater use to assess the decompose and long-term durability of various materials, for example, concrete, and steel. The result of the evaluation is used for upgrading for the design and the operation and maintenance for port facilities.

Second research experiment facility is the Large-Scale Testing Facility which uses for exploring the mechanical properties of the port, coast and air terminal structure and their segments by leading structure tests on large scale models. To endure the response against applied forces and support the models and loading, strong, rigid floors and walls are required.

The third facility was the Large Hydro-Geo Flume (LHGF) tsunamis of 2.5 m.

The model experiment is to reduce the field to understand the phenomenon, but in the small model experiment, the nature of sand and structures changes from the area, and the actual phenomenon may not be reproduced correctly. This facility is the world's largest wave, a 3.5 m wind wave, and a large water channel that can generate a tsunami of up to 2.5 m, which is a rare experimental facility in the world. The size of the water channel is 184 m in length, 3.5 m in width, 12 m in depth, and has a sand ground layer of 4 m in depth. In this channel, almost full-scale experiments can be conducted, and it is possible to reproduce the movement of the ground and the failure process of structures, which were problems, especially in small model experiments. Using this experimental facility, PARI is conducting research on the prevention and mitigation of disasters caused by tsunamis, storm surges, high waves, etc., which have severe effects on people's lives and property. The next facility that has been introduced was Three-dimensional underwater shaking table whole. This facility was developed after the Great Hanshin-Awaji Earthquake, and the behavior of the port facility during

the earthquake, the liquefaction characteristics of the ground, and seismic isolation resistance using the large scale (1/30 to 1/15) experimental model Facilities for developing new technologies in the coastal area and revetments and breakwaters of offshore artificial islands are affected by earthquakes differently from structures on land because they are built in the water. In this facility, a vibration table installed at the bottom of a 13 m square, 2 m deep water tank can vibrate in three dimensions: two horizontal directions and one vertical direction with a maximum displacement of \pm 30 cm and a maximum acceleration of \pm 2 G. Using this, then apply seismic force to the model of the facility to study the effects of earthquakes in water.

Moreover, PARI has other main facilities that use for research such as Random Sea and Coastal Wave Basin, Laboratory for Coastal Ecotoxicology (LACE), Coastal Bottom boundary Eco-hydro Dynamics experiment flume (CBED-flume) and Simulation Tank for Oil Recovery in Marine Situations.

Port and Airport Research Institute (PARI)

KENSEN, Matthew (Vanuatu)

PARI

The WMU Sasakawa fellows of 2019 visited the Port and Airport Research Institute (PARI) on the 14th of May 2019. This visit was one of the most interesting site visits as it gives the students an insight to the ground-breaking researches that PARI had done and is currently engaged in.

OVERVIEW OF PARI

PARI is located in Yokosuka city in the Kanagawa prefecture which is approximately fifty kilometers south of Tokyo city. PARI was inaugurated as a national research and development institute and is also part of the National Institute of Maritime, Port and Aviation Technology. PARI has both medium and long-term plans to achieve its set targets that were set by the Ministry of Land, Infrastructure, and Transport (MLIT) of Japan. PARI focuses on maximizing their achievements in research with regards to the development targets as outlined below:

- Promotion of Cross-sectoral Research of the three former institutes
- Research and Development (R&D) of Technologies Related to Ports, Waterways, Coastlines, and Airports, emphasizing on below research fields:
 - ➤ Maintenance technologies for ports and airports
 - > Improving port and airport infrastructure
 - > Disaster prevention and mitigation
 - > Creation and utilization of the coastal environment
- Passing on Research Results to Society
- Promotion of Global Strategic Activities

PARI operates multiple experimental facilities which includes a Large Hydro-Geo Flume that is currently the world's largest experimental wave flume capable of generating wind waves of maximum 3.5 meters and tsunami waves of maximum 2.5 meters.

EXPERIMENTAL FACILITIES

The first experimental facility that was visited is the 3-Dimensional Underwater Shake Table. This facility was established after the Great Hanshin-Awaji Earthquake. The shake table is used to experiment port and airport behavior during an earthquake and ground liquefaction characteristics so that new developments can be made to withstand or resist the vibrations of high intensity seismic waves which thus ensure safe buildings, infrastructures and reduced casualties.

The second experimental facility that was visited is the Simulation Tank for Oil Recovery in Marine Situations (STORMS). STORMS is the only large-scale test tank in Japan that is capable of conducting experiments with actual heavy oil on seawater. STORMS can simulate various sea conditions such as current, wav, wind and water temperature that can affect the efficiency of oil spill response under actual sea conditions. This facility is really useful and vital for intensive research and development for advancing oil spill response technologies which will eventually be used in mitigating and preventing oil spills now and in the future.

The third experimental facility that was visited is the Large-scale testing facility. This facility was built purposely to investigate the mechanical properties of port, coast and airport structures and their components by conducting structural loading tests on large-scale models. Large-scale models were tested to assess their

reaction against applied forces. Rigid floors and walls surrounds the facility to withstand the forces that are applied on the models.

The other experiment facilities that were visited are located within other departments within PARI. The table below categorizes the different research clusters or groups within the various departments within PARI:

Table 1: Table showing the different Research Groups within the various Departments within PARI. (**Source:** www.pari.go.jp/en)

Department	Group		
Coastal and Ocean Engineering Department	Wave Group		
	Maritime Structures Group		
	Coastal and Ocean Development Group		
Marine Information and Tsunami Department	Marine Information Group		
	Marine Environmental Information Group		
	Tsunami and Storm Surge Group		
Coastal and Estuarine Environment Department	Coastal and Estuarine Environment Group		
	Coastal and Estuarine Sediment Dynamics Group		
Geotechnical Engineering Department	Soil Mechanics and Geo-Environment Group		
	Soil Dynamics Group		
	Soil Stabilization Group		
	Foundations Group		
Earthquake Disaster Prevention Engineering	Engineering Seismology Group		
Department	Earthquake and Structural Dynamics Group		
Structural Engineering Department	Structural Mechanics Group		
	Materials Group		
	Pavement Group		
Frontier Technology and Engineering Department	 Sensing and System Technology Group 		
	Robotics Group		
	Oil Spill Response Group		
International Research Center for Coastal Disasters			
Life Cycle Management Research Center			
Ocean Infrastructure and Offshore Wind Energy Research Center			
Productivity Improvement Research Center			

PARI's missions are based on the MLIT's basic plan for putting MLIT's recommended policies into practice. Japan, as a country, faces various important challenges and PARI is very instrumental in ensuring that the policies that were put in place become operational so that these various challenges can be solved in a sustainable way.

Many developing and least developed countries are also facing some of the similar challenges that Japan is currently facing and faced before. Hence, by visiting PARI, the WMU-Sasakawa Fellows of 2019 came to see the current new technologies that are deployed in various situations that can help solve some of the world's problems. Therefore, the site visit to PARI is very important not only to the individual students or to the maritime world, but also to the overall understanding of the process involved in translating policies into practice for the betterment of a nation.

JAMSTEC - Yokosuka Headquarters

ZAMEEL, Hussain (Maldives)

As a part of the Sasakawa Sponsored Students trip to Japan, on 14th of May we had the privilege to visit the Japan Agency for Marine-Earth Science and Technology (JAMSTEC).

JAMSTEC which was formed in 1971 has transformed from a argely technical organization into a research organization pursuing both scientific research and the development of technology.

Today, JAMSTEC is a scientific research agency which has a main objective to contribute to the advancement of academic research in addition to the improvement of marine science and technology by proceeding the fundamental research and development on marine, and the cooperative activities on the academic research related to the Ocean for the benefit of the peace and human welfare. JAMSTEC also plays a huge role in researching to reduce the impact of earthquake and tsunami disasters.

Currently JAMSTEC has 8 Research vessels which are in operation, Support Vessel YOKOSUKA, Deep Sea Research Vessel Kairei, Oceanographic Research Vessel MIRAI, Research Vessel KAIMEI, Research Vessel, SHINSEI MARU, Research Vessel HAKUHO MARU, Manned Research Submersible SHINKAI 6500 and Deep Sea Drilling Vessel CHIKYU.

YOKOSUKA; This vessel acts as a support ship for the SHINKAI 6500. Also this vessel has many functions which can be used to clarify the surface layer of the deep sea bottom.

KAIREI; this vessel also as the support ship for the deep sea ROV, KAIKO 7000, which can conduct surveys up to a maximum depth of 7,000 meters. The vessel can accommodate upto 22 research personnel.

KAIMEI; this is the worlds most advanced research which can efficiently perform wide area seabed research to help in climate change research and studies for prevention and reduction of disaster risks associated with earthquakes and tsunamis.

SHINSEI MARU; the 1,635 tons research vessel was built as a part of program known as "measurements of reconstruction in response to the Great East Japan Earthquake". The vessel is well known for its equipment's which helps to the observation of Oceanic environment and Marine weather observations.

In addition to the Research vessels JAMSTEC also uses four vehicles to conduct deep sea research. The Deep Sea Cruising AUV URASHIMA is an autonomous underwater vehicle for deep-sea exploration developed and operated since 1998 by JAMSTEC. URASHIMA can be pre-programmed to travel autonomously, using its onboard computer.

Other vehicles used are HYPER-DOLPHIN which is able to conduct surveys at a maximum depth of 4,500 meters and the remotely operated vehicle *KAIKO* can dive down to depths of 7,000 meters.

The underwater vehicle known as DEEP TOW used at JAMSTEC has the capacity to conduct a deep ocean floor survey as deep as 6000 meters. If you happen to visit Japan, consider to keep JAMSTEC in your bucket list as it will give you a lifetime experience.

JAMSTEC - Yokosuka Headquarters

PHAM, The Quyen (Vietnam)

Introduction

On 14 May 2019 Sasakawa fellowship awardees were organized to visit the Agency for Marine-Earth Science and Technology of Japan (JAMSTEC), which is located in Tokyo Capital. The Agency is the pioneer in researching the ocean and earth in Japan. In two visiting hours, we were introduced about the history of JAMSTEC and were taken to the site offices where we had excellent opportunities to study the projects, which are being carried out by JAMSTEC. The representatives of the Agency introduced the main projects of JAMSTEC that included the manned research submersible SHINKAI 6500, autonomous underwater vehicle URASHIMA, Hydronic Chamber, and the research vessel SHINSEI MARU. The following paragraphs are some key features of JAMSTEC that we obtained during the site visit:

JAMSTEC history and mission

JAMSTEC was found in October 1971 with the name was Japan Marine Science and Technology Center with the function of developing the technologies servicing for marine researches. After a period of development, in April 2004, Japan Agency for Marine-Earth Science and Technology (JAMSTEC) was established as an Independent Administrative Institution. In April 2015, JAMSTEC made a fresh start as a "National Research and Development Agency." The main role of JAMSTEC is to study and understand the generation process and forecasting of earthquake and tsunami to projections of protecting the marine environment. Furthermore, JAMSTEC is working on protects to contribute to the improvement of marine science and technology by proceeding the fundamental research and development on marine, and cooperate the activities on the academic research related to the Ocean for the benefit of the peace and human welfare.

Deep Sea Cruising AUV URASHIMA

The deep sea cruising AUV URASHIMA is an autonomous underwater vehicle for deep-sea exploration developed and operated since 1998 by JAMSTEC. The vehicle can be pre-programmed to travel autonomously, using its onboard computer. As it can get closer to the seabed during exploration than a research vessel can, AUV URASHIMA acquires extremely high-resolution seafloor topographic data and subbottom profiler data.

Deep Submergence Research Vehicle SHINKAI 6500

SHINKAI 6500 is a manned submersible that can dive to depths of 6,500 meters – deeper than any other manned submersible for academic research all over the world today. In 1991, SHINKAI 6500 began its mission to study seafloor topography and geology and research deep-sea organisms in the Pacific Ocean, Atlantic Ocean, and Indian Ocean as well as the sea around Japan. In March 2012, JAMSTEC completed the major upgrade of SHINKAI 6500, which was the largest scale since its launch. The mission of SHINKAI 6500 is to ascertain movements in Earth's interior, clarify evolution of living organisms, utilize and conserve deep-sea organisms, elucidate thermal and material cycles.

Research Vessel SHINSEI MARU

SHINSEI MARU vessel was built as part of the "Measurements for Reconstruction in Response to the Great East Japan Earthquake" of the Japanese government, and it is also the research vessel supporting the "Tohoku Ecosystem-Associated Marine Sciences (TEAMS)" program. The vessel was named after its predecessor research vessel TANSEI MARU which was decommissioned in January 2013 after many years of

contribution to various research activities including new development in the Tohoku region. The mission of SHINSEi MARU is to understand the actual large-scale natural variability caused by the Great East Japan Earthquake, to monitor the continuous change in ecosystem disturbance and the repair process of disturbed ecosystems, to study the oceanic environment observation such as temperature, sea water quality, current profiler, to measure the quantitative of biological resources, and observe the marine weather including wind direction, wind speed, humidity, atmospheric pressure, precipitation, amount of carbon dioxide, etc.

Hyperbaric Chambers

This is the instrument with the function reproduces pressure conditions of the deep sea down to a 15,000m depth. It is used for fatigue tests, pressure-tolerance tests, and operation tests for various deep-sea instruments and materials, to Increase the reliability of deep-sea instruments and materials.

Conclusion

The site visit gave me a great opportunity to experience and approach to advanced technologies of JAMSTEC. These technologies have been contributing to the development of researches of Japan regarding to ocean environment and the earth, which aims to protect global environment and human from nature disasters. Furthermore, the results of the researches are not only beneficial to Japan but also the world. Through this site visit I have also learned a lot about professional working environment and diligence of Japanese people. In overall, the visit has brought me valuable experiences for my future work and gave me more motivation to contribute to the development of my organization as well as home country.

Visiting

TOKYO MINATORIE

Miraikan – The National Museum of Emerging Science and Innovation



TOKYO MINATORIE



Miraikan – The National Museum of Emerging Science and Innovation

TOKYO MINATORIE

MANNAN, Mohammad Samsul (Bangladesh)

On 17th June, we, the Sasakawa fellows of class of 2019, paid a visit to Tokyo port water front area. Tokyo port authority received us cordially. Representative from port of Tokyo, gave us a brief presentation about port of Tokyo. Port of Tokyo is one of the largest and busiest ports in the Pacific region. This port was initially built for trading between local ports of Japan. This port opened for international trade on 1941. Since then, this port has become the commercial hub for Japanese trade. This port handles almost 24,000 Commercial vessel and 8533 tons of goods every year. The main export of this port includes high value cargo, manufactured goods, machines and computers. Whereas the main import of this port includes food item. The port is expanding very fast. In presentation, the representative of port of Tokyo mentioned the mission, vision and future plan of the port. Apart from container cargo, port of Tokyo is now focusing on building new terminal for passenger ships. As 2020 Olympic and para-Olympic is nearby, this new initiative for passenger terminal will add a new dimension in the port of Tokyo. After the presentation we went to the exhibition room. It was like a mini museum. They tried to exhibit everything since initial construction of port of Tokyo. Representative explained us briefly the reason for constructing "port of Tokyo". Initially it started its journey to trade "Japanese Saki". They showed us the journey of Tokyo port, from a small local port to one of the busiest port in the world. They tried to explain every phase of expansion, which was very interesting to hear. Every year a lot of students come Tokyo port Minatorie- Exhibition room of the Tokyo water front area, for learning Japanese history. In our visit day also, we saw a group of school students visiting Minatorie.

The building itself is in a nice location. Since, it is 100 meters above from ground level, we got a 360 degree view of the whole port. Besides, there was an in-house facility, by which we could see the different location of the port of Tokyo. All of us enjoyed that facility. We were impressed by the Technology, hospitality and humbleness of the Japanese people.

Tokyo Minatorie:

The exhibition room is a fantastic place to visit. It has many facilities including future deck, Edo deck, history gallery, communication deck and port deck.

Future deck: In Future deck, we experienced "Port virtual Explorer". "Port Virtual Explorer" enables you to explore with a tablet AR visuals of the Tokyo Waterfront City and otherwise-inaccessible places such as the operator's compartment of a gantry crane and the inside of the public utility.

Edo deck: Edo deck consists of dioramas and models to re-create the lifestyle of Edo citizens along the river bank and introduce the culture generated from the marine trade and port in the Edo Period.

Communication deck: Minatorie has a seminar room for training program; a space for events and exhibitions; introduction to the Marine Park.

History gallery: History gallery helped us to look back on the 400-year history of the port and the city of Edo/Tokyo, with chronologically compiled graphics and photos.

Port deck: In port deck, we saw 6 videos about Tokyo Port, showing the postwar reconstruction and growth of Tokyo.

After visiting all this places, we become astonished. Most of us were impressed by the Japanese technology and future plan. As Olympic is going to be held in the Japan, next year, Tokyo is preparing herself accordingly, for this big event. Port of Tokyo should consider to show this facilities to the outside world. As I am a port officer, I felt that my country should have this kind of facilities. I will surely advice my authorities to build such type of facilities.

I personally, liked the visit to the port of Tokyo. The visit helped me to learn about port of Tokyo and Japanese culture. Presently, Japan international corporation agency (JICA) is constructing new port in my home country, Bangladesh. I will surely advice JICA to make same facilities in my country, which will help stakeholders to know about the history of ports in my own country.

TOKYO MINATORIE

SRENG, Chantha (Cambodia)

During the field studies in Japan, Sasakawa fellow students were able to visit many workplaces where we were provided lecture and visit. Even though we are from different specialization, we all did perceive benefits from the visit. The Port of Tokyo is one of the most interesting places we have visited. On the 15th of May 2019, there were 29 Sasakawa fellow students have visited the Port of Tokyo which was divided into parts. The first part was about the introductory of Tokyo Port by getting lectures by technical officers and the second part was about the tour walking around at the Minatorie- Exhibition Room of the Tokyo Waterfront Area (Port of Tokyo). Students were presented about the port background from the past to the present. Likewise, the officers also shared the implemented experiences which they have done to develop port with environmental sustainability and on how to compensate on the loss of damages from the development or enhancement of the port. Therefore, the visit to the Port of Tokyo was very useful and informative for students in terms of commercial aspects and environmental aspects.

The Port of Tokyo is an international trading port of Japan which is one of the largest seaports in Japan opened on May 20th 1941. The Tokyo Port is playing a crucial role in Japan's Growth, supporting the lives and livelihoods of a population of 40 million people in the capital and surrounding areas. With the upcoming Tokyo 2020 Olympic and Paralympic Games, the number of tourists is rising from year to year, and The Port of Tokyo is the main destination for a tourist and leisure spot. The Port of Tokyo is an attractive tourist site due to the proximity of the waterfront to the city centre, the view of the bay area, the container terminals and Rainbow Bridge and the high-rise building of central Tokyo.

According to the 2017 handbook, the Port of Tokyo is located in the area between the estuaries of the Arakawa and Tamagawa Rivers which is covered by the port area (water) of 5 179 hectares and harbour area (land) of 1 028 hectares. The port statistic in 2015 has revealed that the port is able to handle the volume of cargo about 85.33 million tons and 23, 997 incoming vessels. The total amount of foreign trade value is 17 611. 9 billion yen which is a huge amount of money. The port of Tokyo is characterised as a commercial port which is responsible for distributing commodities essential in its industrial activities and enriching the lives of the citizens; sundry foods foodstuffs, paper products, building materials and so forth which are handled at the port and directly delivered to the industry in Tokyo; the area of the port's influence not only encompasses metropolitan Tokyo but extends out broadly as far as the Shinetsu region and the southern part of the Tohoku area which is playing as the main role in terms of connecting land and sea for the smooth intermodal transportation; Responding swiftly to the transport revolution of the 1960's by taking action to greatly enhance its accessibility and functionality with terminals for container, ferry and cargo; warehouse and distribution centres which have developed to facilitate distribution activities.

While the development and the enhancement of the Port of Tokyo to be capable of increasing port activities for the purpose of economic growth, the negative environmental impacts might occur. Therefore, we were offered lectures on how to offset the damages. To compensate for the damages, the Port of Tokyo has conducted some projects which help to conserve and generate new spots for nature. There are many parks

created, namely Greenery at Tokyo Waterfront City, Wild Bird Park, Waterbirds Wintering at Kasai Marine Park, Kasai Maine Park, Sea Forest Project "Umi-no-Mori" and the restoration of coast project. The purposes of creating parks are to use for sports ground, barbecue, natural observation, fishing and beach recreation which are beneficial for people living in Tokyo city and obviously for the tourist attraction. The environmental compensation strategies done by the Japanese government are very educative and informative for all fellow students, especially those who are specialising in Ocean Sustainably, Governance and Management.

In summary, the visit to the Port of Tokyo was a great occasion for Sasakawa fellow students because we have learnt a lot of knowledge which is shared by experts working at the Port and of course, we also had an opportunity to visit Minaroie-Exhibition Room of the Tokyo Waterfront area where is the tourism site. The knowledge and experiences we gained from the visit to the Port of Tokyo will help us both our current studies to fulfil our master degree and our future career.

TOKYO MINATORIE

MBOTIJI, Noella Njeuyap (Cameroon)

Introduction

On the 15th May 2019, World Maritime University Sasakawa fellowship students class of 2019 visited Minatorie-Exhibition Room of the Tokyo waterfront area (Port of Tokyo). The port of Tokyo which was opened as an international trading port on May 20th 1941 is now one the world's major ports and it plays a crucial role in Japan's growth, supporting lives and livelihoods of a population of over 40 million people in the capital and surrounding areas. To raise the profile of the waterfront area and the international presence of Tokyo as a whole, the port is promoting the development of Tokyo waterfront City as a world class and tourist destination. However, with the upcoming 2020 Olympic and Paralympic games approaching, the number of overseas visitors to Tokyo is increasing yearly and Tokyo's port is gaining attention as a tourist and leisure destination.

Geographical Location

Tokyo port is located in an area between the estuaries of the Arakawa and Tamagawa Rivers. Because of its location proximity, it serves as a gateway to Tokyo's Izu and Ogasawara islands and as work continues there will continue to be an improvement on the port and airport facilities to guarantee the safety and security of the islands' inhabitants, maintain local infrastructure and support the growth of industries.

Port statistics

Incoming Vessels
Volume of Cargo Handled

23,997 vessels
85.33 million tons

Foreign Trade Value 17,611.9 billion yen (From trade statistics)

Content of the port of Tokyo 8th revised port and harbor plan

As a result of international trade growth, technological advancements, increasing concerns of environment/safety/security, changing demands patterns of people amongst many others, the port of Tokyo has as content the following;

- > International commerce port connecting the world
- > International tourist harbor visited by people from around the world
- A harbor with environment leadership which leads the world
- > Sports City Tokyo to entice the world and open up the future
- ➤ World-class safe and secure bay area

It is extremely important to prevent the smuggling, illegal entry and other criminal acts using vessels or shoreline to ensure that Tokyo remains a city that enables the local residents to continue to live with peace of mind.

Conclusion

The visit to the port of Tokyo by WMU students class of 2019 was a big success and very fruitful. It was an educative and informative session which will help students in capacity building and for future purposes. It is recommended that future Sasakawa Fellowship students be given the opportunity to visit this international

leading port facility.

Miraikan – The National Museum of Emerging Science and Innovation

ROJAS TRILLOS, Reynaldo (Colombia)丸

Visit the Museum of Emerging Science and Innovation was one of the most enriching and thrilling experience which provided us insight into Japan's robotics capabilities and achievements.

The main objective of this museum is to show, in a friendly and straightforward way, some phenomena from day to day, as well as allowing young people and adults to have contact and literarily touch and interact with science and technology. This type of interaction with questions from day to day, which cannot arise, as well as the spatial development and participation of Japan in this race to space, as well as some of the latest technological advances available, especially those related to robotics and humanoids.

This type of museums not only allows the approach of science and technology to people, especially children that can develop many concerns and can call attention directly allowing them to venture into the world of science in the future. This can be seen in the essence of its slogan "Science Changes People, People Change Worlds" that shows us how science and technology is the differentiating factor that contributes to the development and progress of first world nations like Japan.

This museum is more than a simple museum, it also has areas of laboratories where different scientists advance their various research projects, the visiting staff has the opportunity to observe them through the glass as the research is developed and day by day in a first-level laboratory. Some of the ongoing projects, in which the laboratory scientists are working, are the following:

- Photo-Energy Conversion Project
- Intelligent Systems Project
- Humanoid Project
- Cyber Living Lab | Embodied Media Project
- Multisensory Communication Project
- Mitochondrial Biogenesis Project
- Implicit Processes of Mind and Brain Project
- 2D Materials Project
- SFC Lab | Science Communicator Project
- JIZAI Body Project

The facilities include a permanent exhibition, divided into three main parts. The first one is exploring the frontiers, this area contains different activities where the visitor can interact with the universe, especially locating us and showing us our solar system and the direct interaction between the earth and life.

The second part creates your future, is focused on the interaction between science, technology, and people, primarily pointing to a future that is sustainable for human beings. Here is the opportunity to interact

especially robots and humanoids, but especially the development of innovation and new futuristic ideas for human beings and their environment.

Finally, the last part discovers your land, this part seeks to demonstrate that we do not know much about the planet in which we live. It also seeks to generate awareness of the impact of human beings on the earth and the importance of technology to help the planet.

The students were impressed by the capacities and achievements of the japans technology and were grateful for the positive impact of such activities to the whole of humanity.

Miraikan – The National Museum of Emerging Science and Innovation

SOE HTUT (Myanmar)

It was such an amazing trip to Miraikan – The National Museum of Emerging Science and Innovation. I really love the slogan of 'Miraikan' which is "Science Changes People; People Change Worlds". It means that the science is changing people with the help of cutting-edge technology and in turn the innovative spirit of men with the help of technology leads a better future of the world. Therefore, it can conclude that science is indirectly changing the world.

The founding principle of 'Miraikan' is also very realistic. It states "we believe that science and technology are part of our culture. We provide an open forum for all to ponder and discuss the future roles of science and technology". Not only the founding principle but also the three activities such as service communication, development of science communicators and creating connections play important roles for the science society. Miraikan highlights cutting-edge science and technology as "new knowledge and innovation" through various methods, such as permanent and special exhibitions, talk sessions, experimental classes, on the web, through publications, and videos.

Miraikan also trains Science Communicators internally and externally through a unique human development system based on practical science communication activities. At Miraikan, Science Communicators are appointed on a fixed-term system for a maximum of five years. During their terms as Science Communicators, they engage in science communication activities, including providing explanations of exhibits on the exhibition floor, and planning events and exhibitions. After that, they can have jobs in research institutes and universities.

The underlying network within the Miraikan also includes researchers, engineers, the media, volunteers, Member's Club, museum visitors, government offices, schools, science museums in Japan and around the world, and industries.

Based on the above-mentioned facts, Miarikan is not just a museum for tourist attraction and recreational place for younger generations. It is the place which has an amazing vision with the strong foundation principles. It not only educates younger generation of Japanese people but also provide a platform for researching and discussion about the science matters through important stakeholders throughout the world. Moreover, it also gives opportunities for science enthusiastic people to be able to work and progress their career. Therefore, Miarikan is indeed a wonderful place for younger generations of Japanese people.

During the trip, I had an opportunity to explore around third floor and fifth floor within an hour (11:00 to 12:00). A duration of one hour cannot give me enough time to explore all facilities in detail. Therefore, I quickly skimmed the facilities provided in both 3rd and 5th floors.

At third floor, there are several sections to explore such as Tsunagari, geo-scope, life style, innovation, robots, network, digital expression, science workshop and information society. My focus was on robots as I have been imagining for a long time to see a live demonstration of robot's activities. Surprisingly, a 'ASIMO' robot show will be conducted in 10 minutes and I had to run fast to get a good place for the show. The show was amazing and the robot can do talking, walking, running as well as playing with football. It was such a wonderful experience to see the performance of 'ASIMO'.

After that, I went to network section where I can visualize the mechanism behind the transfer of information on the internet and through cell phones with the help of the movement of white and black balls. I also entered

the information society where I can experience the songs of ANAGURA. There, you can know how will a world that has fully incorporated with spatial information will react the location, movement and voices of you as information. Finally, I took photos with 'Tsunagari' which is an earth-like sphere.

Then, I moved to fifth floor where numerous amazing sections like medicine, the universe, human, life, earth environment, our solar system, the earth, the universe and VR theater are existed. I still got 30 minutes left. Therefore, I went to universe category in which the protype and materials used in International Space Station are displayed. There I can see the application of different procedures for the same activities of mankind between the earth and the International Space Station. Then, a full-size model of the Shinkai 6500, which is one of the world's deepest manned research submersibles in earth section had my attention and I realized that how small the size of the place where human have to live and work during the research operation. The prototype was not really realistic but you can have a general idea of how these submersibles are working.

All in all, I thought that visiting museum is beneficial only for kids and teenagers. But after exploring through the museum for an hour, I acknowledged that there are so many things I don't know. The tour through the museum gave me amazing and different perspectives about the science that is supporting our daily lives. I believe that the children, teenagers as well as adults and elder persons who are visiting the museum can have a chance to know the importance of science in our daily lives. Finally, I believe that Miarikan is such a unique place for distributing science information, doing research and educating children for the benefits of younger generation of Japanese people.

Miraikan is a place where we can understand the things happening in our world today from a scientific point of view, and have discussions while considering the future that awaits us. In addition to exhibitions that provide people with a chance to enjoy hands-on contact with science and technology, Miraikan's colorful line-up of offerings includes experienced based classes, and talks. Visitors can experience the technological progress of today, from simple day-to-day questions, to the latest technologies, the global environment, space exploration and life science.

Founding Principle

Activities - Three Pillars

Science Communication

To arouse the interest of the general public, Miraikan is developing methods of expression and communication to present the information in an easy-to-understand manner.

Development of Science Communicators

At the end of their terms, armed with their experience as Science Communicators, these knowledgeable personnel take up jobs in research institutes, universities, science museums and other museums, corporations, and educational institutions.

Creating Connections

Miraikan views these relationships as multi-dimensional linking Miraikan's activities to all society, and continues to strengthen its connections with these eight stakeholders. Miraikan approaches these people and organizations and engages with them in its projects and activities. Through such engagement, Miraikan creates links between cutting edge science and technology and the general public.

Slogan

"Science Changes People" means not only to learn and understand science, but also to consider new ways to engage with "the state-of-the-art knowledge and innovation" presented by cutting-edge science and technology.

"People Change Worlds" means seeing all of life differently through the lens of "the state-of-the-art knowledge and innovation", and, through discussion followed by action, leading the world to a better future.

Miraikan – The National Museum of Emerging Science and Innovation

SALUM, Mohamed (Tanzania)

On 15th day of May, 2019 and immediately after our site visit to Tokyo port, we had an opportunity to visit the National Museum of Emerging Science and Innovation (MIRAIKAN) which is also very close to the Tokyo port. The visit was not official and many thanks to the Nippon Foundation which decided to buy us the tickets for the entry into to the museum and it was left for every one individually to explore for the period of one hour.

But at the time of our entry we were informed that at third floor ASIMO, a Humanoid Robot created by Honda, is about to start performance and we ought not to miss it, thus all the group rushed to the third floor to witness the performance. Despite its ability to mimic almost all human movement including jumping with one leg, the robot informed on the need for us humans to protect our environment for the future generation as we have no other place to call home. The performance ended within 15 minutes and thereafter we had time to explore other parts of the museum individually.

Personally I explored some areas of the museum including the Discovery Earth, which is the live display of global weather system. The view of the globe is majestic and for detailed analysis of any part of the world they have provided a special weather center with latest technologies and user friendly computer touch screens for you to explore. I was very impressed when I was able to view the detailed weather of my city.

Thereafter I visited other parts of the museum and saw my school students flocking around. I went and visit an operation room where u can practice how an operation is done to a human. I also visited an example of a Space Centre and experience the life of astronauts, the items they use while in space. Also the Museum has display of all then names, photos and country of origin of all the astronauts since the time of space exploration had started until today. It is really educative and inspirational to the young generation.

There is an area I also visited where you can practically see, participate and understand how a computer intake, process and give output to the information by observing the chain flow of information. This is like a game which you can participate and understand the chain flow of information, there was a lot of school students in this game as it was seen to be interesting and very fascinating.

I also visited a display showing the greenhouse gases (Co2) emissions as the cause of global warming and its effects to the earth the place we all call home. The display uses different color of bearing balls having different measurements and sizes and each color and size replicates different types of greenhouse emissions and how of circulating around while moving into different holes and channels. By observing this balls movement, you can understand sources of emissions, the effects they have to earth and what should be the solution for our own future existence. It was very educative and inspirational to observe this display.

There were many things to see but time was not in our hands therefore the last thing I observed was the area allowing you to create your future my interacting with computers and answering some questions, it was good experience for us all and is good way for practical learning.

At around 11:45 the tour came to an end as all group gathered at the entrance of the Museum and afterwards
we went for lunch.

Visiting

Mitsui E&S Shipbuilding Co., Ltd. - Tamano Works Okayama Gakugeikan High School Hinase Satoumi Research Institute



Mitsui E&S Shipbuilding Co., Ltd. - Tamano Works



Okayama Gakugeikan High School Hinase Satoumi Research Institute

Mitsui E&S Shipbuilding Co., Ltd. - Tamano Works

GEYMONAT, Santiago Juan (Argentina)

During the field trip to Japan, the 29 fellows had the chance to visit many different Institutions, Organizations and companies related to the maritime community. Historically, the geographical position of the country and the limited resources available contributed in the sea-view development. Therefore, shipping was a fundamental activity for the country, in order to trade with the rest of the world importing the needed and not available resources. For that reason, the development of ports was a relevant action taken by the Authorities, exploiting the 34,000 km of coastline. But that was not the only action undertaken, to have an important role in shipping ports and policies are not enough, therefore, since the beginning of the 19th century the development of the shipbuilding industry was one of key to understand the actual status of Japan.

Mitui E&S Shipbuilding is just an example of that development. It is one of the several companies that conform the Mitu E&S Group, with origins in the 1917 under the name Shipbuilding Division of Former Mitsui & Co. Located in Tamano city, southern Okayama Prefecture, the company gave us a very warm welcome during the morning of Thursday 16th May. The visit started with a brief introduction of the Group and the company itself, where every fellow received an overall idea about the importance of the company in the Japanese shipping sector. Basically, we could understand that the company is divided into 2 main sectors: shipbuilding and engine construction.

Once the introduction finished, all of us were provided with personal protective equipment in order to conduct a guided tour along the different sections of the company. Starting with the "shipbuilding area" we walked through the welding section, where with a very comprehensive explanation we understood how the many pieces of metal are placed together to provide strength for the rest of the ship. After that we also had the chance to be on board a cargo ship that was under construction, it was in one of the most advanced step as it was composed by the bridge in a complete status. The personnel highlighted that it was planned to be ready for next September.

After that, we moved to the "engine sector", where we could see in real time the way an engine is built. We walked through the many sections involved where the tests are also conducted. The fact that 8 engines can be finished in a day was one of the most astonishing figures revealed. It was also interesting the fact that the company is not only producing engines to be placed on board, but also they are producing engines for shore, in the case of big companies or power plants, for example.

During the visit, all the members showed very welcome to receive questions from us, therefore, while we were inside the "engine area" many queries about fuel efficiency raised. The staff explained in detail that the products they are producing are already prepare to comply with the international regulation established by the International Maritime Organization (IMO) related with the use of fuel containing not more than 0,5% of Sulphur, despite the fact that it will enter into force in 2020.

When the tour finished, we all gather together with the different specialists in the main building in order to conduct a "Q&A" session. Many topics were discussed, since the concern about the environment that the company have and the firmly compromise with the sustainable development, until the impact that the goal based standards (GBS) regulations, included in the Chapter II of SOLAS Convention, could have in the design of future ships.

To conclude, I would like to express my gratitude to have the chance to visit such an important company in the worldwide scenario that along its more than 100 years has provided more than 2,000 new ships to the maritime community and a numberless amount of engines. I had the opportunity to be on board of many ships in my life, but this is the first time that I can face the process in which those ships are been built, therefore it is an experience that will last in my memory for ever and it will also help me in my professional career.

Mitsui E&S Shipbuilding Co., Ltd. - Tamano Works

HASANOV, Natig (Azerbaijan)

On 16 May 2019 morning, we visited the famous shipbuilding company of Japan Mitsui E&S Shipbuilding Co., Ltd in Tomano which established in 1917 as Shipbuilding Division of Former Mitsui & Co. and started its business with constructing ships. First of all, we were provided with the information that the Mitsui E&S Group is an engineering team that offers ships essential to physical distribution, diesel engines as power sources for ships, industrial machinery and many other different products and services in areas ranging from plant engineering to marine resources development.

Then, the responsible people of the company gave information about history. They informed us that the first diesel engine ship built in ship yard in 1924 and the company started to manufacture engines since 1926.

The company's major products are wide-ranging which include bulk carriers, LNG carriers, large crude oil tankers, naval ships, training ships and other ships, patrol ship, research vessel / training vessel, fishery patrol vessel, high-speed vessel, floating production storage and offloading system, submersible, diesel engines for ships, port cranes, rotators and other industrial machinery, power generation plants, petrochemical plants and other plant engineering, and products for social infrastructure such as bridges. The company engages not only in design and manufacturing but also consulting and after-sales services for many different products.

Mitsui E&S Shipbuilding Co., Ltd owns also MODEC, Inc., which globally operates the marine resources development business, TGE Marine Gas Engineering GmbH engaging in gas engineering, and Burmeister & Wain Scandinavian Contractor A/S, which deals with biomass power plants in Europe and elsewhere. The company will harness the Group's overall strengths to offer comprehensive solutions in the areas of energy and marine logistics.

In rapidly changing global conditions, issues surrounding the ocean such as logistics, resources, the environment and security are newly surfacing one after another. One of the company's priorities is to solve these problems and overcome this time of change by utilizing the shipbuilding technologies, they have built up over a century since their establishment with capacity to execute strategy quickly.

Mitsui E&S Shipbuilding Co., Ltd has various affiliated companies that operate in a wide range of categories, including technology research, ship repair, and gas engineering, and it will harness its overall strengths to build the Mitsui brand, to provide core technologies and services that are always a step ahead, to meet the expectations of its customers in the shipbuilding and engineering business fields, to enhance value and to contribute to the people and the society.

After presentation we visited engine factory of the company where we were informed about engine manufacture processes. Furthermore, we learnt that manufacture of one engine takes 4 days and every year factory manufactures more than 100 engines. In 2018, the company achieved the accumulated production of 100 million bhp with a single brand of Mitsui-MAN B&W diesel engines which is world record. The total production was 6555 units.

Then, the students visited ship yard and saw the process of ship building. Furthermore, we visited one ship which was building and here we got information about ship's particulars which was cargo ship. We were informed that shipyard build 8-20 ships during a year.

In the end of visit, the WMU representative expressed profound gratitude to the Mitsui E&S Shipbuilding Co., Ltd members and management that made available of enormous opportunities for students in gaining such extensive experience and knowledge, and mentioned heart-felt appreciation for their honorable hospitality. After that the memory gifts from the World Maritime University were presented to members of the company. Our visit to Mitsui E&S Shipbuilding Co., Ltd was really an incredible experience. Before visiting the Mitsui E&S Shipbuilding Co., Ltd I knew that Japan is one of biggest country for ship building with great history and I wanted to see the experience of this country on ship building. We learnt a lot of things, such as history and priorities of company, the process of manufacturing engines and ship building processes from this company visit. The staffs of the company was so friendly and their friendly behave help us to learn practically about the company. We are really wondered for such type of technological development in Japan. After that visit, I understood the real reason of economical development of Japan.

Finally, I want to express special thanks to the Sasakawa Peace Foundation and Mitsui E&S Shipbuilding Co., Ltd for arranging this unforgettable visit.

Mitsui E&S Shipbuilding Co., Ltd. - Tamano Works

TSITSKISHVILI, Avtandil (Georgia)丸

The site visit of Mitsui E&S Holding Co. Ltd was held on May 16, 2019. World Maritime University (WMU) delegation spend 2 hours at the Mitsui E&S Holding Co. Ltd. The report consists of two parts: First, General overview of the company and the second, report of the visit.

The visit started by arriving in okayama. The hotel DIAMOND SETOUCHI MARINE. Okayama is the capital city of its namesake prefecture, in western Japan. In the city, the Mitsui E&S Holding Co. Ltd is located. The company was established in 1917 as the shipping department of Mitsui business. Today the company shifted into holding company structure and manufacture a variety of products such as ships, diesel engines and industrial machines as well. In addition, The company established a training facility for students of Tamano Commercial and Technical High school in Tamano.

The production is divided into two production fields: The first Ship and Oceans, the second Machinery and systems:

Ships and Oceans production field manufacture the following products:

- The services the company provides:
- New shipbuilding
- Ship repair
- Offshore unit
- Deepwater survey unit
- Techno superliner
- Catamaran Type high-speed craft
- SWATH
- Hovercraft
- Semi-submersible underwater viewer craft
- Pleasure service craft

Machinery and systems field produces:

- Marine diesel engine. turbocharger, gas injection diesel engine, etc.
- Maintenance ad part supply for diesel engines, rotating machines, and cranes
- Columns and drum, heat exchanger, reactor, pressure vessel, rotary system tube dryer
- Gas turbine steam turbine, top pressure recovery turbine, reciprocating compressor, Axial flow compressor.

The company also builds and repairs various types of ships and offshore development equipment including bulk carriers, crude oil tankers, reefers, high-speed passenger ships, container ships, underwater equipment, and iron steel structures

As the delegation arrived on the location they received a warm welcome from the reception team. They were escorted to the conference room. In the conference room delegation was presented the highlights about the company and schedule of the day.

As the presentation was finished the delegation was provided personal protective equipment and the site visit commenced.

The first place delegation visited was a marine engine factory. There the company assembles and tests marine diesel engines of around 10000 kW power. At the final stage of testing, the customer is invited to make sure that the results are suitable. Most of the parts are produced at the spot while some such as crankshaft are manufactured and delivered by other company. The production speed is astonishing. An engine delivered every four days. Therefore the company produces more than one hundred engines each year.

The second site we visited was a block assembly shop. At this premise, they assemble blocks the bocks will be assembled into mega blocks and at the final stage combined to become a vessel. Unfortunately, due to being short in time we were briefed about the place quickly from the bus.

The next we visited was the ship which was still under construction. A bulk carriers of 60 000 Deadweight and 199 meters of length. We climb all the way to the bridge. There we were briefed about the further steps of construction. Then we came down the main deck and saw the cargo holds of the vessel. The company delivers a ship of similar dimension in 10 months. lastly, we took an official group photo in front of the vessel ATLANTIC.GR.

Finally, we arrived back to the conference room. There we had a question and answer session for about 20 minutes.

Question - 1: What are your current actions to reduce CO2 emissions from ships.

Answer - 1: We use a special material for ship construction. And we work in the direction to increase the efficiency of engines

Question - 2: How are you going to cope with the upcoming SULPHUR 2020 CAP:

Answer - 2: At the moment we only provide Scrubber installation service. In the future, we will start building and installation of scrubbers.

Question - 3: What about NOx emissions from ships?

Answer - 3: We will soon build a new workshop to produce SCR scrubbers. That will clean the exhaust from ships. At the moment we only provide installation and service only.

Lastly, the visit was closed by the final remarks of the general manager.

Okayama Gakugeikan High School

SHAHHAT, Mamdouh Awad Abdelrahman (Egypt)

On May 16th we visited the **Okayama Gakugeikan High School**, and we met with secondary school students and talked with them how they spent their day at the school and about their dreams in the future and talked with them about the Japanese language then we watched the presentation about their Satoumi project in the Archipelago of the Seto region. Their work and the presentation was excellent and miraculous as they show the interactions of humans and ecosystems by using oyster shells to assist in the growth of eelgrass after they presented they were welcoming for questions from WMU students and their answers showed the importance of ocean sustainability.

The key aspect of the Okayama Gakugeikan High School is how to grow up respectable Japanese leaders in the future.

With the passing of days, I think the high school students will be global leaders because they have a lot of skills and excellent English level mixed with the Japanese accent and they have much knowledge, and they can deal with different cultures around the globe and many more.

While they were presenting, I found how the Japanese education system is advanced because they mixed their presentation with mixed between practical and theoretical side, and this method in many countries around world unfound.

with my best wishes, Mamdouh Shahhat

Okayama Gakugeikan High School

ARAI, Yuta (Japan)

1. Introduction

We visited a high school in Okayama city on Thursday, 16th May. The high school is the Okayama Gagugeikan High school, which is one of the selected high school as a highly global education institute by Government of Japan.

We were invited the program which consists of three parts including a game session, lunch and presentation about the Satoumi project, an activity of eelgrass revitalization in the coastal waters. The program encouraged us to communicate beyond nationality and linguistic barrier with sharing a global common issue, a costal management. Finally, a Sasakawa fellowship student delivered a thank-you remark for all of the hospitality given by teachers and students in the high school.

2. Game

Dr. Furukawa, an expert of environmental and ecological symbiosis, organized an interesting game for both students to understand marine ecosystems. It used cards drawing other living things in coastal waters. All participants explained a marine creature or plant indicated on a card each other. Consequently, we learned the marine ecosystems relations and marine bio-diversity throughout playing the game.

3. Lunch

After playing the game, lunch made us relax more. The lunch box contained typical Japanese foods, namely Makunouchi Bento. While I was enjoying the lunch by myself, I was interested in how foreign students were felling about it. However, laughing voices were spreading out in the classroom so that they were surely enjoying it.

4. Presentation

Highlight of this visit was the presentation made by three high school students. We listened to a presentation about their activity of growing eelgrass and their research on measures to improve marine bio-diversity using an artificial tidal flat.

In Hinase coastal area, eel grass fields covered so wide in the past. However, it had reduced sharply by 1980s due to coastal reclamation and water pollution in associated with industrial development. In fact, although there was over 4,000 hectare of eel grass field in 1925, it declined to 12 hectare of that in 1980s. A project of eel grass revitalization started in 1985 by local fishery community. Consequently, the field has recovered to 100 hectare today.

Three high school students explained their actual involvements of the eel grass revitalization project in Hinase. That includes collecting eel grass seeds in the sea, growing them on land and allocating the seedlings underwater. Moreover, they contributed to solve a current problem caused by the project which is to remove damaged and drifting eel grass which is likely to obstacle navigation of boats.

They also presented a measure to recover a tidal flat environment. The research method was comparative research in two damaged tidal flats. The artificial basement with scattered stones had been sunk in one tidal flats. As comparing each area after a certain period, they found that benthos increased on the artificial basement more than in the another natural tidal flat. According to the field survey, they concluded that the scattered stones improved a condition of food-supply at the area by microorganisms attached the rocks. Furthermore, they found oyster shell's layer has high contribution to hold microorganisms. Thus, spreading oyster shells out into a tidal flat was indicated as a key tool to improve a tidal flat environment form their actual application in Hinase. In addition to that, they shared their findings with public in conferences called Satoumi Interaction Symposium and Eel Grass Summit in Japan, and also in their filed study in Myanmar. Their presentation was well supported by their experience-based argument.

5. Farewell remark

The farewell remark was delivered by a Sasakawa fellowship student in the end of the whole program. She mentioned that importance and responsibility of education. In her words, studying is a powerful tool to make an own future. The government, teachers, parents and students have each responsivity to provide, teach or learn education in a school. Her message fully expressed our respects toward the positive attitude of the high school students for their studying.

6. Conclusion

Their research and activity must be a best practice of mitigation and compensation of human impacts to the sea. Needless to say, coastal management is a local- and global-level common issue as the target 14 of Sustainable Develop Goals. We are very looking forward to seeing them again when they become global leaders to solve various social issues. Of course, their success should be supported by their current studying in the high school providing an attractive education.

Hinase Satoumi Research Institute

HAIMBALA, Tangeni (Namibia)

On 16th May 2019 the WMU Sasakawa Fellowship students' class of 2019 went on an expedition to visit Hinase Satoumi Research Institute at the port of Hinase and to get an insight of Satoumi. Historically, Satoumi is a combination of two words, (sato) for the village and (umi) for the sea.

On arrival, students were warmly welcomed by Dr Osamu Matsuda, the president of NPO Satoumi Research Institute and Mr Takehiro Tanaka, executive director of Satoumi Zukuri Kenkyu Kaigi, the Satoumi Research Institute. On his speech, Dr Matsuda gave a brief history of the institution. Later on, Mr Tanaka gave a short history of his biography and his roles. Initially, he was a fishery expert in Okayama Prefecture. He also served as the division chief of fisheries before retiring. Mr Tanaka has a profound comprehension into the promotion of fisheries and invigorating the Satoumi. He also mentioned that during his years as a public servant, he dedicated most of his time on the community side, where things are actually happening.

His presentation continued with the elaboration of Satoumi, in which he defined it as an ocean that has a better biological stability and production through having artificial changes made by humans. He also, modernization changed the sea state and the human role in connection with it. When the Hinase community noticed the reduction of catches and the disappearance of some species, the Hinase Satoumi Research Institute under the stewardship of Tanaka came on board with the focus on amamo (eelgrass) to revitalize the ocean. He collaborated with the inhabitants of Hinase in Okayama Prefecture, namely the Hinase Fishery Association. According to Tanaka, amamo is a piece of common knowledge among fishermen. He also mentioned the role of different stakeholders in Satoumi project. In his keynote presentation, Mr Tanaka highlighted one core important fact that led to the success of amamo (Eelgrass) restoration: it is not only science that solves problems like the disappearance of Eelgrass. The assistance, participation and the experience from the local communities is important especially towards building a successful project like Satoumi.

To understand the functionality of Satoumi project, the WMU Sasakawa Fellowship students gathered at the port and boarded the ship to visit and observe closely the oyster farming rafts and the site of amamo (Eelgrass), a characteristic of Hinase's fishing grounds. This project started in 1985 with only 12 hectares of Eelgrass available. The project comprised cleaning the ocean floor, the amamo field revitalization technique procedure, a plan between prefectures whose objectives were to increase the Japanese Spanish mackerel population, the establishment the ocean farms, as well as efforts to increase oyster aquaculture production. Initially, the amamo field had 590 hectares. However, due to the rapid modernization characterized by anthropogenic activities and climate change, the field of amamo was reduced to less than 5 hectares. As a result, the Satoumi Research Council brought this number back to 250 hectares in about twenty years. This work was possible thanks to the leadership and commitment of the fishery association. About 100 million seeds were planted which exponentially increased the size of the Eelgrass. The importance of regenerating eelgrass serve to protect oyster farming in the area. This led to an increase in fish species around the area, thus improving oyster aquaculture production. To date, Okayama Prefecture is Japan's second-largest producer of oysters, meaning there is a wealth of surplus shells.

To the Sasakawa Fellows, especially the OSGM program students, this visit was very beneficial and provided a huge opportunity that added valuable knowledge to their academic experience as this project is in line with their curriculum.

At the end of the visit, students and professors exchanged gifts from WMU as a token of appreciation to thank Mr Takehiro Tanaka, the Secretary-General NPO Satoumi Research Institute for his kind hospitality and for sharing his experience with the students. During the exchange of gifts, Professor Laura Carballo Piñeiro of WMU highlighted the importance of investing time and research study in projects such as Satoumi which is in line with the Ocean Sustainability, Governance and Management (OSGM), one of the academic programmes at World Maritime University. Finally, on the way to Kobe, while on the bus, students received a precious and traditional gifts called Bizenyaki or Bizen ware, a type of Japanese pottery traditionally from Bizen province that were conferred by Mr Masayuki Matsui, the president of Nissyo Kisen Co.

Hinase Satoumi Research Institute

IJABIYI, Roland (Nigeria)

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On the 16th of May, 2019, as part of the scheduled educational and cultural tour of Japan, all 29 of us Sasakawa Scholarship students and two accompanying faculties; Professor Laura Carballo and Susanna Perlheden, were taken on an exciting trip to Hinase Satuomi Research Institute in Okayama City. This experience exposed us to the Japanese philosophy of respect for nature and the natural order of the environment. It goes further to encourage the peaceful co-existence between man and nature, whereby humans build side-by-side with nature while protecting it and preserving the different ecosystem components.

We traveled by bus to Okayama City and proceeded to the institute. On arrival, we were warmly welcomed by a team from the institute and they ushered into a comfortable conference room which has been prepared to host us. Very informative presentations on the Hinase's Satoumi: Eelgrass and Oysters Aquaculture and History were made by two leading researchers of the institute, Dr. Osamu Matsuda and Mr. Shigehiro Fuchimoto.

The presentations centered on the practice of the Japanese philosophy of building with nature. This was explained and represented by the term "Satoumi"- which is the formation and maintenance of marine and coastal landscapes, sustained by the interaction between human beings and the ecosystem. We were also taken through the history of the eelgrass and oyster farming of Hinase's satoumi, which was another major highlight of the workshop presentation.

A brief recap of the history of Hinase's Satoumi Eelgrass and Oysters farming started with the symbolic value revitalization and resource management during the era of the Fishers' market in the year 1967. This historical timeline also included significant events such as collecting underwater garbage in 1985. Another notable event in this timeline involved the marine ranching project which included revitalization of the eelgrass beds, also in 1985. Three years later in 1988, the utilization of oyster shells was promoted in Hinase.

The Japanese Spanish Mackerel stock which was going through depletion was restored in the 1996 restoration project. In the same year, the collection and selling of sea bottom trawled oysters was done, which was another significant milestone with economic relevance to the region. In 2002, a marine ranching area was established as part of the Hinase's satoumi eelgrass and oyster restoration project history.

The class room workshop was complemented by a boat tour through the coastal landscape of Hinase, where students were privileged to see understand from a practical perspective the eelgrass and oyster project. This further shed light on the harmonious handshake with nature while benefiting from the natural resources in a responsible and environmentally sustainable manner.

The training and wealth of exposure gained from this experience will increase our knowledgebase fourfold: first, it will add to our understanding of environmental sustainability, nature preservation and coastal management which is at the core of our training at the World Maritime University. Secondly, it will provide valuable reference points for our dissertation research and assignments. Thirdly, it will enhance our capacity building and make us better leaders with prospects in the global maritime sector. Finally, armed with this knowledge and art of *Soutomi: building with nature*, we can return to our respective home countries and influence government policy with this unique knowledge of peaceful co-existence between man and nature, by domesticating this effective, tested and proven concept.

In concluding this report, it is important to show profound appreciation to all who invested time, effort and resources to make this visit to Hinase Soutomi Research Institute possible. The visionary and our financier who's stamp of approval preceded this visit, the leader and Chairman of the Nippon foundation, Dr. Yohei Sasakawa, is a man we give our sincere gratitude and respect.

We also thank our Dr. Osamu Matsuda, President NPO Stoumi Research Institute, Mr. Shigehiro Fuchimoto, President Hirashe Gyogyo Kumiai, the entire staff and management of Hinashe Soutomi Research Institute for their hospitality and warm welcome, and our facilitators and handlers, Miyo San and Takeshi San. We are indeed very grateful to all.

Visiting
Nippon Maru
SASAKURA Engineering Co,. Ltd.



Nippon Maru



SASAKURA Engineering Co,. Ltd.

Nippon Maru

BOUMGARD, Taoufik (Morocco)

Nippon Maru (日本丸) is a Japanese training sailing ship owned by the city of Yokohama. She was built by Sumitomo Heavy Industries in Uraga, Kanagawa as a replacement for the 1930-built barque Nippon Maru. The Nippon Mar is qualified as an operable ship (as a training vessel that can only be run in smooth waters). It is the predecessor of the second-generation Nippon Maru, which is operated now for on-the-top (OTJ) training by the Japan Agency of Maritime Education and Training for Seafarers (JAMETS), an independent administrative corporation governed by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

Ship particulars:

- Type: Sailing vessel (Four-masted barque)

- Year of built: 1984

Length overall: 110.09 mGross tonnage: 2,570 tonsEngine: 2 diesel engines

Capacity: 190 (including 120 cadets personsOwner: National Institute for Sea Training

The Sail Training Ship "NIPPON MARU" was built in 1930 as a training ship for cadets. The ship brought up 11,500 cadets for 54 years until her retirement as a training ship in 1984. During her service, NIPPON MARU logged 45.4 times around the earth (1,830,000 kilometers in total). The ship was placed under the authority of the City of Yokohama in 1984 and has been open to the public since 1985. NIPPON MARU is also used for a full-sail exhibit in cooperation with volunteers and provides marine educational programs to students. While still active the ship was used to train seafarers, but since coming to Yokohama it has continued to contribute to ocean education for youth through its on-board training Ocean Classroom. The Yokohama Port Museum, operating in conjunction with the Nippon Maru, has been carrying out educational outreach programs focusing on the ocean, port, and ships for elementary level students.

Description of the vessel:

She was built by Kawasaki Shipbuilding Corporation in Kobe, and was launched on 27 January 1930 alongside her sister ship Kaiwo Maru. She was operated by the Tokyo Institute for Maritime Training to train officers for Japan's merchant marine.

Nippon Maru measures 97 metres (318 ft) long, with a beam of 12.95 metres (42.5 ft) and a draft of 6.90 metres (22.6 ft). Her gross tonnage is 2,286. She is rigged as a four-masted barque, with 32 sails covering 2,397 square metres (25,800 sq ft), and two 600-horsepower diesel engines for auxiliary functions. During her career as a training ship, she was manned by a crew of 27 officers, 48 seamen, and 120 trainees.

The Nippon Maru has retired from working as a training ship. With help from local citizen volunteers, however, it is still displayed with all of its sails set from time to time, while marine education courses for young people and other events are held on board. It is the hope that the ship's designation as National Important Cultural Property will bring more people to come visit.

The council for Cultural Affairs pointed out that the following features about the Nippon Maru have been highly rated in the histories of shipping and shipbuilding technologies:

- 1. For a long period of time, the Nippon Maru consistently assumed responsibility for training seafarers in a wide variety of circumstances and contributed to the growth of the Japanese shipping industry.
- 2. Diesel engines for vessels were manufactured in Japan with domestic technologies in the early days when ships began to be equipped with diesel engines worldwide. The Nippon Maru fully inherited the transverse framing system, riveted structure and rigs of the large sailing ships that has been equipped with such domestic engines. As for its outer shells, the steel stocks used when it was constructed have remained in many parts.
- 3. There are still data that can systematically tell how the Nippon Maru was operated and repaired, in the form of sailing journals, and other documents, the design drawing and other materials used when the Nippon Maru was built, the histories of the hull and engines, and repair records, among others, have remained.

The Nippon Maru played an active role as a training vessel for any years after it was completed in 1930 and remarkably contributed to developing the human resources who underpinned the Japanese shipping business. Therefore, possessing a training vessel needs enormous capital to manage; however, the training vessel has several useful functions. When using the training vessel in an optimizing way, the outcome of utilizing the training vessel will be inestimable.

Nippon Maru

SERTER, Deniz Can (Turkey)

Introduction

First of all, I must say that the Japan field study trip that took place between May 11 and 19, 2019 was a great opportunity for me in my professional career. All of the visits to Japanese maritime companies as well as foundations and organizations during our Japan field study trip gave me a great impression of Japanese maritime community. One of the most memorable parts of our trip was Nippon Maru training ship visit which took part on 17th of May 2019.

Sailboat Nippon Maru visit

Together with the official from Japan Maritime Education and Training, we, WMU Sasakawa fellow students of 2019 class had the opportunity to observe the Japanese training ship Nippon Maru. We were divided into 3 groups as A,B and C while visiting the ship. Our group's presenter was chief mate of Nippon Maru in 2018. But during that time of the visit, he was working for Japan Agency of Education and Training of Seafarers. Young officers on board the ship guided us together with presenter and answered curious Sasakawa fellows' questions.

Nippon Maru was a sailing training ship and utilized for the maritime education and training of the Japanese candidate seafarers. It was a part of maritime education and training of seafarers in Japan. This training ship was built and delivered in 1984. Her expected life was 50 years and to be retired in 2034. This ship could accommodate 120 cadets at the same time together with 17 crew members.

At the time of our visit, cadet students introduced Nippon Maru to us. Together with the cadet students, there were qualified instructors on board this ship which were necessary for training. In respect of the 2 important elements for the training, qualified instructors and approved syllabus, a program implemented for the cadet students on board. According to the information given to us, International Regulations for the Standards of Training Certification and Watchkeeping together with the Japanese national maritime standards are practiced on board. We have the opportunity to observe the implementation of these rules on board not only seeing just outside of the vessel, but also visiting the engine room, bridge, accommodation part and deck compartments of Nippon Maru.

Ship was quite narrow inside with low ceiling. We had to watch our heads and steps on board. While walking around we were able to observe the ship herself. For safety reasons, taking photo while walking was not allowed.

Many sails were on board the vessel but they were closed during the ships stay at port. Anyhow, we had the opportunity to see 2 sets of diesel engine located at the engine room where each have capacity of 1500 hp. Together with those engines; this ship can make 13 knots at full ahead.

As per the information given to us, the first version of Nippon Maru was retired in 1984 and now exhibited at the port of Yokohama. The version of the ship we were visiting was traditional ship of the Japan, designated important cultural property sailing ship Nippon Maru. Main part of the training was taking part with the mast and many ropes on the main deck.

A bell was placed on board Nippon Maru as a tradition and requirement of Collision Regulations. This bell was traditionally called Samurai Bell and during the practice period of the Samurai Bells, when ship was on duty, the ships bell has been ringed once every 30 minutes.

We visited the training room which was a small room having a capacity for eight people at the same time. It was a place of relaxation for apprentices. The beds measures 185cm long and 65cm wide. We also visited the captain room where captain treats guests and receives reports from navigators and officers. At senior officer salon, officers were having their meal and holding meetings. The table and chairs are fixed to the floor because of the ship's rolling during the voyages. Helm is placed at the aft of this ship to be able to watch the state of the sails during the navigation.

The sailing ship Nippon Maru was offering "Ocean classrooms" where you could experience the life of sailing ships. Coordination and spiritual strength were fostered through the disciplined group life of sailing ships. It was explained as a content that couldn't be experienced in other facilities such as deck polishing, rope work and cutter training. It used to hold in spring, summer and autumn. In the case of accommodation, cadets were staying in the Nippon Maru student room. It could also be used for school trips, working people and school training.

A total sail was a spread of all the sails (usually it was folded). There were a total of 29 sails of the Nippon Marunouchi. Some people we thinking that they were automatically spreading sails or folding them, but all crew all were doing it manually. This work was done in cooperation with volunteers who have been registered. About 2,000 people have been registered, but about 100 volunteers have participated each time to exhibit the total sail.

Conclusion

As a symbol of the new international city that enhances the sense of solidarity of the citizens, the sailing ship Nippon Maru is also preserved as a valuable historical property of Japan, and is used as an integral part of the related facilities attached and juxtaposed promote understanding and knowledge of the sea and the port.

Preservation and release of the sailing ship Nippon Maru serves for the dissemination of youth and maritime thought, management administration of Yokohama Minato Museum; collection, preservation, display, investigation of materials about the sea, port, ship and safety management of harbor green space and maintenance of environment.

All in all, it was totally a great experience for WMU Sasakawa Fellows to visit Nippon Maru during our Japan field study trip.

SASAKURA Engineering Co,. Ltd.

AUBYN, Lois (Ghana)

The Sasakawa Fellowship students of 2019 visited the premises of Sasakura Engineering Company Limited in Osaka on Friday the 17th of May 2019. As typical of the Japanese culture, we arrived to a very warm welcome at the company with a big board on which our group name was written held by some staff of the company in front of the reception upon our arrival. This gesture made as feel very welcome and we realized the company is as excited about our visit as we were also excited about the new experience we were about to have with this prestigious company.

The president of the company, Mr. Toshihiko Sasakura and the Executive Vice President, Mr. Shintaro Sasakura made time out of their busy schedule to grace us with their presence.

The President Mr. Toshihiko Sasakura gave us the welcome address and gave us a brief profile of the company. The company was established in February 1949 in Osaka. The company also has a branch in Tokyo and has expanded to other Asian countries including Hong Kong, Taiwan, China and Indonesia. It has offices in Saudi Arabia and Bahrain in the Middle East too.

Sasakura Engineering started producing desalination machines in March 1951, a product which has become their key identity. The desalination machines convert sea water into fresh water which can be used for all domestic activities including washing, cooking, bathing and even for drinking. And this has made the life of seafarers' onboard vessels relatively much easier. These machines are not only used on board vessels but also used in areas with water shortage problems like the Middle East.

The desalination machines are not the only machines or inventions of Sasakura Engineering. The company also manufactures Oily Water Separators which they began producing in 1962 and Air-Cooled Heat Exchangers since 1963. In 1971, the company started producing Reverse Osmosis Desalination Plants, Noise Control Systems and Sewage Treatment Plants. These are but to mention just a few of all the plants and machinery manufactured by Sasakura Engineering Company Limited.

It was also worthy to note that the company exported the first Desalination Plant for land installation in an Arabian Oil Company in June 1966. Also in August 1972, Sasakura Engineering received the world's largest order from the government of Hong Kong for 180,000 T/D Desalination plants. Another largest world's order was made by the government of the State of Bahrain for 46,000 T/D Reverse Osmosis Desalination Plants in January, 1983.

The president concluded by noting that the company is always researching and developing new products to meet the constantly changing needs of human and the company thrives on the motivation to create a better life and environment through its many inventions.

After the welcome address, we were given Personal Protective Equipment (PPE) such as helmets and reflective vests to wear and we divided into 2 groups to visit the various technical workshops.

First we were taken to see a model of the desalination plant. We were told the whole process it takes to desalinate sea water to make it fresh water safe for consumption. They tried to explain the process to us in very simple science to make us all understand since most of us have no engineering background. We got to know that the ejector pump supplies seawater to the evaporator chamber and generates vapour in the evaporator chamber and then goes into the condenser. The condensed vapour turns into fresh water and is transferred by pump into the fresh water tank.

During the questions and answers session, we got to know that about 20tons to 40 tons of fresh water can be produced daily using the system. We also learnt that since seawater contains salt, corrosion occurs on the metal parts of the machine and therefore regular maintenance is advised to prevent damage to the machine because it is very expensive. It was interesting to note that Japan is among the top consumers of water on a daily basis.

We then moved to the workshop that handles the Noise Control Systems. First, we were taken to a room, a gun was fired in the next room with the door opened and it sounded very loudly. The door was now shut and the gun was fired again and the sound was very low. We were then shown that there were fittings made on the door which cancels sound and reduces sound to its minimum.

We were shown a room with metal bars fitted with sound control systems which controls sound and distributes the sound equally in the room. We demonstrated this by clapping and the sound was evenly distributed at the same level throughout the room.

Next we moved to see 2 chambers that were side by side each other. One chamber was fitted with noise cancellation device and the other was not fitted with any device. We played a tambourine in both chambers. The chamber fitted with noise cancellation device produced less sound compared to the chamber without any noise cancellation fitting.

After that, we went back to the conference room where the executive vice president Mr. Shintaro Sasakura gave us his farewell remarks. Our Professor Laura Carballo gave a thank you speech on behalf of us the students and presented a gift to Sasakura Engineering on our behalf to show our appreciation for this lifetime opportunity given us by the company.

We returned the reflective vests and helmets and were given Sasakura customized souvenirs to take away to remind us of this memorable day which will be in our minds for a lifetime. We took official group photographs in-front of the office building and after that we departed.

As we practiced the Japanese culture of waving till we are out of sight, thoughts of how to help our home countries in our little ways or form alliances with other Sasakawa colleagues to make our countries and environment a better place ran through our mind due to the motivation we got from Sasakura Engineering Company Limited.

SASAKURA Engineering Co,. Ltd.

IWANAGA, Shinji (Japan)

On the 17th May, Sasakawa fellowship students class 2019 visited Sasakura engineering Co., Ltd. The company is well known as one of the biggest manufacturers of fresh water generator and noise cancelling system. The company is located in Osaka and we spent only one day in Osaka to visit there. It was established in 1949 and also has developed oil water separator and air conditioner in addition to fresh water generator and noise canceling system.

First, from the president, he gave us the welcoming remarks. Following that, we were separated into two groups and visited factories for fresh water generator and noise cancelling system one by one.

In the factory of freshwater separator, the sequence of manufacturing was introduced. Then, how to generate the fresh water was also introduced with the model of fresh water generator in the office. The procedure to generate water is as below

- 1. The evaporator chamber under vacuum evaporates seawater supplied from ejector pump.
- 2. Vapor generated in evaporator enters into the condenser after being demisted.
- 3. Vapor is condensed into fresh water and transferred to fresh water tank by pump.

The generated fresh water can be utilized for drinking, cooking, washing and any other purposes for seafarers' life on board. The characteristic of their products are bigger capacity for generating water, improvement of maintenance and stable operation. In each procedure to manufacture, some parts were equipped and the product was transported to next procedure. During the tour, there were many questions from our colleagues like bellow.

- -How much fresh water can this system supply per a day?
- Depending on system, between 20 and 40 tons of fresh water can be supplied per a day
- -Although to process seawater causes corrosion of parts, how do you devise to overcome that issue and attain to improve maintenance?
- Compared to previous model, the new model can be separated from heating parts. Therefore, it became easier to check the part which is one of the most vulnerable against corrosion. In addition, the time to check the parts became not to take time and encourage customers maintain frequently.
- -Except for on board, where is this fresh water generator used?

Sasakura has supplied this system to Middle East states suffering from shortage of water. so on and so forth.

Then, we moved to the factory of noise canceling system. We could experience several kinds of facilities. One of them was thick wall with special equipment to cancel noise. There was intensive noise demonstrating the noise at an engine room from one side and we were at another side. Both side were segregated with thick wall and special equipment. While the experiment, we could talk without any problems. After the wall and equipment were removed, it was too difficult to continue talking. They introduced that this equipment could be introduced in engine room for engineers on board and improve their working condition.

Then we moved to noise canceling room whose wall was uneven. The uneven wall reflects the sound randomly and noise cancels each other.

The another room had even walls but each angle of the walls was not parallel. Due to the unparalleled wall, the sound reflects randomly and we could hear same level of sound anywhere within the room.

The concepts of the rooms are to do experiments. The noise has been focused on for the human health. However, recently, the influence of noise on sea creatures is also being focused on. We hope that new development and investment of technology for preventing noise from ships will be conducted with this kind of facilities.

After both groups came back to the office, the souvenirs like erasable ball pens, smartphone holder and notebook, were distributed to all of us. Executive Director also gave us welcome and farewell remarks. Then prof, Calaballo also gave thanks remarks to them.

The president and executive director joined in farewell party held on the same day at Kobe.

This opportunity could be so precious for not only to know latest technology but also to get along with each other. For example, one of our colleagues from Indonesia where the branch of Sasaskura locates in and the executive director could communicate each other for not only the technical issue but also the life in Indonesia.

SASAKURA Engineering Co,. Ltd.

SAHARUDDIN, Ahmad (Malaysia)

On 17th May, participants of Sasakawa foundation had been given the opportunity to visit one of Sasakura Engineering's manufacturers and producers of top freshwater generators in the world. A few backgrounds of Sasakura Engineering, it is located in Osaka and had been established since 1949. Today, it is chaired by Toshihiko Sasakura. Sasakura Engineering has several branch offices worldwide to cater to consumer demand including at Bahrain, China, Indonesia, Saudi Arabia, Hong Kong and Taiwan.

First of all, upon arriving at Sasakura Engineering, we had been briefed on the products they produce. The products manufactured by Sasakura Engineering can be divided into 4 groups. The first group is for marine use. These include Marine Fresh Water Generator, Heat Exchanger, Cryogenic Butterfly valve for LNG Carrier, Sewage Treatment Plant and Bilge Separator. Group 2 is for land use including Air Cooled Heat Exchanger, Cryogenic Butterfly Valve and Rotary Thermosiphon Chill Roll. The third group for Water industrial use includes Desalination Plant for land, Reverse Osmosis Desalination Plant, Evaporation Concentrator and ozone Generator. The 4 and the last is Noise control and air conditioning system including Noise Control system, Anechoic Room and radiation Air conditioning system.

All the equipment they produced had been widely used throughout the world and proved to be very durable and efficient. It said that Sasakura Engineering's products account for almost 30 per cent of the world market, and that is a considerable amount. To ensure companies always competitive, Sasakura Engineering will always ensure that products they produced meet the needs of consumers, cost-effective and comply with international regulations such as IMO.

Then our group was divided into 2, where the first group would first visit the place of the freshwater generator. There, the basic concept of equipment had been described. Freshwater produced from the freshwater generator is used for drinking, cooking, washing and even running other necessary machinery which uses freshwater as a cooling medium.

Freshwater is generally produced onboard using the evaporation method. Two things are available in plenty on the ship to produce freshwater -Seawater and heat. Thus freshwater is produced by evaporating seawater using heat from any of the heat sources. The evaporated seawater is then again cooled by the seawater and the cycle repeats.

In addition to being used on boats, the same machine is also used for large-scale freshwater production for countries in the Middle East that lack of freshwater supply.

Then, our group was taken to a noise control or cancelling system room. The same equipment has been used worldwide to relieve noise problems at plants and factories and provide a comfortable and safe environment. Among other areas also use this technology are in the field of air conditioning and ventilation, ships, aircraft and underground facilities. Methods used to reduce the noise are sound-absorbing, insulation panels, duct silencers, elbow silencers and soundproof louvre.

In the same building, some experiments also had been carried out on how noise control can be performed. We are given the opportunity to feel the sound difference before and after soundproofing is installed. Scenarios such as room engine room or worker cabin area are available to see how enhancements can be made for a safer and more comfortable working environment.

We were also be taken to a sound room where a unique design room was built to ensure that the sound produced was equal in every space. It is found that no sound reduction occurs due to different hearing distances from the source, and this condition is critical and useful when sound recording need to perform like at the Audio Recording Centre for music.

Before we concluded our tour here, we had been given the farewell remarks from the Executive Director himself. From his speech, he was very grateful and overwhelmed by our visit. We also had some questions related to the company and received a pen and notebook as a souvenir and farewell sign.

Lastly, we find this visit was beneficial as we had been exposed to Japanese working culture and used of modern technology. The manufacturing method which prioritizes quality and continuous improvement is the core for the company to remain competitive.























Overall Impression on Field Study Trip to Japan

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Overall Impression

GEYMONAT, Santiago Juan (Argentina)

On Saturday 11th May, 29 Sasakawa fellows from 26 different countries started a field trip to Japan thanks to the generous support of the Sasakawa Peace Foundation. The group was accompanied by Ms. Susanna Perlheden and the professor Ms. Laura Carballo.

The group was received in Narita International Airport for Ms. Miyoko Wada and Ms. Sachiko Sumitomo who gave a warm welcome, gathering all together and conducting the group by bus to the Hotel Villa Fontaine Shiodome, located in the center of Tokyo city. In that place a very helpful orientation session took place, where all of us have been provided by information needed to the development of schedule carefully planned.

During the field trip to Japan, the students had the chance to visit many different Institutions, Organizations and companies related to the maritime community. Especially in Tokyo, we started that same day visiting the Hama-Rikyu gardens, one of the 9 Metropolitan Cultural Heritage Gardens, learning about the Japanese culture and history.

On Monday 13th the group traveled to the Nippon Foundation Headquarter where the official presentation to the Chairman of the Foundation, Mr. Yohei Sasakawa took place. During the meeting every fellow had the chance to express the gratitude to Mr. Sasakawa for the generosity in proving the fellowship allowing been part of the Master studies in the World Maritime University (WMU). Moreover, we can introduce ourselves and provide a brief discussion of our aims in future and confirming our compromise to maintain and inforce the network that is been built between us. We finished the session with a group and individual picture.

After that meeting, the delegation was translated to the headquarter of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) where we received an introduction the organization of the Ministry and the different components. Especially we received an overview of the function that the Ocean Development & Environment Policy Division of the Maritime Bureau is conducting and the relationship with the International Maritime Organization (IMO) objectives.

During that night the welcome reception took place in the Tokai University Club, where many members of the different sectors of the maritime community participated. This was a unique opportunity to establish contact with members from the public and private sector exchanging information about relevant issues and challenges for the international maritime sector. In my case, I had the chance to meet members of the Japanese Coast Guard, similar Institution to the one I belong, to whom I could exchange information about structure and functions of both entities. Also, I had the chance to talk with members of the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and from the MLIT, about the Argentinian view of the environmental issues and the way the challenges are faced, making a comparison with the Japanese approach.

On the following day we visited two institutions: The Port and Airport Research Institute and the JAMSTEC. In the first one we received an introduction of the fundamental functions that this independent organism conducts. As it is known, Japan is exposed, unfortunately, to severe weather conditions because of its geographical position, facing tsunamis and earthquakes. Therefore, the research for technological improvement in the construction and preservation of ports and airports is fundamental. We had the opportunity to see the technology used for them to prove material and structures.

On the second mentioned place, we received an overview of the function conducted for this Institution closely related with the preservation of the environment and the research of the oceans and land in the country.

On Wednesday, we visited the Tokyo Port, which is considered as one of the most developed port in the world. By facing it and visiting the main office it was enough to understand why the port is placed in that category. With more than 20 berths and receiving more than 20,000 yearly, Tokyo port is an example of sustainability for the world. Apart from the operational function the port has developed a close relationship with the community by proving and maintaining a green land for recreation activities and tourist attractions. It is interesting also that many developments are being conducting as the city will held the next Olympics' Games in 2020. After that visit we also immersed ourselves in the National Museum of Emerging Science and Innovation, where we discovered the new development on science and robotics.

During Thursday we visited Mitui E&S Shipbuilding, which is one of the several companies that conform the Mitu E&S Group, with origins in the 1917 under the name Shipbuilding Division of Former Mitsui & Co. Located in Tamano city, southern Okayama Prefecture. The company is divided into 2 main sectors: shipbuilding and engine construction and the personnel guide us along the many sections showing how they are able to build 8 engines per day and a cargo ship in 8/9 months. After that, we went to Okayama Gakugeikan High School, where the students presented a project conducted by them scoping the development of the Eel Grass, key in the existence of Benthos in the area.

On Friday, we visited in Kobe, the Nippon Maru vessel of the Japan Agency of Maritime Education and Training for Seafarers (JMETS) with the guide of its personnel, describing the functions that the crewmembers conduct and also the exercises that the cadets can do on board during the training navigations. After that, we went to visit the Sasakura Engineering Co LTD., where its personnel provided us an introduction of the products the company produces: water desalination plants and noise reducing equipment. The had the change during the visit to do a tour along the different sections and test the products.

Finally, during the Saturday we visited many touristic but at the same time historical places, closely related with the Japanese culture that allowed us to understand and learn more about the origins of the country and customs. Those places are the Kyoto Arashiyama, Togetsu-kyo bridge and the Kiyomizu-dera Temple, placed nearby Kyoto city.

The overall personal impression of the trip was that I found in Japan what I expected to see...an extremely developed country that faces every challenge with the highest level of technology available, working as NATION, all together based in the rich ancient culture. The chance to be in contact with many different industries and organizations related with the maritime sector provide me a very helpful amount of knowledge that without any doubt will remain in my memories for my whole life and will also be a useful tool along my professional career. My personal challenge now is to transmit all that knowledge not only for the members of my Institutions, but also to all the region through the participation in meeting of the regional technical cooperation network established. Lastly, I would like to highlight that the trip allowed the development of very united group of 29 students that in a nearby future will be working in different sector of the Maritime Administration of different countries, but THIS GROUP AND THE FRIENDSHIP WILL PERSIST FOREVER!

Overall report

HASANOV, Natig (Azerbaijan)

The field study to Japan was one of the amazing experiences for me realizing one of my biggest dreams which were to visit Japan. In my opinion, I was lucky because of being Sasakawa Fellowship student and sponsored by Sasakawa Peace Foundation. This trip gave us lots of unforgettable memories while let us to learn new experiences for our future career. The tour started from 11th May to 19th May 2019, with the participation of 29 WMU Sasakawa Fellowship students along with Prof. Laura Carballo and Mrs. Susanna Perlheden as staff representatives. During the time period we stayed in Japan we were able to visit lots of places including Port of Tokyo, Port and Airport Research Institute (PARI), Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Mitsui E&S Shipbuilding Co., Ltd, Sasakura Engineering Co., Ltd and many more. The most important thing for me was a great pleasure to meet with our honorable sponsor Dr. Yohei Sasakawa at The Nippon Foundation office; besides, without his support and great sponsorship I would not be able to study at World Maritime University in Sweden.

Furthemore, the program was well organized and coordinated by Mr. Takeshi Mizunari and Ms. Miyoko Wada who welcomed us at the airport with a great friendship and hospitality since we arrived to Japan and cared us until we were leaving the most beautiful country of the world. They guided us during the trip with demonstrating Japanese culture, history, places to visit and even advising us about our next steps, plans and prohibitions in some places.

Besides, I want to express my heart-felt appreciation to Mr. Takeshi Mizunari who guided me to hospital and helped me a lot when I had problem with my health.

The program is well organized for the limited time. Every day we were visiting different organizations or places which were new experiences for us; moreover, cite visit to Sasakura Engineering Co., Ltd was amazing for us which showed the technological developments of Japan. Those experiences were very good opportunities for us, we would not get any such opportunities visit the places without support of The Nippon Foundation and the Sasakawa Peace Foundation.

Regarding the culture and people of Japan, we witnessed that Japanese people are so polite; moreover, we were impressed when saw that how many times they were bowing during a meeting for showing their respect to others. Japanese people are very punctual for the time. During the trip everything was arranging perfectly on time on schedule; furthermore, they were starting the programs exactly on time and finishing on time. In beginning of the trip, we were suffering to follow this punctuality, but after few days we already practiced and learned Japanese punctuality.

Honestly, before going to Japan I was worrying about Japan cuisine. However, after tasting Japanese foods I really liked it; in addition, I have to confess that Japanese foods are very delicious and I liked them a lot. It is also necessary to mention that we were served open buffet lunches and dinners with the cuisine of Japan and harmonized European cuisines.

In Japan there were a lot of places for visiting for entertainment and sightseeing. Although we did not have much free time during day times to go out and explore beautiful places, the last day of the trip was amazing. We visited the city Kyoto which is the oldest city of Japan and famous for its historical places and where Japanese people remained their history and culture. Visiting the Golden Pavilion, Nishi Honganji Temple and other temples, especially bamboo garden was unforgettable memories for us.

Therefore, it is necessary to mention that visiting of Japan was a perfect experience for us. We learned lots of things about Japan's history, culture and cuisine, as well few Japanese words. I want to thank to all people who organized this trip.

As a conclusion and recommendation, I would like to suggest one thing which may be useful for future field studies to Japan. During site visits the vast majority of presentations were about environmental issues. However, there are different specializations, such MSEA, SML and PM at the WMU where the students study. Therefore, it may be good idea to organize site visits to see maritime safety and security, cargo handling processes and shipping operations. It may be good opportunities for students to see the experiences of the country which is the one of biggest state on maritime industry.

Finally, I want to express special thanks to the Nippon Foundation and the Sasakawa Peace Foundation for arranging this unforgettable trip to the one of the beautiful country in the world - "the Land of Rising Sun".

Overall Impression

MANNAN, Mohammad Samsul (Bangladesh)

Since I am a mariner by profession, I have visited Japan many times. But, I have to acknowledge that the Sasakawa field trip in japan is the best trip of my life. The main purpose of this trip was to thank Dr. Sasakawa, understand Japanese maritime society and establish relationship among us.

According to the schedule, we departed Copenhagen on 11th may 1320 hrs. by Finn air and reached Tokyo on 12th May 0805 hrs. local time. After reaching Tokyo we had been received cordially by Miyo san. She guided us to the hotel, Hotel Villa Fontaine, which was a nice hotel to live in. In the hotel conference room we had our initial orientation. We met Mr. Takeshi San and Mr. Kudo San in the orientation program. After the orientation we went to a park nearby for sight-seeing. After that we had our lunch together in very good Japanese restaurant and the food was delicious. After having the lunch we returned to our hotel for check in. After check in, we had our free time. Some of us went for shopping and some of us went for sight-seeing.

On 13th may, we all wake up very early. That day was the main highlight of the trip, as on that day we were going to meet Dr. Sasakawa. Most of us were very excited. We all dressed up very nicely. After lunch we went to Nippon foundation to meet with Dr. Sasakawa. Mr. Sasakawa talked with us and we took photograph individually with him. In his speech he highlighted the mission and vision of Sasakawa peace foundation and advise us to build a strong community among Sasakawa fellows. After meeting with Dr. Sasakawa we paid a visit to MLIT. After visiting MLIT, we went for welcome reception and dinner. In welcome reception we meet with previous Sasakawa fellows who welcomed us cordially. In Welcome reception, we sang WMU song together, and everybody was pleased by our performance. After a long day, we were very tired and most of us went for sleep.

On 14th may, we departed from hotel at 0800 am for Port and airport research institute (PARI). After lunch paid a visit to JAMSTEC. We saw the Japanese underwater AUV Urashima and Shi kai 6500. Their aim is to create a sustainable future for mankind and the earth.

On 15th may in the morning session, we visited Tokyo port and national museum for emerging science and innovation. After lunch, we ran to catch shinkansen- the Japanese Bullet train. We went to Okayama by Shinkansen. We enjoyed the view of both side while travelling by Shinkansen. After reaching Okayama station we went to a nice beach side hotel. Most of us went to the beach for a walk and enjoyed the walk in the beach.

On 16th May, we departed the hotel for visiting Mitsui E&S shipbuilding LTD. The visit was excellent, as we saw the process of assembling a main engine of ship, which was a unique experience for most of us. After visiting shipyard we went to Okayama Gakugeikan high School. We had a wonderful lunch and time with the school kids. After visiting school we went to the Hinase to see the sea grass restoration process. We learned about the "Building with nature" concept in Hinase.

On 17th may, we left the hotel very early to see the Japanese training ship "Nippon Maru". The ship officers escorted us throughout the whole ship visit. After the ship-visit we paid a visit to Sasakura engineering co., Ltd. Since I was seafarer, I have used Sasakura fresh water generator in many ships. It was a great experience and opportunity for me to meet with Mr. Sasakura. After that we returned to hotel and prepared ourselves for farewell reception. At night we had nice farewell dinner together.

On 18th may, we visited Japanese old capital, Kyoto. We went for sight-seeing and visited many historical places including famous bamboo forest, Golden temple of Kyoto and Shinto temple. Finally, we departed Japan on 19th

may 1045 hrs. local time. Takashi San and Miyo San we're in the airport to see us off. We reached Copenhagen on 19th may 1620 hrs.

Personally, I was impressed by the passion, hospitality, humility, politeness, neatness and the general culture of respect that uniquely characterizes the Japanese society. Everywhere we went, every one of us was treated nicely that we all felt like nobles. Moreover, the Japanese people are very diligent and committed people; and the society is imbued with hardworking culture built on reward for merit, fairness, team spirit and respect for time! I must confess that I have great awe and respect for the great values of the Japanese people and culture.

Finally, I would like to reiterate my heartfelt appreciation for the wonderful opportunity granted to me by the Chairman Dr. Yohei Sasakawa through the auspice of the Sasakawa Peace Foundation to study at the World Maritime University and for the memorable Field Study trip to Japan. Also, I salute the patience and acknowledge the great efforts of SPF team for making our time in Japan memorable, comfortable, enjoyable and worthwhile academic cum cultural exchange experience.

SRENG, Chantha (Cambodia)

The Japan field studies, which was held on 12th to 19th, May 2019, was very impressive for all Sasakawa fellowships. The visit to Japan was beneficial to students both related technical education and Japan cultural aspects. It was such a great opportunity for students to enhance their knowledge and skills through a direct visit to workplaces. Students were able to experience new technology by testing systems and listen to lectures provided by technical staff and scientists. The field study in Japan was really excited because the Sasakawa fellows of the class 2019 have visited many workplaces which located in the cities of Tokyo, Kobe, Okayama, Kyoto, Osaka and Yokohama. It was such a privilege that we were provided with a great visit. The overall impression which I have got from the trip remains many aspects such as Japanese landscape, Culture, workplace visit, tourism site visit, food provided and accommodation.

First of all, when I first arrived in Japan, I was really impressed with the green landscape and mountainous area which I did not expect before because Japan is technology country. When I was driven in a bus, I did enjoy seeing the green landscape along the way on both sides either on the flat area and upon the mountains. It showed me that Japan is doing very much effort to keep that nature as it is used to be to preserve environmental nature. Likewise, even though Japan is a technology country within many high buildings, it still keeps doing its agriculture to meet own demand by not relying on much import. Furthermore, in the city of Tokyo, there are still a lot of trees planted nearby high buildings and it is such a lesson learned to other countries on how to reduce the temperature and generate fresh environment.

Secondly, the culture of Japan was really unique and prosperous. I have learnt how to welcome or greeting to each other by bowing down the head many times, again and again. It is showing high respect to the guest. Punctual is very important for Japanese culture. Japanese people pay respect to punctuality and it is compulsory. We were informed clearly when we should be ready and when we should leave for our destination. Moreover, People are very quiet when they are taking the train. Most of them are sleeping during travelling back home. Therefore, to be quiet on the train is a respectful moment.

Thirdly, Workplace visit was vital because we have learnt educative knowledge and skills which are relevant to our current studies and future career. Workplace visit provided us the opportunity to gain new knowledge from Japanese officers and scientists who are involved with their specialisation for years and it is significant to get to know them and question them directly. We, of course, got to know many key people who can share to us experiences what they have done and it is such a great chance to enhance our relationship or professional network with them. Moreover, the visit was varied from one specialisation to another which means all specialisations are able to get benefits from the field studies regarding their major conducting at World Maritime University.

Fourthly, we were not only brought to workplace visit, but we also brought to tourism sites where are extra excitement. The last day of the trip, we were driven to Kyoto city which is an old city of Japan rich of cultural tourism sites. I was really surprised to see the wonderful cultural sites of Kyoto. We have visited a few places such as Togetsu-Kyo bride, Kiyomizu-Dera Temple and bamboo forest. We could enjoy listening to a skilful

guide who described the history of the place within her lovely and soft voice of a Japanese lady. Besides, we also had a chance to explore the city and bought some souvenirs produced by local people. Green tea ice-cream was really fantastic in Kyoto city and it is an unforgettable taste.

Fifthly, Japanese food was really interested due to its unique taste and healthiness. I have found that Japanese food is healthy and different others which mean it has its own taste and ingredients. For example, Misu soup was the most enjoyable of me. I was tasty and healthy. Japanese food makes me attention to why Japanese people are healthy and live for long life. Obviously, during the trip to Japan, we were treated very well in terms of food provided. We were provided with a wide range of foods at buffet restaurants; therefore, we have many choices according to our preferences.

Last but not least, the accommodation was also well arranged. I would say that It was wonderful that we were accommodated with luxurious hotels which we could access the city easily, for instance, in Tokyo. Therefore, we were able to explore the city for the purpose of food, souvenirs, consumed products and tourism site seeking. Especially, I was really impressed that we could be provided with an individual room which we are convenient and relaxed to stay while having the trip there.

In conclusion, the field studies in Japan was both education and relaxation because we have visited many workplaces where we are able to gain new knowledge and experiences from many experts. Furthermore, we also had an opportunity to visit several tourist sites which are the symbolic and prosperous culture for Japan. It is a memory which will be never forgotten for me and I wish I could visit there again.

MBOTIJI, Noella Njeuyap (Cameroon)

Introduction

The Sasakwa Fellowship of the World Maritime University class of 2019 were privileged to visit Japan from May $12^{th} - 19^{th}$ 2019 through an invitation by Dr. Yohei Sasakawa Chairman of the Nippon Foundation. The Japan field trip is an annual event organized by the donor in which students travel not only to have an educative session by visiting many sites such as ministries and ports but also to learn about the Japanese culture as well as meet with their donor Dr. Yohei Sasakawa one on one.

This year the class of 2019 were 29 in number accompanied by two faculty members of WMU, Mrs. Susanna Perlheden and professor Laura Carballo who all made the trip a very exciting and memorable one indeed.

The Trip (12th- 19th May 2019)

Arrival in Tokyo

Upon arrival at Narita Airport Tokyo on Sunday 12th May 2019, the students were warmly welcomed by Mrs Miyo. From there were all moved to have an orientation session which was led by Mr. Takeshi and Miyo where the students were told on the do's and don'ts during the entire field trip. After this session the students were handed the keys to their hotel rooms where they had to go and have some rest after a long and tiring journey of about 9 hours.

Day 1, Monday 13th May 2019

The day started with Mrs. Miyo teaching us some useful Japanese phrases and numbers in the bus on our way to start our site visits. Some of these phrases were ohayou which means good morning and arigato which means thank you. Miyo san was our tour guide throughout our trip in Japan and she made the trip a fun, exciting and memorable trip with the songs she taught us.

On this very special day we first and foremost had a courtesy visit to the Nippon Foundation which even though was undergoing some construction works, we had our way in which was a great and unique opportunity to shake hands with Dr. Yohei Sasakawa. Given this opportunity, we all expressed our sincere thanks and gratitude for his generosity and kindness as well as our mission and vision upon graduation from the World Maritime University. Dr. Sasakawa laid emphasis on the need to become committed in conserving and preserving mankind's shared resource "the ocean."

From the Nippon Foundation we were again opportuned to visit the Ministry of land, Infrastructure, Transport and Tourism (MLIT) Japan. We were warmly welcomed by the Director General of Maritime bureau Mr. Satoru Mizushima which was followed by a presentation and a question and answer session. The visit to MLIT was very informative and the students had the privilege acquire some knowledge.

This day ended with a welcome reception dinner where we all had a great time for networking, meeting former WMU students and making new friends as well hence establishing professional and social relationships.

Day 2, Tuesday 14th May 2019

The first site visit on this day was to the Port and Airport Research Institute (PARI) where the students were welcomed by the Director General Dr. Yoshiaki Kuriyama which was followed by presentations on topics such as mitigation and restoration of storm surge and water disaster, research on the technology to reduce maximum storm surge and wave disasters and research on mitigation and restoration of Tsunami disasters. Since the Great East earthquake of Japan which took place in 2011, there have been many studies on stable structures against

tsunami overflows and a number of numerical simulation models to predict the drifting of debris generated by the destruction of structures are being developed in order to avoid catastrophic socioeconomic damages.

This day's activity was followed by a visit to the Japan Agency for Marine-Earth Science and Technology (JAMSTEC), which is set up for a forward integration and understanding of the oceans, the earth, life, humanity and creates the future of the earth by co-creation with society. The students were welcomed by an opening session by the president Dr. Asahiko Taira later on followed by presentations and a question and answer session marking the end of the day.

Day 3, Wednesday 15th May 2019

The visit on this day started at the Minatorie-Exhibition room of the Tokyo Waterfront Area (Port of Tokyo) which was led by an opening statement by the Senior Director, General Affairs Division who saluted the students. Presentations were made about the progress of this international trading port which was opened as an on May 20th 1941 is now one the world's major ports and it plays a crucial role in Japan's growth, supporting lives and livelihoods of a population of over 40 million people in the capital and surrounding areas. To raise the profile of the waterfront area and the international presence of Tokyo as a whole, the port is promoting the development of Tokyo waterfront City as a world class and tourist destination. We were made to understand that, with the upcoming 2020 Olympic and Paralympic games approaching, the number of overseas visitors to Tokyo is increasing yearly and Tokyo's port is gaining attention as a tourist and leisure destination.

We later on paid a visit to the national museum of emerging science and innovation where we had lots of fun especially seeing the performance done by the robot at ASIMOV robotics. ASIMOV robotics believes that it is the time of cooperation than competition. The reason being that robotics technology is still in the development stage. No standardization has been evolved yet. It was really wonderful seeing these robots display.

Day 4, Thursday 16th May 2019

The students kick started this day by paying a visit to Mitsui E & S Tamano works with a word of welcome by the Tamano works manager Mr. Takeshi Lizuka after which some presentations about the industry was done and we were given the opportunity to ask questions as well. The students were taken round the ship building industry and shown how the industry provides investment holdings in engineering, construction, and shipbuilding services. The operation is done through the following segments: Ship, Marine Development, Machinery, Engineering, and Others. The Ship segment builds and repairs various types of ships and offshore development equipment including bulk carriers, crude oil tankers, reefers, high-speed passenger ships, container ships, underwater equipment and iron steel structures. The Marine Development segment constructs floating oil and gas production facilities. The Machinery segment manufactures marine and stationary diesel engines, marine equipment, blowers, process compressors, industrial boilers, process equipment, induction heaters, container cranes, industrial cranes, container terminal management systems. The Engineering segment handles chemical plants, oil refinery plants, overseas civil works, renewable energy power generation business, power plant, water treatment plants, waste treatment plants and resources recycling plants.

On this same day, the students visited the Okayama Gakugeikan High school and were welcomed by the school principal Mr. Kentaro Mori which was followed by a presentation and question and answer session.

We later on paid a visit to the Hinase Satoumi research institute and were welcomed by the president Dr. Osamu Matsuda after which we had lunch together with the students. After our lunch break we had an interactive session with the students where we learned how the new concept of "SATOUMI" is used in Japan. This concept in Japanese can be divided into "SATO" which means the area where people live and "UMI" meaning the sea. Satoumi is an important sea-area concept which has been supporting culture and cultural exchanges through such

things as fisheries and the distribution of products. It is an area which includes both Nature and human-beings, as well as an area in which both high biological productivity and biodiversity are expected. The visit to the Hinase Satoumi Research Institute brought an end to our visit for the day.

Day 5, Friday 17th May 2019

The first visit for this day was made to the Nippon Maru Japan Agency of Maritime Education and Training for Seafarers (JMETS). At JMETS, the students were welcomed by the president Mr. Tetsuichi Nozaki which was followed by a learning session in the ship done by the cadets of JMETS. We were told that, JMETS has become mandatory in the competence of "Fire Prevention and Fire Fighting" and "Personal Proficiency of Survival Techniques" which have to be proven by being maintained by each seafarer because of their specific duty onboard, in accordance with 2010 Manila Amendment of STCW (Standards of Training, Certification and Watch keeping for seafarers) Convention and Code. JMETS aims to promote the steadily bringing up of excellent seafarers for the purpose of fostering seafarers to contribute to safety and stabilization of maritime transportation as well as contributing to the development of the world maritime industry, co-operating and co-ordinating with international organizations in maritime affairs and foreign seafarers training institutions for the future.

This day ended with a visit to Sasakura Engineering Co., Ltd where the students were saluted by the president Mr. Toshihiko Sasakura after which presentations were made and we later on went round the company learning and out of curiosity asking questions to know more about the sophisticated technology works. We went through the seawater desalination plants, heat exchangers which ensures the effective utilization of resources, noise control which is achieved through Acoustic Engineering and extensive testing. What amazed me most at this site was when we entered the duct silencer room which is a room which has sound absorbing and insulating panel. Also, we were shown the recent model of the fresh water generator which has as latest series, Series X.

Day 6, Saturday 18th May 2019

This day was a fun filled day as the students visited some interesting and symbolic places in Kyoto the former capital of Japan from 794 to 1868. On this day, the students went to the Shinto shrine where we learned some Japanese religious traditions. We equally visited the Golden Temple/Pavillon which is a Zen temple in northern Kyoto whose top two floors are completely covered in gold leaf. From there we visited the Arashiyama Bamboo Grove. The most exciting part on this day for me was the mountain hiking I did with some of my friends to the Kyoto monkey mountain which took us about 30 minutes to climb but was fun because we made it to the mountain top at last and had a view of Kyoto city from the mountain top.

Our last day in Japan ended with a farewell party with closing remarks, a farewell speech made on behalf of all the WMU students and we sang the WMU anthem. The rest of the evening was reserved for eating, drinking and creating professional as well as social relationships for our career and for future purposes "NETWORKING".

Sunday 19th May 2019

On this last day of our departure from Japan we were accompanied by Takeshi san and Miyo san to the Kansai International Airport for our flight back to Sweden. This brought an end to our study trip in Japan. I was very happy cause I left Japan with lots of memories in my mind which will last for a life time. If given an opportunity to visit Japan one day, I would not think twice of accepting such an opportunity.

CONCLUSION

To crown it all, I will like to make the following remarks:

The Sasakawa Fellowship students, class of 2019 had an educative and memorable trip indeed learning from the experts in Japan maritime industry.

I noticed how clean and very organized the Japanese people are which was evident in the way they conduct themselves in public areas such as the bus stations, supermarkets and metro stations. This gave me a very positive impression.

I was very impressed about the degree of politeness of the Japanese people and time consciousness/punctuality as we were taught to always arrive 10 minutes earlier at a venue because lateness for the Japanese people is a sign of disrespect.

To Dr. Yohei Sasakawa, Mr. Takeshi san, Mrs. Miyo san, MLIT, PARI, JAMSTEC, Port of TOKYO, National Museum of Emerging Science and Innovation, Mitsui E & S Tamano works, Okayama Gakugeikan High school, Hinase Satoumi Research Institute, JMETS, Saskura Engineering CO., Ltd and every other person who made our stay in Japan a very comfortable and memorable one, I say "Arigato Gozaimashita" for your kind heart and generosity.

ROJAS TRILLOS, Reynaldo (Colombia)丸

1. Courtesy Visit on the Nippon Foundation

The first day of the trip, held on Monday, May 13th, 2019 in the afternoon, was dedicated to the courtesy visit to Dr. Yohei Sasakawa at The Nippon Foundation Headquarters. in this unique opportunity to meet such an important person as Dr. Sasakawa is not only in the Japanese national field, but in the international maritime industry.

The person in charge of speaking on behalf of the students and the WMU university, was the teacher Laura Carballo, who spoke on behalf of the president of WMU, Dr. Cleopatra Henry-Doumbia, the WMU staff, and the Sasakawa Fellows students, who took advantage of her speech to give thanks to the NIPON foundation, but especially to its Chairman, besides mentioning the importance of continuing to strengthen ties of fraternity and cooperation between the foundation and the WMU University, allowing new opportunities for study and improvement for new scholars from different countries of the world.

Afterwards, each of the students had the opportunity to present themselves, to talk about themselves, as the country they belong to, which specialty they are studying and also what their resolutions and goals are when they return to their country. But specially expressed the deep and sincere gratitude to Dr. Sasakawa for the generosity for granting the Fellowship and in which way this master's degree contributes direct way to potentiate the maritime development of each nation.

2. Courtesy visit on Maritime Bureau, MLIT

During the first day of our Field Study Trip in Japan in the afternoon, 13th May 2019, a courtesy visit to the Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT) was submitted with a comprehensive presentation which covered the orientation about the maritime administration of Japan. Initially, the presentation covers general topics such as the function of the ministry, how it is organized, what are its primary tasks and projects. as well as the main challenges to which it is confronted and the impact generating activities for the Japanese population. Taking into account that this is one of the largest and most representative ministries for the functions it fulfills such as transportation, land infrastructure, and tourism.

Within this group of interesting lectures, we had the opportunity to listen to a graduate of WMU, who currently works for the ministry made an exciting presentation of very pertinent and current issues in which Japan is at the forefront and in modern world projects.

Attending this type of speeches, allows us to broaden the scope and know the impact of public policies on the development of the maritime power of a nation, as it is essential that the high-government provide tools and means for activities of associations between the public and private part as well as the development of research and development work.

3. Welcome reception

During the development of this lovely evening, we had the opportunity to share with distinguished personalities of the diplomatic corps of the countries, the Japanese industry and notable people of the Nippon Foundation. This type of exchange of ideas is essential not only for networking but also an exciting opportunity to exchange ideas and thoughts while enjoying the different dishes of famous and international Japanese food.

During this reception, I address all the distinguished guests through a speech, expressing the complacency and honor of this opportunity to visit Japan. Above all the high expectations and illusions at the beginning of this new adventure, as well as giving a distinguished recognition to our Dear fellows and teachers that accompany us, an attention that could not be overlooked in a year of the empowerment of women in the maritime sector. Also, take the opportunity to thank for the hospitability and warmth with which we have been received by all our Japanese hosts.

4.Port and Airport Research Institute

In this research center, it plays a vital role in safeguarding the lives of Japanese citizens. It has a simulator of the waves that are experienced in the tsunamis, persistent in this region, allowing you to do experiments and analyzes that help to take measures to protect the Japanese citizens. On the other hand, there are also specialized laboratories that will enable the measurement of the resistance of materials. At the same time, I draw attention to the laboratory in which the resistance of the materials used in the springs and terminals is measured concerning the strength and durability of the concrete, the different forces and effects to which they are subjected, seeking thus to improve the mixtures and compositions that allow achieving a higher resistance and durability in the time

5. Japan Agency for Marine-Earth Science and Technology (JAMTEC)

During this visit, we could be aboard research ships that have laboratories to develop scientific activities, also have underwater devices that allow the exploration of the depths of the ocean. Allowing you to even identify new species still unknown to humans, being in the facilities of this agency, we saw a new species of fish that is under scientific study and has not been formally presented to the world and is in preparation and review a scientific document where the studies are performed. From this visit, it can be concluded that the exploration activities with the rigor and meticulousness of the scientists can lead to the development of new knowledge and advances in paths as profound and unknown as the depths of the ocean.

Japan is a country whose diet includes high amounts of protein from fish and the ocean, as the primary source of food. Therefore, the investigation of the ocean, its riches, but also the way to make it sustainable and lasting over time is a challenge for scientists of this type of agencies. That seeks to know and show the world the importance of investigating in one of the most unknown aspects for humanity the profound depth of the oceans.

6. Tokyo Port (Minatorie)

Visiting Tokyo Minatorie, we had the marvelous opportunity to know the growth and evolution of one of the most important ports in Japan, the port of Tokyo, through all the audiovisual and interactive aids it is possible to appreciate and receive important port information. The miniature models recreate exciting activities of the Japanese culture that allow us to learn a little more about Japan. On the other hand, from the height where it is located, the port facilities can be observed through the use of wine. An exciting visit especially for the fellows who are of the specialty port management.

7. National Museum of Emerging Science And innovation

During this visit to the museum, it was a new window to interact with science, especially with the area of robotics in which Japan goes not only to the avant-garde but is already part of the life of many citizens who interact in their daily homes with robots. Undoubtedly have the opportunity to meet ASIMO the famous robot that has interacted with personalities of the world as former President Barack Obama or German Chancellor Angela Merkel.

without a doubt, it is an incredible place where adults and children can interact with science and technology, participate in the different facilities and attractions that are available.

8.Mitui Shibuilding

The visit to these shipyards was for me one of the most exciting and vital sites. It is unknown to anyone that Japan leads the industry of shipbuilding, by guaranteeing vessel with very high quality, which are recognized especially in the second-hand market, where the Japanese ship enjoys superiority against several of its closest competitors. This type of shipyard not only develops boats for private industry, but it also does it for the military sector, at that moment a destroyer was being built for the Japanese Navy, which unfortunately we could not visit. Nevertheless, we could climb aboard a bulk carrier that was in construction, it was magnificent and impressive to see the magnitude and magnificence of a colossus of these. Observing each of the details and dimensions of each of its corners, especially the wineries that are the essence of this type of ship, it is a beautiful memory to have visited a Japanese shipyard and know how they work, how they work and why they are the leaders in the field of shipbuilding.

9.Okayama Gukegeikan High School

We visited this private school, we had the opportunity to have lunch with the students, talk with them, and share some ideas, doubts, and concerns. After lunch, we were presented with a project where several of the students are involved. A very interesting project because it mentions how the fishing industry so important for that region was affected and how it manages to include the active participation of the children in days of afforestation of marine vegetation that allows not only the fish to lay their eggs when they are spawning, but also gives them shelter from some predators. In any case, an important factor in the marine ecosystem of the region, but above all what is fascinating here, it is like seeking to raise awareness in children and how to find to involve future leaders of the country.

10.Hinase

During the visit to this site, it was very interesting to receive the talk about the problem that had been presented in the region, due to the decrease in seaweed, a necessary place for the fish to place their eggs when they are spawning, in addition to It provides shelter to many fish and allows them to protect themselves and get rid of their predators. Thus, as the number of marine algae decreased, the availability of fish for fishing was considerably reduced, in a region of tradition and fishing focus. Due to this problem, a leader of the area had an initiative on how to solve the problem, making the plantation and transplanting of other places, in the end the proposed solution was successful, and with the passing of the years it was possible to recover the level of fish again that was getting used in the area. But what is really interesting about this story is that not only does it get the community involved, but it also generates awareness at all levels, including the school children of the area, who also actively participated in the project.

11.Nippon Maru

During the visit to the Nippon Maru, we were able to learn about daily life and the routine of boarding a tall ship race. How the training of seafarers is carried out on this unit, and the necessary discipline and rigor for seafarers are transmitted to them. The ship is in an excellent state of maintenance in general, but above all, it has an essential function for the training and training of the future sailors.

12. Sasakura Engineering co ltda.

The visit to these facilities was very interesting from the industrial point of view, since in Japan the companies transcend their founders and go from generation to generation, generating solutions and bringing progress. the activity of this company is basically located in the solutions of desalination plants that are used aboard large ships, such as passenger cruises, or also in sites and facilities on land that have access to salt water and lack of fresh water. Applicability solutions in many of our countries. On the other hand, industrial soundproofing solutions are very useful to avoid excessive noise and auditory contamination.

13.Farewell reception

During this farewell event, we once again had the opportunity to share with a distinguished personality from the academic and industrial area of the area. While we enjoy a variety of exquisite dishes of Japanese cuisine. This was the opportunity not only to make new contacts and networking but also to thank for such an essential visit to Japan, for many of us it was the first time in the nation of the rising sun.

14.Kyoto Arashiyama / Kiyomizu-dera Temple

Last but not least. We could not leave Japan without having the opportunity to learn about its traditions, customs, edification gardens, and temples. During this visit, we were able to pick up fascinating and beautiful places where the Japanese culture, its architecture, the majesty of its gardens and landscapes are reflected. Without a doubt, the best way to close with a flourish a magical and unforgettable visit.

In my particular case and for the vast majority of us, it was the first time we visited Japan. Without a doubt, it was a journey that we will always carry in our memories and that we will never forget. Thanks to the efforts and the perfect coordination, everything was a resounding success. But the most interesting of all was that we took full advantage of every moment and every second of the trip, with an agenda filled with new sites, each of them of great importance, but above all very linked and related to the maritime sector. Thank you very much for everything, for this way of strengthening the bonds of brotherhood and friendship forever.

SHAHHAT, Mamdouh Awad Abdelrahman (Egypt)

This is my first trip to Japan, and I hope to return many times. Japanese people are very polite, cooperative, respective, and innovative and very welcoming no matter at any time.

Japanese culture and traditional Japan, pronounced in Japanese as "Nippon" or "Nihon," is a Pacific Ocean island nation off the coast of mainland Asia. It is constituted of about 6,900 islands. Japan has a beautiful culture and unique and distinctive art, lifestyle, and food.

The Japanese are primarily fish eaters. Japan is in the first place fish importer in the world, consuming around 12 percent of the world's caught fish and there are many plates like sushi, a dish that includes fresh fish, seaweed, and lightly-seasoned rice. Japan has the best food, great shopping and extensive and high-class choices of entertainment.

The Japan field studies started on May 11th, 2019, from Malmö, Sweden, and we reached Narita International Airport, Japan on May 12th, 2019 and greeted by Mrs. Miyoko Wada and Mr. Takeshi Mizunari.

Then we transported by bus from the airport to our hotel, Hotel Villa Fontaine Tokyo-Shiodome, where our orientation program started. Later, we were walking to the restaurant for lunch and directed to the trip of the Hamarikyu Garden in Chūō, Tokyo, Japan.

On May 13th, we departed the hotel to have lunch before we left to the Nippon Foundation and was greeted with such a warm welcome from the staff as we waited for the arrival of Dr. Yoshi Sasakawa. **Dr. Sasakawa** gave a welcoming speech to all students and WMU staff in the audience.

Professor Carballo gave the opening statement as a representative of World Maritime University. She represented the gratitude and thanks from Dr. Cleopatra Doumbia-Henry, President of World Maritime University for his continued support of the Sasakawa Peace Foundation and the Nippon Foundation towards the students, the university and the WMU- Sasakawa Global Ocean Institute and the marine sector.

afterwards, each student participating in their dedication and vision after they graduate from WMU and a commitment to keep continuing with the networking created by the Sasakawa Peace Fellowship family. This was followed by group and individual photo session with **Dr. Sasakawa**.

After the meeting the group visited the Ministry of Land, Infrastructure, Transportation, Transport and Tourism MLIT) of Japan. We were welcomed by staff from several members of the ministry including Dr. Otsubo, Senior Deputy Director General of Maritime Bureau and Mr. Yasuhiro Urano, Deputy Director of Safety Policy Division in Maritime Bureau and who was WMU student, class of 2012-MSEA, Sasakawa Fellow.

The WMU group were given presentations regarding facts and challenges for Japan as well as the mission and organization of MLIT. Mr. Urano gave a presentation on Japan's contribution to the IMO, nowadays problems on safety and security and Japan is an advanced country in work in maritime digitalization as well as cybersecurity. In the evening, we had a welcome reception dinner. In attendance were key contributors to the Maritime industry in Japan, diplomats from several of the student's home countries as well as Sasakawa fellows and WMU graduates. The night offered great opportunities for networking among many at the dinner for the students. In the end, the student presented thanks a speech and followed by the WMU song.

On May 14th, in the morning, we visited (PARI) of the National Institute of Marine, Port, and Aviation Technology. Their primary focus is coastal disaster mitigation and restoration. The company also research the

mitigation and restoration of the earthquake disaster, tsunami disasters, storm surge, and wave disasters and improvement of port and airport performance for industrial competitiveness. WMU student was excited to see a tsunami simulation at PARI research center.

Then we visited the Japan Agency for Marine-Earth Science and Technology (JAMSTEC). Their intention to create a future of the earth by co-creation with society. We also visited the Shinsei Maru research ship at JAMSTEC as well as receive information and details on some of the autonomous vehicles such as Urashima (cruising AUV), Shinkai 6500, and we saw a simulation of deep sea pressure on objects in different depths.

On May 15th the WMU students visited Tokyo Port (Minatorie) where we were given about the history of the port starting in 1941, and the port has a marine park, Kasai Marine Park. This park is now a Ramsar place for migratory birds. Then we visited the National Museum of Emerging Science and Innovation (Miraikan).

On May 16th Mitsui E & S Shipbuilding Tamano Works Ltd and receive a tour of the shipyard along with witnessing the different steps of many ships before completion. After that, we visited the Okayama Gakugeikan High School to learn about their Satoumi project in the Archipelago of the Seto Region. The students presented an excellent presentation, showed the intercommunications of humans and ecosystems by using oyster shells to help in the growth of eelgrass.

In the afternoon we visited Hinase Satoumi research Institute and took a boat ferry tour of the Archipelago islands of the Seto Region.

May 17th the students visited the Nippon Maru- Japan agency of Maritime Education and Training for Seafarers (JMETS) and received a tour of the ship followed by our visit to Sasakura Engineering Co. Ltd. We learn about Sasakura work in creating generators that acts similar to a desalination plant by the uptake of seawater to produce potable water.

Later in the evening, we attended the farewell dinner and we met with many of Japan's most prominent in different maritime sectors.

May 18th the group visited Kyoto Arashiyama/Togetsu-Kyo Bridge, Kiyomizu-Dera Temple, the Kinkaku-Ji (Golden Temple) and Arashiyama Bamboo Grove.

It was a very interesting field study trip and increased my knowledge and experience.

Thank you very much, Arigato Gozaimashita.

TSITSKISHVILI, Avtandil (Georgia)丸

Japan - the country of the innovation, hard work and results. Japanese people managed to build one of the strongest countries in the world with zero resources. I was wondering how is it possible. I think the key is hard work and dedication to what you do.

A week in Japan gave me a lot. It widened my range of view. I started to look at certain things differently. Seen all those projects that the Japanese have already accomplished and the ones that they are planning to made me understand that there is no such thing as "IMPOSSIBLE". If you want to do something it is all about hard work and dedication. It is all about hard work and dedication.

In Japan, we traveled in Tokyo, Tamano, Kobe, and Kyoto. There we visited mainly premises related to the marine sector. But, the first and of utmost importance was The Nippon Foundation, where we met Dr. Yōhei Sasakawa and we had a chance to show our gratitude for giving us a chance to study at the World Maritime University.

Next, we visited the Maritime Bureau, MLIT. There we were given an overall presentation about Japan maritime sector and the structure of the MLIT. Also, WMU alumni lectured us about security, safety, and future of the maritime sphere. It was very informative to listen to how the country with such a long coastline and 7000 islands manages the sector. We finalized the day one with wonderful reception where we had a chance to meet people from maritime spheres. I also met with people from my country who work in the Georgian embassy in Japan.

On Tuesday, we went to the Port and Airport Research Institute. The institute serves as a research institute responsible for developing technology related to construction and maintenance of ports and airports, and coastal zone management. Later, we moved to Agency For Marine-Earth Science and

Technology where we got familiar with the main objectives of the agency. They contribute to the advancement of academic research in addition to the improvement of marine science and technology by proceeding the fundamental research and development on marine, and the cooperative activities on the academic research related to the Ocean for the benefit of the peace and human welfare.

May 15 was spent on a visit to one of the biggest ports in the Japan - Tokyo port. The presenter showed us how they were expanding through the years by building an artificial island in the sea area. The second site was the National Museum Of Emerging Science and Innovation where we were lucky to meet ASIMO. The symbol of robotic development.

Next site was Mitsui E&S Shipbuilding LTD.Tamano Works. The scale of the production of the marine diesel engine was astonishing, an engine every 4 days. From there we headed to Okayama Gakugeikan High School. There we had a chance to get involved in more casual Japanese life. We learn how seriously the children take education. Honestly, I could never imagine that those children could accomplish such a big project. They saved a whole marine species and brought back to the normal local marine ecosystem. I wish we had more interaction with such children.

The next day we went to Nippon Maru and saw where and how Japanese cadets get their experience. Sasakura Engineering was one most interesting places we visited. They show us they maint two directions noise reduction and fresh water generators. There hospitality and attitude to there job were impressive. The same day we had a farewell party. This part was important particularly for building the network and interact with people various working in the maritime sector.

We finalize our stay by fully emerging into Japanese culture. We went to a wonderful Arashiyama, which is a district on the western outskirts of Kyoto. There we saw an amazing bamboo groove and monkey island inhabited by about 180 monkeys. Also, we saw Togetsu-Kyo bridge which translates to "Moon-Crossing Bridge". The poetic name was in fact inspired by the Emperor Kameyama.

Finally, what I truly disscovered is that still there are planty of thing to explore in Japan. I hope I will have a chance in the future to come back to this wonderful country and do business with Amazing Japanese people.

AUBYN, Lois (Ghana)

INTRODUCTION

From the moment we arrived in World Maritime University (WMU), we the Sasakawa Fellowship students were trumpeted to be the most privileged due to the rare opportunity of visiting Japan and having the lifetime opportunity of meeting our sponsor Dr. Yohei Sasakawa, without whom, our dream of furthering our education in WMU would not have been possible.

The field trip to Japan "The Land of The Rising Sun" was what we kept looking forward to and especially for those of us who have never been to Japan, this was a golden opportunity and we were having sleepless nights as we continued counting the days.

On 11th May 2019, 30 Sasakawa Fellowship students accompanied by 2 staff of WMU, Professor Laura Carballo and Mrs. Susanna Perlheden, packed our bags happily and set off on our journey to the Land of the Rising Sun. It was a long flight over 12 hours and the 7 hours' time difference made us experience some jet lag. We arrived tired but the thoughts of the excitement that awaited, gave us the energy to carry on.

We arrived at Narita International Airport in Tokyo in the early hours of Sunday, 12th May and we were welcomed with warm smiles from Mrs. Miyoko Wada and Mr. Takeshi Mizunari, who we later referred to as Miyosan and Takeshisan respectively throughout our stay in Japan. We were transported by a comfortable bus from the airport to the luxurious Hotel Villa Fontaine. We had an hour orientation in the hotel conference room and then we headed off for lunch to taste our first Japanese Cuisine.

After lunch, we visited a beautiful garden with Miyosan and saw many beautiful trees notable among them was the 300 years old pine tree and many beautiful birds and this began our journey on learning about the rich and preservative culture of Japan.

We finally checked into our hotel rooms around 3:30pm and had the rest of the day off to sleep off our jetlag and later explore the beautiful city of Tokyo.

ACTIVITIES

We went to the Sasakawa Peace foundation on Monday 13th May to meet our sponsor, Dr. Yohei Sasakawa and we had the honour to thank him profoundly personally for the first time since the only chance we have had prior to this to show our gratitude to him has been only through written letters so this opportunity was a dream come true. Dr. Yohei Sasakawa welcomed us warmly after which we each had a chance of introducing ourselves to him and also took individual as well as group pictures with him.

We also visited the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), where we had a presentation delivered by a past WMU student who is also a Sasakawa fellow.

A welcome reception was organized for us at 18:30pm to 20:30pm at the Tokai University Club where we met most friends of WMU and Sasakawa Peace Foundation and we happily sang our WMU anthem. Some of our country's consulate were around so we had the chance of meeting them.

The night officially ended after the welcome reception party and we had the night free to ourselves to explore the city.

The subsequent days saw us going on educational tours to the Port and Airport Research Institute (PARI), Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Tokyo Port (MINATORIE). We went to the

National Museum of Science and Innovation where we saw a nice demonstration by a Honda robot and other robots which made us realize that robots will be living among us sooner than we think.

We had the experience of traveling on one of the fastest trains in the world known as Shinkansen – Bullet Train from Tokyo to Okayama.

In Okayama, we visited Mitui E&S Shipping LTD, Tamano works where we saw a Bulk Carrier under construction and had the chance to go onboard the vessel. It was my first time of seeing a vessel under construction and I was very happy.

We spent one afternoon with students of Okayama Gakugeikan High School where we had lunch and interacted with the students after which they presented a very interesting project they embarked on to us which they called Satoumi. We paid a visit to the Hinase Satoumi Research Institute where we had a ferry tour on the sea, viewing the beautiful Archipelago islands of the Seto Region after which we set off to Kobe by bus.

In Kobe, we visited the Nippon Maru which is a Ship for Japan Agency of Maritime Education and Training for Seafarers (JMETS). We had a tour of the ship and saw many cadets on board. We proceeded from there to visit the Sasakura Engineering Company Limited, a company known for the manufacture of Desalination Plants, Noise Cancellation Systems, Sewage Treatment Plants, Oily Water Separators and many other amazing machinery and plants.

A farewell dinner was organized for us and we had the chance to network with other Sasakawa Fellows and some of the giants in the Maritime Sector. President and Vice President of Sasakura made time out of their busy schedules not to only attend our dinner but also printed out our photograph taken at their premises and handed them to us individually. This is the height of the Japanese humility we learnt about and experienced it to our pleasant surprise.

Saturday before our departure was less formal and we visited the city of Kyoto to see the beautiful and historic Temples. We saw the Golden Palace and the beautiful Bamboo Grove.

CUISINE AND CULTURE

We learnt about the excellent time keeping in Japan and we have adopted it as a part of our lives since it is disrespectful to be late for an occasion. Japanese are very humble and polite and it shows in the number of times they bow and greet. This humility is one of the good things we carried away with us too. Above all, we noted Japanese are very hardworking and it is a culture that is instilled right from primary school so it becomes a part of their lives.

We tasted as many Japanese cuisines as possible and I must admit they were very delicious. Most of the dishes were with sea food which happens to be my favourite so I really had a fun time eating in Japan. One meal I will not forget though was the pasta dipped in squid ink which we called black pasta, I will urge everyone to try it, it doesn't look encouraging but the taste is amazing. And oh I tried the many flavours of ice cream since I am an ice lover and my favourite remains the green tea ice cream and the Macha ice cream. I will definitely come back to Japan for those. Sake, Sake, Sake, truly a rich taste of Japanese Liquor.

PLACES TO VISIT

Outside the official schedule, we visited the popular Shibuya crossing in Tokyo and it was a site to behold. We also visited the statue of the Loyal Dog at the Train Station which shows the loyal nature of people of Japan. The 100 Yen shop was a must visit as we wanted to get as many souvenirs as possible for our friends and family who did not have the opportunity to visit Japan.

Tell me about Japan and I will tell you endlessly about my amazing and unforgettable tour of 4 cities in Japan many thanks to Dr. Yohei Sasakawa.

And to Miyosan, Sachisan and Takeshisan, and all other staff who made our trip memora Gozaimashita.	ble, I say Arigato

KUMAR, Rajinder (India)

- The Nippon Foundation to organized an informative field trip for the Sasakawa Fellow students to Japan from 12 May 2019 to 19 May 2019.
- 2. The field trip was full of fun and frolic. It was a rare experience to stay in Japan and understanding their rich culture. I have heard the stories of the Japan field trip from the seniors of the previous course and was overwhelmed by their stories about the Japan trip. I was eagerly waiting for it. The dream came true on 12 May 2019 when we landed at the Tokyo airport. The weather condition was conducive for a trip to Japan and we were gifted with the umbrella during the first meeting to save us from the rain. The first meeting itself made it very clear that the hosts have prepared very well to make out stay memorable and comfortable in Japan. We were briefed about our plan for the week. The field trip was very useful to understand the working culture of Japan. The visit to the ports and the research sites associated with the maritime fields reveals the formula for the successful operation of the Japanese Maritime sector.
- 3. We visited Tokyo Port (Minatorie) to learn about the development of the maritime sector of the japan. The interactive models and use of technology for the information sharing was impressive. The working for the port and its development phases were discussed during the presentation. The Sasakura Engineering Co Ltd has conducted a very useful class for us. We were impressed by their innovations on 'sound reducing technology'. I will try to bring it to the notice of my organization on my return, so that such technologies can be applied in the ship construction in India for better living conditions of seafarers. Interaction with the young generation at the school in Japan was good experience to understand how Japanese schools are nurturing their young generation. I was impressed with their social work in terms of preserving the environment and educating the fishing community. Their presentation skills and knowledge of the subject was excellent. They represented of humble and hardworking Japanese culture.
- 4. The visit to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) was very useful for me to understand the workings of Japanese Transport organization. We were given a brief presentation on the assets and challenges for the Japan. Presentation on contribution of Japan to IMO by Mr Urano was very informative. The issues of safety and security were also discussed during the presentation. The interaction with the authorities at MLIT was very informative and there were many things to learn from them which I can implement in my country for the development of the transport sector, especially in the maritime domain.
- 5. The visit to Japan Agency for Marine-Earth Science and Technology (JAMSTEC) revealed the technological advancement of Japan in terms of understanding the oceans and life below water. The research and its usefulness for the earth is immeasurable. The display of underwater vehicles and the research lab show the extent of the research capability of Japan. It displays the importance of the research and development in the sustainable development of the economy.

- 6. The safety culture and working environment of the Mitsui Shipbuilding yard at Tamano speaks a lot about the importance of the safety in the shipbuilding and how well it is embedded in the culture of Japan. The adherence to the procedures and guidelines was clearly visible through the marking of the roads. We have understood the various stages of the ship building.
- 7. One of the best experiences of this field trip was our meeting with Dr. Sasakawa. He has given us a warm welcome and his speech was form of his blessings for us. The words by Dr. Sasakawa brought out his vision of the sustainable development of the world. A brief meeting with him was enough to display his strong personality and reveals that he is working hard to make this world a better place for all to live together.
- 8. The farewell dinner was one of the best experiences of my life. Meeting with the Sasakawa Fellows and hearing their experiences in WMU was nostalgic. I have also learnt that how the education at WMU will be utilized by them in their respective fields and has given me food for thought for implementing the same in my home country.
- 9. I want to convey my sincere thanks for the hospitality. Arigato Gozaimashita.

IRAWATI (Indonesia)

Day 1 – 12th May 2019

The first day we arrived at Narita International Airport in Tokyo, we were welcomed by Mrs. Miyoko Wada and we were brought straight to the hotel. At approximately 1pm, we received the orientation related to our stay in Japan. This orientation is really important for me because it really helps me with Japanese culture. As the proverb say, where the earth is stepped on, there the sky is upheld. We have to be respectful of the country's culture we visited.

Visit Hamarikyu Garden. Because of the hotel policy that allows us to check in only after 3 pm, we had the chance to visit Hamarikyu Garden which is only 10 minutes walk from the hotel. This garden is so beautiful, located in the middle of big city like Tokyo, and has the big lake inside the park. Really worth to visit.

Day 2 - 13th May 2019

The beginning of our field trip to Japan is started by the **Courtesy visit to The Nippon Foundation.** For me, this is the most important visit since I had the chance to say thank you to Mr. Yohei Sasakawa as the one who gave us all the privilege to study in World Maritime University. After visited The Nippon Foundation, we were heading to the **Ministry of Land, Infrastructure, Transportation, and Tourism**. This visit was not less important than the previous visit to TNF. Here, we were explained about how Japan has contributed to the maritime world and how the recent development in Japan's maritime industry is. This visit helps me to understand and think about how to think about maritime development in my own country. In this visit, I also got the chance to meet Dr. Shinichiro Otsubo, the person who in charge of the draft of Hong Kong Convention.

City of Tokyo Sightseeing. Waiting for time to attend the welcome reception, Mrs. Miyoko brought us to sightseeing around Tokyo by Bus. After a brief tour of approximately one hour, we headed to the welcome reception venue. Here, I met a lot of important person in Japan's shipping industry. I also met Indonesian ambassador for Japan.

Day 3 – 14th May 2019

On the second day, we went to visit Port and airport research institute, and Japan Institute for Marine-Earth Science and Technology (JAMSTEC). This visit is important for me because we got information related of how Japan conduct research and development in maritime area, we went onboard of the research ship, Shinsei Maru. We also went to see the underwater vehicle, Sinkai 6500.

Day 4 - 15th May 2019

Day 4th, we went to **Tokyo Port**. What I like about this visit is, the Port has an exhibition room for visitor who wants to know how the port works, they have interactive video, interactive maps, screen like radar which has the real time condition. After that, we went to National Museum of Emerging Science and Innovation where we watched robot from Honda. The museum itself is amazing, their collection in terms of technology is so broad, from robotics, space ships, up to the information about the sun energy. We moved to Okayama after our visit to the museum ride on shinkansen. Always pleasure to ride shinkansen in Japan, even though the speed is above 250km/h, the internet connection is not affected. Japan is awesome.

Day 5 – 16th May 2019

Day 5 of our visit in Japan was started by visiting **Mitsui E&S Shipbuilding LTD.** Here, I got a new experience as I never been to a ship which was still on construction. Mitsui E&S Shipbuilding LTD has 100 years of experience in shipbuilding and built majority of general cargo ship. The visit itself is really interesting because they brought us first to the ship and then went around the shipyard to see how the shipyard works.

From Mitsui, we were heading to **Okayama Gakugeikan High School** to have lunch together with the students, exchange information about high school life in Japan, and listened to the presentation about the student's project on the development of eel grass in Okayama. That was superb and I was impressed because they already made a huge effort for the environment with their research even though they are still high school students. The fifth day or the trip was concluded by a visit to Hinase, the centre for the development of eel grass. I love this because we were brought onboard of the ship to looked around Hinase and saw the eel grass.

Day 6 - 17th May 2019

We got the chance to went onboard of Nippon Maru, the sailing ship which used to train cadets in Japan. After went onboard of Nippon Maru, we went to Sasakura Engineering Co., Ltd., a company specialized in the tools for the reduction of noise on ship and fresh water treatment. This was my favourite visit because of the noise reduction experience.

Farewell Reception

Day 7 – 18th May 2019

Our last day in Japan was a tour in Kyoto. We visited Kyoto Arashiyama Bamboo Grooves. Kyoto is beautiful old city that has rich culture. We also visited Golden Pavillion with its beautiful pavilion coated by real gold and the beautiful parks. After that, we visited Heian Jingu Shrine which has the most beautiful park I ever visited. The inside park of this shrine has a lake which mirroring all its beautiful surrounding.

Day 8 - 19th May 2019

Finally, our field trip in Japan is ended. Our flight back to Malmö was from Kansai International Airport in Osaka. I would like to say thank you to The Nippon Foundation for giving all of us the experience the richness of Japanese cultures and witness the technology advancement that Japan has.

ARAI, Yuta (Japan)

1. Before arrival at Tokyo

We, 30 Sasakawa fellowship students, had been so excited to go to the Japan Field Study Trip 2019. Before our departure, all students had engaged in learning background of the trip under the initiative of Shinji-san and me. The presentation delivered by us at the briefing in the World Maritime University (WMU) surely contributed to share a common understanding of significance of the trip.

2. Sunday, 12th May

Sachi-san of the Sasakawa Peace Foundation (SPF) and Miyo-san, an experienced tour guide, welcomed us in Tokyo-Narita airport where we arrived. Miyo-san provided very attractive and informative guidance of Japan with us in a bus heading to Tokyo.

The first event of the trip was a primary meeting with Mr. Kudo and Takeshi-san, both from SPF, and Ashu-san who is an official of Ministry of Land, Infrastructure Transport and Tourism (MLIT) at the hotel in Tokyo. The meeting was a very well-prepared. Moreover, it should be emphasized that the moment when we felt their warmest regards and deepest thoughts for us including a refresh walk in a beautiful park, namely Hamarikyu.

The first-night gathering organized by Shinji-san at the Japanese bar, Izakaya in Shinbashi district was awesome. We enjoyed our first night in Japan with unmemorable number of grasses of beer.

3. Monday, 13th May

Our official study program was started with a courtesy visit to The Nippon Foundation. We fortunately received a precious opportunity to see Dr. Yohei Sasakawa, the chairperson of The Nippon Foundation. This was a second chance for me to see him after the first Coast Guard Global Summit in Tokyo, 2017. He gave an impressive and strong speech with his humor. After touched his passion directly, I strengthened my resolve to contribute to the network of the Sasakawa fellowship and keep a safe, clean and sustainable ocean for my child's generation.

The official program was followed by a courtesy visit to the Maritime Bureau of MLIT.

Dr. Otsubo, the Senior Deputy Director General of the Maritime Bureau, and Mr. Ishihara, Mr. Urano and Ashusan were warmly welcomed us. After Dr. Otsubo's remarks, the presentation about hot issues of maritime policy in Japan was conducted by Mr. Urano, an alumnus of class of 2012, WMU. I wish to do that like him several years after my graduation.

The day ended with a warm welcome party hosted by the Friends of WMU in Japan and SPF with supporting by The Nippon Foundation. We were shown a great deal of hospitality from alumni, maritime experts in the public and private sectors, and SPF members. It became a remarkable day and night in my life.

4. Tuesday, 14th May

The two institutes were interesting, which were the Port and Airport Research Institute (PARI) and the Japan

Agency for Marine-Earth Science and Technology (JAMSTEC). Our learning at the PARI and JAMSTEC will help us work for policy-making in the ocean field. In fact, modelling impacts on port facilities in PAPI made us to recognize importance of continuous working of state's maritime logistics and protecting the population from coastal disaster. We deeply understood that a precautionary approach sustains our daily life. On the other hand, we explored the advanced technology and the unknown world under the sea in JAMSTEC. I truly pay homage to scientists toward their effort to pursue findings in associated with earth system like earthquake, volcanic activity, sea-bed resources.

In addition to the official program, the personal study tour to Toyosu market carried out to watch Tuna auction in the early morning in the group of four students. Furthermore, we experienced the Japanese culture at the Shibuya crossing and Okinawa cuisine with Prof. Carballo, Susanna-san and some students. I was so glad that they expressed their satisfaction to me after leading them in the night.

5. Wednesday, 15th May

The learning from the Port of Tokyo was fruitful for me. The mitigation method of ecological impacts from port development was one of topics which I study at WMU. After the visit there, we had fun at the National Museum of Emerging Science and Innovation called Miraikan and in the Shinkansen bound for Okayama.

There is one further fact at the night that I must not ignore. I love Onsen. &

6. Thursday, 16th May

The Mitsui E&S Shipbuilding Ltd., Tamano Works showed us parts of vessel's body, huge engine and its equipment. We also watched scenes of testing engine and inside of a constructing vessel in progress. At the classroom of Okayama Gakugeikan High School, we enjoyed discussion with the young students through a game coordinated by Prof. Furukawa, lunch and presentation about the Satoumi project by three hopeful students. In the afternoon, the precious opportunity came. We sailed out for the field study of the eelgrass growth project which had been explained by those students. I think that was certainly based on special kindness of Hinase fishery community. I sincerely appreciate the experience of sailing in the art-like beautiful scenery consists of blue sky and sea, and archipelago colored fresh green.

7. Friday, 17th May

We visited the tall ship, Nipponmaru, and the Sasakura Engineering Co., Ltd. These visits were also illustrated as the chance to know diversity of maritime field. Both places welcomed us warmly and made our views wider. In particular, people of the company treated us kindly so much. In fact, the president and an executive of the company was giving each student photos in the farewell party at the night, which had been taken together in the morning visit.

In this daytime, it was impressive to achieve seeing my wife and daughter again after several months. They are always supporting me even when we live apart. I appreciate that.

8. Saturday, 18th May and the end of the trip at Malmö

In the final program, we enjoyed cultural excursion to Kyoto. I hope the places where we visit were listed into their memory places. On Sunday, 19th May, we flew back to Copenhagen via Helsinki and then were back to Malmö safely.

9. Conclusion

All our experiences and lessons which we learnt during the trip were thanks to the organizers of the trip including people of The Nippon Foundation, SPF and those institutes. The trip was undoubtedly supported by a large number of people, and their works and precious time. Furthermore, it must depend on a decision that we, 30 Sasakawa fellowship students, are believed to be worth investing for candidates leading the future management of our ocean.

We are already back to studying in WMU again. However, we have two tools now. One is the new knowledge gained from the diverse players in the ocean field in Japan. The another is our Sasakawa network which has got stronger through the trip. I will proceed my study with a power of the network and will keep working for our ocean.

IWANAGA, Shinji (Japan)

I could be taken to many interesting destinations in the Japan field study trip 2019. It was held between 11th and 19th May, 2019 in Tokyo, Okayama, Kobe and Osaka.

First, it was a good opportunity to express our appreciation to president Sasakawa not via letters but face to face. After our arrival at Malmo, almost one year already passed. It was the best timing to do it in this timing. On the same day, we could visit ministry of land, infrastructure, transport and tourism and see a deputy director general of maritime bureau. Individually, I could feel honor to introduce my working place to my colleagues.

Starting on 3rd day of Japan, we visited each institute like Port and Airport Research Institution, JAMSTEC, Tokyo Port, Mitsui E&S Shipbuilding LTD. JAMETS and Sasakura Engineering Co., It was the first time to visit each of them for me.

In Port and Airport Research Institution, one of the most unique facility was a large hydro-geo flume. Some of the pacific states suffer from tsunami and the facility enabling to simulate tsunami is limited. We could feel what is tsunami and how it is strong.

In JAMSTEC, we could experience many latest facilities. One of the most impressing facility was SHINKAI 6500. Through the experiment of noodle cup, we could understand the strength of pressure, difficulty to stand strong pressure and develop such kind of submarine vessels.

In Tokyo port, it was introduced what they are doing from environmental perspective. They try to render development of Tokyo port compatible with environmental issue via Umi-no-Mori project. We could understand the importance of the environmental value there for inhabitant as well as the importance of the economic value of Tokyo port.

In Mitsui E&S shipbuilding LTD. We could observe the manufacturing line for engines and be on board a general cargo ship being built. In addition, this shippard is one of the unique shippards where various kinds of ships have been built from frigates to ship shipping radioactive materials.

In Okayama Gakugei-kan High School, the students introduced their project to raise eelgrass there and we were also inspired from such young generations and we could discuss several international matters. On the back way to bus, one of the students asked me how to enter WMU. I hoped parts of our discussion could contribute to their growth.

In Hinase, a strategy to raise eelgrass giving nutrition to fish there was introduced. Just now, we are studying Ballast Water Management Convention and Biofouling on ship hull guideline. We could reconsider the vulnerability of native species and difficulty to raise them again. One of the importance is to prevent their threats like overfishing and invasive species.

In JAMETS, we could be on board training sailing vessel, Nippon-maru. That was the first experiment on board training and sailing vessel for me. Also, we were surprised with the difference of the number and composition of seamen on board a training ship from general merchant fleets.

Finally, we went to Sasakura Engineering Co. We could learn about fresh water generator and noise cancelling system. Especially, in the lavatory of noise cancelling system, we were so surprised with unique facilities. One of them was room whose walls were not parallel. Due to the unparalleled wall, the sound reflects randomly and we

could listen to same level of sound anywhere within the room. The concept of the room is to do the experiment. The noise has been focused on for the human health until recent. However, recently, the influence of noise on marine livings is also being focused. The noise generated from ships are considered more important recently for marine livings. It was fruitful to know about such facility before starting discussion about the issue in earnest at IMO.

Also, we were hosted with two times of parties for welcoming and for farewell. At that time, many maritime industry stakeholders and some diplomats from each country welcomed us kindly and we could feel honor at that time.

In addition to the programs for studies, we could make a deep friendship through free time and sightseeing in Kyoto. Although we have done something together in Malmo, this field trip could contribute to establish our tight relationship. Individually, this trip will be one of the most unforgettable memories in my life.

Finally, I want to express appreciation to the president Sasakawa and all staffs supporting our Japan trip again.

AL-MAHARIQ, Enas Nadi Hamed (Jordan)

Here is one of my dreams that came true when I spent nine days in the most beautiful parts of the globe in the country of civilization, culture and the future, Japan. I heard that the Japanese culture was very homogenous, accurate, but I did not realize how accurate it was until I visited it.

Japanese culture is a pretty much-known globe of their courtesy and etiquette rules. As far as individuals go, I saw a wide variety of personalities ranging from shy and polite to more professionalism in their what they do. Many were welcoming us at different levels and positions; they are intelligent people, hospitable and humble.

We have had wonderful times in the most beautiful cities of Japan; Tokyo, Okayama, Kyoto, Kobe, Osaka, Yokosuka. Where we have made many visits to the academic education places. One of the beautiful institutions we have visited is the Nippon Foundation; we had the honour of meeting Dr Yohei Sasakawa, who was kind and generous in giving us the time to talk to us and to hear from us and for our ambitions. We took a group photo and an individual photo with Dr Sasakawa; these moments were fascinating and impressive for each of the students.

We also had an awesome time in MLIT we understand the significant effect made by Japan as one of the biggest maritime nations. It is essential to safeguard the maritime environment in parallel with the development of the maritime industry.

Japan surrounded by the sea on all sides and the international shipping which undertakes by the import energy resources, food and export domestic products. The shortage of successors according to the progress of the ageing population combined with the diminishing number of children in Japan has appeared severely in shipping industries. So through our visited JMETS we have been briefed for the continuous education and training to cultivate seafarers via school education onboard training.

One of the most crucial site visit we had it was our visit to SASAKURA, which is trying to devotion to a better human environment through freshwater production through fresh water production, energy-saving noise suppression which was an inspiring visit and experience what they have as products.

In Okayama Gakugeikan high school, we spent a great time with the students, and I notice that Okayama Gakugeikan high school working hard to achieve distinct educational goals, which are to foster students with pride in their heritage, based on a deep understanding of their tradition and culture, and its underlying philosophies and moral code.

Moreover, to foster students with high-level English and Japanese and the ability to succeed in the global arena, establishing meaningful international relationships using their deep understanding of other cultures.

Tokyo's gateway is poised to become a leading international port facility, Tokyo Port as an international trading port on May 20th 1941, today is playing a crucial role in Japan,

Also, not only that, we have visited the most beautiful tourist sites in Japan. Moreover, one of the most beautiful places which is Tokyo city, Tokyo was the clean, modern and sleek city, but we still managed to stumble upon hidden gems like the old, peaceful Toshogu Shrine; and of course, we did not hesitate to go up high to the Tokyo Tower. We also visit Hama-Riku Gardens, which is a unique place of scenic beauty and special historic site. Moreover, we were lucky to visit the golden pavilion Rokuon-Ji temple, never forget that is a lovely, beautiful and impressive place

What a success! WMU Sasakawa Fellowship, Class of 2019, have enjoyed their trip to Japan. We understand the significant effect made by Japan as one of the biggest maritime nations.

WACHIRA, Margaret Wanjiku (Kenya)

INTRODUCTION

Field studies are a very important part of the World Maritime University(WMU) programme. For the WMU students, field studies have created immense opportunities for first hand experiences that have encouraged critical thinking, created positive attitudes towards the way they handle things, increased curiosity, enhanced cognitive development in the coursework and also enhanced motivation. Through the field study trips, WMU students have been able to collect the much needed data that is needed to conduct their dissertations from companies that they establish their contacts with. The aim of the Japan field trip was to enable the students to interact from the maritime professionals as well as build cooperation and unity among the sasakawa students who come from different countries and diverse backgrounds.

IMPRESSIONS

The Japan field studies trip is one of the most important and highly regarded trip among all other trips attended by World Maritime University students. This is because the trip has given a life chance opportunity to a country which has the reputation of its distinctive culture and its unique traditions with a long history of isolation and whose many developments in terms of culture has not been affected by outside influences.

From a personal opinion, the field study trip gave me an opportunity to study about the seaborne trade in Japan and how it influences the world economy. It was interesting to learn how Japan is highly engaged in shipping trade both domestically and nationally. I was greatly amazed at how Japan is able to use the least resources it has while importing almost 100% of natural resources from outside Japan while at the same time becoming one of the most developed countries in the world in terms of technology and its highly dependency of the economy on shipping related activities. I was also amazed at how the high school students in our visit to Okayama and how they are able to conduct an intensive research and generate results at such a tender age. I will surely be happy to implement such programmes in my country when I go back.

The trip to the shipbuilding yards was very interesting. It's very interesting how Japan is able to construct vessels with big capacities and deliver many orders within a year and from time to time. The spring season was perfect for us and very conducive for the study visits. The umbrella gift from the Nippon foundation assisted us very well during the short rains. Japan's rich history of tradition and the creation of beautiful landscape in busy cities such as Tokyo and Osaka beautifies the environment in a very pleasant way. I also got the chance to utilize the bullet train which is regarded as the fastest trains in the world. I can never forget the cosmopolitan Port city and the home of Japan fourth busiest container port, Kobe. The field study also gave me a chance to view some of Japan's traditional temples. The most amazing and favorite temple that I saw was the golden Kinkaku-ji which was built at the end of the 14th century and converted into a temple. The culture of effective time keeping in Japan is very impressive. Being a maritime officer working in the commercial operations department, it is imperative to manage time in a very effective way. The bamboo forest and a tour to see the monkeys up the hill was one of the best adventures I did outside the city. These is just to mention a few, but the experience was immense.

How can I forget our wonderful guides Miyo San and Takeshi San? They were always there to guide us throughout the field study and offer additional ideas all through the way. They were very organized, flexible and caring. They taught us how to say "Ohayou", 'Konichiwa" "O Genki and "Arigatou" among many others. They also took time to learn greetings in our local languages too. This was super amazing. They knew well how to plan all the visits

while at the same time optimizing the time available. Their knowledge on the history of Japan is very rich and was good enough all the way. I highly recommend them for future field visits by other fellows.

The lessons I learnt from field study for which I am grateful for can be in the form of a very long and endless list. But in a nutshell, I can gladly say that your sponsorship for the masters programme and the just concluded field study trip has helped me realize that dreams do come true and that I can be what I want to be.

HATIKULLAH BIN AHMAD ONG (Malaysia)

I am grateful because has been selected as one of the students sponsored by The Sasakawa Peace Foundation (SPF) for study Master Degree at World Maritime University (WMU). Japan are one of the countries on my visiting lists. The chances given by the Sasakawa Peace Foundation (SPF) through the sponsorship, are the valuable opportunities for me. Through the SPF, my ambitious to visit Japan has come true, when myself and the other 28 SPF students been invited to visit Japan specially to meet our kindhearted donor Mr. Yohei Sasakawa. Without him, my dream to visit Japan would be not be accomplished.

We arrived at Narita International Airport on May 12, 2019 at 0805 in the morning after go through long journey almost 10 hours on air. Our arrival has been welcomed by SPF staff that already waiting us at international arrival hall. After all the baggage has been claimed, we departed to our accommodation prepared by SPF at Tokyo city center. The hotel name is Villa Fontaine, very convenience and linkage with public transportation like subway station. Tokyo are the biggest metropolitan in Japan and in the world with total population 13.8 million. First time in Japan and Tokyo metropolitan has make me very exciting even though exhausted due to long flight hours from another continent.

Once we arrived at hotel, we have been given the briefing and orientation relating to the itinerary for the whole weeks we staying in Japan. The SPF, has been planned and organized for us to visit 6 prefectures in Japan and many places that I will never forget this experienced. The city we visit during our staying in Japan are the Tokyo metropolitan, Yokosuka, Osaka, Kobe, Kyoto and Okayama. In each city or prefectures, The SPF have made the arrangement to visit the important agencies such as the Nippon Foundation, the Maritime Bureau (MLIT), Port and Airport Research Institute (PARI), Japan Agency for Marine-Earth Science and Technology (JAMSTECH), Tokyo Port, National Museum of Emerging Science and Innovation, Mitsui E&S Shipbuilding, Okayama Gakugeikan High School, Hinase Port, training vessel Nippon Maru, the Sasakura Engineering Co.Ltd, Kyoto Arashiyama and Kiyomizu-dera temple.

The valuable experience that cannot be forget by myself, when I could talk and can take a personnel photo with the SPF president Mr. Yohei Sasakawa. For the first time meeting with Mr. Yohei Sasakawa, he is very humble and have a great vision. Even though, he is very busiest person, he still allocated the time to welcomed us and share his wisdom with us. The main reason for our visit to Japan is to meet and greeting with the important person in our studies journeys at WMU. The SPF ambitions is to establish world wide networking among the fellowship, so the visit to Japan has given us the chance to meet with other important players in the maritime industry.

Maritime industry especially shipping is very important to Japan. The shipbuilding technology and capability owned by Japan is world class. During our visit at Okayama, we have been given the opportunity to visit one of the oldest shipbuilding industries in Japan. The Mitsui E&S shipbuilding (Tamano works) are the famous shipbuilding in Japan. Many ships irrespective of size and type has been produced in this shipbuilding. We have been given the tour inside the engine assembling production and visit on board new type bulk carrier vessel. The

technology owned by this shipyard is very impressive. For decades this company building their reputation through their quality products.

Japan main problem are the natural disaster like earth quake and tsunami. The damage caused by this natural disaster has led Japan government to spend on research and development (R&D) new technology to prevent or minimize the damage caused by earth quake or tsunami. The Port and Airport Research Institute (PARI) has been established to conduct the research and development of new technology that can minimize the damage caused by natural disaster. Before new ports or airports development, PARI will conduct researched on the suitable material or design of the port or airport. The most important is the extend of structure can withstand the quake. The engineers will develop a structure model and conduct the modeling test in the quake table. From the experienced, Japan managed to reduce the damage and help to save lives and cost.

One of the iconic features associated with Japan are the high-speed bullet train, Shinkasen. I can travel by Shinkasen from Tokyo to Okayama during this visit because the SPF has organized for us to experience the Shinkasen by ourselves. The journey from Shinagawa station to Okayama station took 3 hours. The Shinkasen travel speed during that time 270 km/hours. An amazing experience that will be never forget by me. Travelling by Shinkasen also one of my travel lists to do when in Japan.

In Okayama, we have been arranged to visit Hinase Port. A small fishing ports famous with seafood products likes oyster. The most significant reflected to Hinase port is Seaweed. Before Hinase coastal have problem with water pollution from the industrial area. This pollution has reduced and depleted the seaweed population and the fishing stock in that area. Realized from the pollution problem, folks in Hinase took drastic action to start the seaweed plantation project to re-growth the seaweed and sustain the fish stock in that area. With the cooperation between the fisher and local government, the project is successful and recent underwater survey carried out show that many organisms, fauna has coming back to seaweed area. The *Satoumi* concept is being cultured in the Japan high school student. The concept between relationship human and sea cannot be denied and human need to preserved sea for their future. This concept in my opinion can be introduced to other high school student outside from Japan.

My overall impression toward Japan is very amazing, from the technology advancement to cultures and the social life of Japanese. Japan don't have natural resources like oil and gas, however Japan become the develop country through the determination of their people and government. This culture and attitude need to be set as example by others. The never surrender spirit and work ethic has determined who they are today.

SAHARUDDIN, Ahmad (Malaysia)

This is not my first visit to Japan. But after ten years, to set foot again on the land of Rising Sun, it just made me feel so happy. So the field trip of 2019 Sasakawa Fellowship Students of World Maritime University (WMU) commenced on 11th May 2019 to 19th May was indeed been looking forward by me.

Our arrival to Japan was warmly welcomed by 2 staff from Sasakawa Foundation Ms Sachiko Sumitomo and Ms Miyo, who always accompanied our entourage until the end of the tour. The initial brief and explanation were given by Mr Eisuke Kudo, and Mr Takeshi Mizunari regarding this visit ensured that we are always in compliance with the timing and rules set.

And our long-awaited ended where we have been brought to meet with Nippon Foundation's Chairman itself, Dr Yohei Sasakawa. His speech emphasized the importance of sustainable development of the world maritime field and the efforts of the Nippon Foundation in assisting for the world-wide prosperity generally. We are also very fortunate to had a personal photograph with him, and that will be an extraordinary moment to remember.

Our accommodation, Hotel Villa Fontaine, Tokyo, is located in the heart of Tokyo Metropolitan capital. So, it makes our movement around Tokyo very easy, with its fast and timely rail transport system.

Our first visit was to the Ministry of Land, Infrastructure, Transport and Tourism (MILT). There, we had been explained by Ms Ashu Ikeda, and Mr Yasuhiro Urano regarding the role played by MLIT in international relations and also Japan contribution in the IMO. The next visit was to The Port and Airport Research Institution (PARI), where they conducting continuous research and providing solutions for the related challenges with the help of new technologies. The visit to the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) highlighted the technological improvement achieved by Japan in terms of underwater research.

A visit to The Mitsui E & S Shipbuilding was also exciting where I can learn the technology of shipbuilding in Japan that was indeed very advanced. The next visit was to Sasakura Engineering, where it is a well-known name for their water filtration products for the maritime sector and industrial scale. The soundproofing technology by the company is also truly remarkable.

A visit to JMETS, we had the opportunity to see and boarded Nippon Maru ship, a yacht training for cadets. The vessel, aged over 30, since it's built-in 1984, had been equipped with modern and up-to-date navigation technology. The ship with its big sail was absolutely stunning and beautiful insight, unlike the other vessels we normally see today.

Among the other tours that had been arranged throughout our time in Japan, a visit to Okayama Gakugeikan High School and Kyoto city is genuinely unforgettable and unique. The opportunity to interacted with the high school's students and witnessed the projects implemented by their own students related to conservation of maritime ecosystem really opened my eyes. Students were exposed to the importance of preserving the marine environment, and the school's efforts were worthy of praised. A visit to ancient temples and historical sites in Kyoto also allowed me to approach the unique culture and way of life in Japan. Its natural beauty and historical conservation by the Kyoto city community showed that nation development can also be achieved without destroying the original values or culture.

In addition to the scheduled tours, during our free time, we managed to look around the unique cities of Japan, especially around Tokyo, Okayama, Kobe and Kyoto. I managed to went to the Tsukiji fish market that was moved to a new location and also enjoyed Japanese food like sushi and sashimi.

A week time moved so fast and fell inadequate. During the Farewell Reception, we met and exchanged views with the Japanese maritime society from various sectors such as state representatives, governments, private institutions and institutions of higher learning who were also invited to the event. This valuable opportunity is fully used to create networking among countries in the maritime industry as well as fellow peer-to-peer associations, liked been emphasized by the Nippon Foundation chairman himself through his speech.

A variety of experiences and lessons I can quoted from this trip. Feeling very lucky been selected as a scholarship recipient of the Sasakawa Foundation, I would like to express my gratitude and appreciation to the Sasakawa Foundation in general and Dr Yohei Sasakawa in particular. Finally, I also found it is good to emulate some culture of Japan people like always be respects to others and punctual. Even though Japan was surrounded by many natural disasters such as earthquakes, tsunamis and the lack of the natural resources, I think that's makes Japanese people and nation, stronger and self-reliant.

ZAMEEL, Hussain (Maldives)

Visiting Japan and experiencing its exceptional culture has been a dream of mine since childhood. From the moment I left Malmo, Sweden to Japan until I boarded the return flight I was coloring my childhood dream.

As soon as we arrived at Narita International Airport we, the 29 students sponsored by the Sasakawa Peace foundation were greeted by Mrs. Miyoko Wada and Mr. Takeshi Mizunari. These two kind hearted people helped us in every way, teaching how the Japanese People are.

After the orientation program at our hotel, we had our lunch which was followed by a walking tour to the Hamarikyu Garden. Our official program started on 13th of May, meeting the President of Sasakawa Peace Foundation, Dr. Yohei Sasakawa. He gave an encouraging speech to all the students and Professor Carballo thanked him for the continuous support for the University by Sasakawa Peace Foundation. Following that each student was given the chance to share their commitment and vision upon graduation. We were very lucky that we got to take an individual photo with Dr. Sasakawa.

After the meeting with Dr. Sasakawa we had a number of visits to Japanese Maritime Organizations and Private Companies to get the first hand experience of their technologies and how Maritime affairs are organized in the country.

As we made a visit to Ministry of Land, Infrastructure, Transportation, Transport and Tourism MLIT), we were given a presentation on the work of the Ministry by Dr. Otsubo, Senior Deputy Director General of Maritime Bureau and Mr. Yasuhiro Urano, Deputy Director of Safety Policy Division in Maritime Bureau. Dr. Otsubo is a Sasakawa Fellow, who graduated from WMU in 2012.

in the evening we attended the official welcome reception for the Sasakawa sponsored students. At the reception we met experts from the Japanese Maritime Industry and diplomats from other countries including the First Secretary of the Maldivian Embassy in Japan. Moreover, it was very overwhelming to meet many Sasakawa Fellows and WMU Graduates.

As we capped of the night we sang the WMU Song I was able to connect with Maritime experts and diplomats which will for sure benefit me in my work at home.

Since I belong to one of the lowest lying island nation in the world, visiting the Port and Airport research Institute (PARI) center to see a Tsunami simulation exercise was a very wonderful experience. With the very friendly staffs at PARI I was able to get a lot of information and experience which I can share with my colleagues as I return to work.

Every day of the Japanese trip gave us lots of experiences. So was the visit to Japan Agency for Marine-Earth Science and Technology (JAMSTEC). At JAMSTEC we had the opportunity to experience unmanned undersea machineries such as Urashima (cruising AUV), ShinKai 6500.

The visit to Nippon Maru- Japan agency of Maritime Education and Training for Seafarers (JMETS), Tokyo Port (Minatorie) gave us a lifetime experience in our professional career.

Apart from the official visits we had the opportunity to enjoy the famous Kobe' beef, enjoy the Shibuya crossing and also to experience the performance of a robot. At the National Museum of Emerging Science and Innovation (Miraikan), the performance of Asimo (Honda robot) asking all to work together towards the protection of the earth was one of the very best of Japanese trip.

The one week trip at Japan was incredible, the Japanese hospitality and all the experiences we, the Sasakawa sponsored students got were tremendous in everyway.

As I told Sasakawa Fellow, about myself receiving the Sasakawa Scholarship I was told how special and lucky I was. After visiting I believe him.

All thanks to Dr. Sasakawa and Nippon Foundation for the generous support to help me study at the World Maritime University.

Arigato Gozaimashita!

BOUMGARD, Taoufik (Morocco)

First impression facts:

- From my arrival to Narita International Airport, I learned that the Japanese are very meticulous with regards to the accuracy of all the details, which is quite good. For example, I noticed, that the border control officers took special care about accuracy of all details written in the documents and the forms.
- The infrastructure in Japan is very highly developed and automated. Also, there are so many metro and rail lines, but overall, it is not too confusing, since there are good metro maps and notifications at each station. The trains are very punctual, and arrive on a minute by minute accuracy. Like in everything else, it is another evidence, that Japanese people pay high attention to accuracy.
- Japanese people are friendly and helpful. For example over my journey in the evening to discover the city, I had to ask for help a few times, and every time people politely and kindly helped me.

Arrival to Japan:

On the first day, we started our meeting by a Courtesy visit on the Nippon Foundation, where we met Dr. Sasakawa and interact with him personally and he gave us an inspiring speech about how the Nippon foundation want us to be the leaders of tomorrow by offering us to study at WMU and learn from each other's in order to transfer our knowledge and skills learnt to our countries and organization we work for. During the meeting with Dr. Sasakawa, we learned a lot of new things with respect to the facets and nuances of Japan's relations with other countries, including Morocco. We learned a lot more about the Nippon Foundation, and we had numerous discussions with the Nippon Foundation staff, helping us get much more complete picture of the organization.

Afterwards, we went to Ministry of Land, Infrastructure and Transport (MLIT), which was very instructive, especially their presentation giving by its employees.

The second day of our official meeting was also very informative, where we had a visit to the Port and Airport research Institute (PARI) and Japan Agency for Marine- Earth Science and Technology (JAMSTEC). Both of the esteemed organization provided us useful piece of information about their main activities and the future projects. Then, on the third day, we went to visit Tokyo Port and the National Museum of Emerging Science and Innovation, which both of them were an exceptional experience for me and such enlightening journey.

Our meeting in the fourth day was in Yokohama city at Mitui E&S Shipbuilding LTD, where we had an illuminating visit inside the shipbuilding area with their staff explaining us every details about their supply chain process. This was actually very helpful for me as it was my first time visiting such industry after we had many discussions on their main activity in our class. Later, we had a lunch with the high school students of Okoyama Gakugeikan High school, where we interacted with all of the students and exchange our interests and cultures, also some matters in the maritime industry such as the pollution of our oceans. Moreover, our visit to Hinase, which is specializing in aquaculture sector was very informative in the sense that we did a visit to the aquaculture sites by boat and see the fish farming cages in practice.

Furthermore, the following day we visited Nippon Maru and Sasakura Engineering Co., Ltd, another educative day when we learned new technology applied in the maritime and shipping industry. In the evening, the farewell reception was very organized and welcoming where we interacted with interesting people from different Japanese

organization. In fact, we had networking and discussions with the participants. Personally, I made numerous useful contacts, and have already kept in touch after the meeting.

To sum up, our visit to Kyoto city was a nice journey as well, where we discovered some traditional Japanese temple and enjoyed such nice view over the bridge with my Sasakawa Fellows and our two guides, who are always helpful and took a good care of all of us. Thank you very much for your time and help!

This trip to Japan made my dream come true after I visited one of the top place in the world I always dream to visit, and also meet in person Dr. Sasakawa in Nippon Foundation that gave me more energy and will to transfer all my knowledge and education learnt from WMU. Many thanks!

SOE HTUT (Myanmar)

INTRODUCTION

The japan field study trip is a well-organized journey from the starting point till the end and it is filled with privilege, satisfaction, admiration and happiness. The trip will always be embedded under inerasable memories of my entire life. I would like to express my overall impression into two parts: arrangement-related and place-related matters.

ARRANGEMENT-RELATED IMPRESSION

The number of places and cities that are arranged to travel within one-week time was amazing. It really matches with the sayings about how Japanese people do things systematically with the precision of time. Our 29 Sasakawa students had a wonderful chance to travel six cities (Tokyo, Okayama, Kobe, Osaka, Yokosuka and Kyoto) of Japan and 18 places.

Then, the accommodation was great for every stay in different cities and I personally love the Diamond Setouchi Marine Hotel with its unique location and amazing beach. Not only the accommodation but also the food throughout the trip was delicious and welcoming. I enjoyed a lot Japanese well-known food 'sachimi' and 'miso' soup.

The transportation we used within the trip are bus and shinkansen bullet train. For the bus, all bus drivers are friendly and competent. For the train, it was my first experience to get on the 'shinkansen' and I was surprised by the stability of shinkansen because the run is so smooth regardless of its 320 km/h speed.

Not only the arrangements, accommodation, food and transportation are fantastic but also the people in-charge of the trip are brilliant. Both Mr. Takeshi Mizunari and Mrs. Miyoko Wada are really wonderful persons and their guidance and arrangements made our trip to Japan a perfect one. I will always remember Mr. Takeshi saying of 'whiskey' for photo shooting and Mrs. Miyoko saying of 'ichi, ni, san' for counting people.

PLACES-RELATED IMPRESSION

Of all 18 places I visited during the trip, the Nippon Foundation visit will be the most memorial event for me because I had a great opportunity to meet, greet and take a photo with Mr. Sasakawa and other distinguished members of Nippon Foundation. I will always be indebted to Mr. Sasakawa as he helps my dream of studying in World Maritime University coming true through Sasakawa Peace Foundation and Nippon Foundation.

A visit to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) gave me a lot of information of how a government organization of a developed nation deals with current situations as well as future plans. Other research institutes such as Port and Air Research Institute (PARI) and Japan Agency for Marine-Earth-Science and Technology (JAMSTEC) highlighted what advanced technologies and research projects are carried out throughout the whole year for the betterment of the country.

The arrangement of 'Welcome' and 'Farewell' Parties and the participation of distinguished people such as government officials, professors and researchers showed how broad the network of Nippon Foundation and how privilege Sasakwa fellowship students are. I am so delightful to perform our "WMU Song" with my colleagues in front of the dignified guests.

A trip to Shipping-related organizations such as Mitsui E&S Shipbuilding Ltd and Nippon Maru sail training ship and Sasakura Engineering Co., Ltd revealed how maritime industry plays an important role in Japanese economy. Furthermore, they enlighten me about the facilities they possess, the technology they develop and the training they give in order to maintain for being one of the biggest maritime nation in the world.

Together with the shipping, the ports in Japan are also revolutionary with traditional ports. The presentation regarding the transformation of Tokyo ports and marine parks were very informative and useful. It also clearly demonstrated how Japan love the beautiful nature and what efforts they have been putting to achieve their nature-friendly vision.

Not only ports but also inland sea are trying to be preserved. The presentation of Mr. Takehiro Tanaka who is director, secretary general of NPO Satoumi Research Institute explained how the environment of the sea bottom is improved by oyster shells. The oyster shells, which acts as an anchor for eelgrass, can minimize re-suspension of sediment and keeps good condition for photosynthesis activities. It was amazing to know that such natural substances can improve the natural habitats.

A similar kind of research has been carrying out in Gakugeikan High School and it is done by the high school students. I am surprised to experience that even at high school level, the students are carrying out their own research regarding environmental concern. I am quite sure that Japan is well taken care of their younger generation with broad perspectives and brighter future.

Landmark places such as "Hamarikyu" Garden, Togetsu-kyo Bridge, Arashiyama and 'Kiyomizu' Temples are very pleasant to visit. The beautiful sceneries with the garden, the peaceful background of togetsu-kyo bridge, wonderful environment of Arashiyama and elegance of 'Kiyomizu' will always capture in my heart. Furthermore, I can find out about the detailed preservation plan of Japan for all landmark places.

Finally, the exploration in 'Marikan' gave me a lot of insights about innovation and robots. The 'Ashimo' robot show in musemum was my first live experience with the artificial intelligence robot and this show obviously explained why Japan is standing at the top rank in robotic technology.

CONCLUSION

All in all, Japan is a developed country with beautiful sceneries and amazing nature. I gained a lot of knowledge about how things are done in Japan and how the authorities look ahead into the future. Moreover, I realized how prominent and broad the Nippon Foundation is. I am so proud to be a part of it and if they need a hand from me, I will contribute as much as I can to the Nippon Foundation as well as Sasakawa Peace Foundation in the future days.

HAIMBALA, Tangeni (Namibia)

As a Naval Officer, I have been to many countries but visiting Japan was my first time. If it was not Sasakawa Peace Foundation, I would have never had this golden opportunity to visit Japan, its people and be able to learn a little about the country's culture that is completely different from the one in which I was acculturated.

When we landed at Narita International Airport, after a long but comfortable flight to Tokyo, I was surprised to see the number of people arriving from different corners of the world. This has already given me an impression of what I expect to experience because there should be plenty of reason as to why these people were coming to Japan. Lining up for passport control was another impression I had. I was impressed to see the organization of the queues and the fast movement of people through the immigration control points, not to forget the cleanliness and the display of signs in universal languages. The service in the airport was exceptional, characterized by a high level of seriousness and professionalism by the security personnel as well as the immigration officers. Walking outside the airport, we were welcomed by Mrs Miyo and Mr Takeshi with bright smiles and a brief orientation of what expected. Having observed their first encounter with us, this had already given me great confidence that the trip would be amazing.

I was enchanted to see how organized the Japanese are. Literally speaking, I have never seen a respective culture such as the Japanese. The way they communicate with each other from the general flow of conversation either between the young ones or among the elders is with no doubt a nominal but naturally respectful. I believe that the level of respect is something that has been passed over from generation to generation and became culturally planted in their bloodstreams. At one point I started feeling the sense of well-being that is close to joy when I see Japanese talking to each other. I kept imagining how the world would be if all nations would confer honorary respect in such a Japanese way.

Japanese people are extremely polite and kind. Saying thank you to each other is part of their quotidian routine. During greetings, they bent at their waist as an expression of respect and compassion. I was astonished by the way they show up on time as punctuality is extremely important in Japan. In general, it is a tradition to always show up ten minutes before the agreed time. I should not forget to mention the ten-minute wave, a hilarious art of saying goodbye until out of sight. In Japan, parting is such sweet sorrow, however, it requires a little time, panache and finesse. It turns out that these lengthy goodbyes carry the idea of being reluctant to leave. And astonishingly, it's an integral part of Japanese social dynamics to show gratitude and respect for someone, especially the seniors. In general, it's often a way of being polite. This was indeed a moment of joy to wave back to our hosts every time we leave the site visit or the hotel. It was a nice gesture I have adopted and I could wave back until we could no longer see them.

Additionally, our visit to Japan Agency for Marine-Earth Science and Technology (JAMSTEC), as well as the Port and Airport Research Institute (PARI), was indeed compelling as it proved how Japanese achieved harmony between urbanization and nature to conserve the environment. We were briefed on how the Tokyo Metropolitan Government sustainably maintain and use wetlands without damaging the ecosystem in Kasai Marine Park. This park is a valuable example of the conservation where humans interact with the ocean and nature.

Japanese Cuisine

I have known Japan for its famous sushi which is popular throughout the world. However, Japanese cuisine has a large variety of dishes and regional specialties such as rice with miso soup. Traditionally the Japanese cuisine is

known as one of the best in Asia. I had an opportunity to explore the city of Tokyo and Kobe in which I had enjoyed a variety of food such as sukiyaki and nikujaga.

In conclusion, the overall impression has exceeded my expectation. It is not enough to say I enjoyed this trip. What a splendid itinerary! Japan is such an amazing country, so advanced especially when it comes to technology, artificial intelligence, innovation and civilization. This was demonstrated by all the organizations that we have visited. Japan is clean. The subways, trains, buses and trains are glittering. People are very polite, helpful, friendly and always smiling. There is no doubt in my mind that I will visit Japan over again. And I am optimistic that the visit to Japan, has enriched me with some core values and cultural experiences that I will share with the Namibian people when I go back home.

IJABIYI, Roland (Nigeria)丸

Introduction

It was indeed a huge privilege and an enriching experience to be part of the 2019 Sasakawa Fellowship family which culminated in the May 11, 2019 visit to Japan. The memories and exposure gained during the 8 days which this trip lasted, has tremendously increased my prior paucity of understanding and information about the Japanese people, their rich and eventful history and culture.

The visit, which started with a long two-leg flight across the Pacific Ocean and across a 5-hour time zone, finally touched down in Narita Airport in Japan. Thus commenced our 7-day tour of Japan with visits to different institutions, government agencies, tourism sites, factories, Ports and city tours. It was an eventful and exciting few days, leaving me better informed and inspired by the sights, sounds and perception of Japan.

Visit to Nippon Foundation and Meeting with Dr. Yohei Sasakawa

This is perhaps is the most significant and awe inspiring highlight of the entire trip as it marked the kick-off our itinerary on 13th of May, 2019. It was a rare window of opportunity to meet with our sponsor and benefactor, who despite his busy schedule, was able to spend time with us, listening as we introduced ourselves, gave us his fatherly advice and had a photo session with each and every one of us. Memories of his profound humility, simplicity and kindness during this special visit, will remain with me forever.

The Food and Hospitality

Prior to this trip, the impression I had about Japanese cuisine can be pretty much summed up in two words: "sushi" and "chopsticks". The chopsticks part held true throughout the trip as it is deeply engraved in their culture. For the sushi part, inasmuch as it is a symbolic and staple food in most their menu, the Japanese are so rich and adventurous in their endless variety of food, so much that sushi only occupies a small proportion. We were students from different corners of the globe, representing different cultures, different dietary specifications and preferences, yet, there was always plenty of options for every taste buds and every palate. The food experience is certainly one aspect of the trip that I will not forget in a hurry.

During these 8 days, as we travelled around different cities, visiting different locations, we checked into three different hotels. These were the Hotel Villa Fontaine in Tokyo, Diamond Setouchi Marine Hotel in Okayama and ANA Crowne Plaza in Kobe. In all of these hotels, I make bold to say, we were treated like royalty. The quality of service, comfort and security we enjoyed were remarkable.

The People and Culture

The first impression I had about Japan is that of a culture rooted in respect, humanity and tradition. The fact that the Japanese exude respect at every encounter and every interaction, is a phenomenon that cannot be easily missed. This is made even more obvious by their signature salutation bow, regardless of age, class and gender. To me, this show of fervent humility is a display of sincerity and modesty. It is impossible not to be touched by this. Lessons on Japanese culture is one we experienced daily on the streets, in offices, in the hotels and particularly in the temples with were privileged to visit. The temples were certainly a treasure trove of Japanese culture and

history. Thanks to our guides and handlers, we were taken through crash courses on the dos and don'ts before

every site visit, particularly at the temples. The care and meticulousness with which these sites were preserved all through the ages, spanning humdreds of years in most cases, tells a lot about the dedication, commitment and discipline that is at the heart of the Japanese culture.

Site Visits

Our schedule included visits to a number of locations spanning government agencies, institutions, ports, museum, factories and tourist locations, spread across 6 cities, which included two of Japan's biggest and most important cities, Tokyo and Kobe. Each location had a unique story to tell about the Japanese way of life, culture, governance, management style and history. Notable among these are:

- Ministry of Land, Infrastructure, Transport and Tourism (MLIT) Maritime Bureau, Tokyo
- Porta and Airports Research Institute (PARI), Kanagwa Prefecture
- Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Kanagwa Prefecture
- Tokyo Port (MINATORIE), Tokyo
- Mitui E&S Shipbuilding Limited, Tamano Works, Okayama.
- National Museum of Emerging Science and Innovation, Tokyo.
- Okayama Gakugeikan High School, Okayama.
- Hinase Satoumi Research Institute, Okayama.
- Kyoto Arashiyama/Togetsu-kyo Bridge, Kyoto.
- Kiyomizu-dera Temple, Kyoto

This was more than we could have asked for. We were conducted through all these magnificent Japanese cities, sleeping in 3 different hotels while taking in so much sights and sounds of this great country. It was indeed a wealth of exposure.

Japan Infrastructure, Technology and Innovation

Japan isn't just known for only their rich culture and astute preservation of history, Japan leads the world in technology and innovation. From brands like Toyota, Honda, Kawasaki, Sony, Panasonic, Canon and so many others, Japan has reshaped the landscape of the global auto, consumer electronics and smart technology industry. This is evident during our visit as we experienced cutting edge Japanese technology in their public infrastructure, automobiles, buildings, and electronics. During our visit to National Museum of Emerging Science and Innovation, we were conducted through a maze of endless technological exhibition pieces, notable among these are, space shuttle, rocket engine and so many other impressive futuristic technological bits. The highlight of this was the globally celebrated *Asimo* robot, which put up quite a show.

The technological breakthroughs we encountered during this trip will not be complete without the ride in the world's fastest train, the *bullet train*, with a record breaking speed of 320km/h.

Organization and Planning of the Trip

The planning and organization that went into this trip is obviously responsible for its success. From the time management, the site visits, the scheduling of choice of hotels, safety and security, tour guides, responsiveness to our needs, it went on smoothly without any major hitches. Credit must be given to Miyo San and Takeshi San who were our handlers throughout the duration of the trip.

Recommendations and Conclusion

This trip has been so successful, it leaves very little room for recommendations, but even the best planning and organization can always be better. Therefore, I wish to humbly make a few suggestions for improvement in subsequent trips:

- 1. Upon our arrival from a very long and tiring flight, we were made to attend a few hours of orientation and other processes. Considering that were heavily jetlagged, hungry and exhausted, I humbly suggest that this orientation be postponed till the next day after the students have rested.
- 2. The programme of the visit appears to be packed with too many visits and other events, leaving the students with little time for personal tour of the cities, visits to places of choice and shopping. You may wish to kindly consider reducing the number of places to be visited to free up more time for the students.
- 3. The locations visited were more of the educative and informative locations, this is very good, but you may also wish to consider reducing the visits to such agencies, factories and institutes and replacing with a few more tourist sites. This is because of the monotony noticed among students later in the visits.
- 4. The farewell event was a very enjoyable and fun, may I suggest that future farewell dinners be complemented with some dancing and music to make it even more exciting.

In concluding this report, may I send a wholehearted thanks to Dr. Yohei Sasakawa, the man with a heart of gold, who made all this trip possible. I will continue to show my appreciation to him and his world-changing foundation by being an excellent ambassador of the Sasakawa Fellowship network and a beneficiary of the Nippon and Sasakawa Peace Foundations.

From the grand reception party, to the farewell dinner and all the amazing events in-between, this is a life-changing experience for me, a significant highlight of my career and a major milestone in my travel and exposure story. It was very rewarding.

SUBHAWICKRAMA, Prasad (Sri Lanka)

"Hatred ceases not by hatred, but by love, it is the message of the Buddha, the Great Teacher, the Founder of Buddhism, which spread a wave of humanism through South Asia, Burma, Laos, Cambodia, Siam, Indonesia and Ceylon, and also northwards through the Himalayas into Tibet, China, and finally, Japan, which bound us together for hundreds of years with a common culture and heritage" a part of the speech given by the late Sri Lanka president Mr. J.R. Jayewardene during the Japanese Peace Treaty in 1951 Sep 01 is one of the eye-catching occasion of the relationship between Sri Lanka and Japan. I have learned about the strong courage of Japanese people toward the development of the country after the second world war, and it was inspired me as a child during my school days. Therefore, visiting Japan, the "Land of Rising Sun" of my dreams from childhood.

Japan filed a study trip 2019 of Sasakawa fellowship students of World Maritime University (WMU) commenced on 11th May 2019 from the Malmo and we reached to the Narita international airport following day. Prof. Ms. Laura Carballo Piñeiro and Ms. Susanna Perlheden traveled with the 29 WMU student for the one-week tour. The welcome received at the Narita airport from the Ms Sachiko Sumitomo and Ms. Miyo was unforgettable. The orientation program held in the Hotel Villa Fontaine, Tokyo on the first day set the foundation for a successful tour and the information given by Mr. Eisuke Kudo and Mr. Takeshi Mizunari increased the enthusiasm and excitement regarding the upcoming visits of the tour. Especially, the concerns given for time management during presenting the total programme at the orientation reminded me of the high priority for the punctuality in Japanese society.

The courtesy visit to the Nippon Foundation and meeting Dr. Yohei Sasakawa is the most important event of the visit to Japan. It was a great privilege for me to have some words with our generous donor, and express my gratitude for the great sponsorship received to study in WMU. The valuable speech delivered by Dr. Yohei Sasakawa highlighted the importance of sustainable development of the world maritime field and the efforts of the Nippon Foundation toward that journey. Further, it emphasized the necessity of the continuous networking of all Sasakawa fellows for undertaking future challenges.

The visits to the maritime-related institutions and companies in Japan helped me to understand the developments of the maritime field in Japan. The Port and Airport Research Institution (PARI) is conducting continuous research and providing solutions for the challenges with the help of new technologies. A country with more number of natural disasters and less natural resources, the role of PARI is vital for Japan. The visit to the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) highlighted the technological improvement achieved by Japan in terms of underwater research. The Mitsui E&S Shipbuilding Tamano Works is a giant in the Shipbuilding industry, and that was my first visit to such kind of facility. The visit to the Sasakura Engineering company is also one of the inspired occasion. The technologies applying for desalination plants offshore and onshore is more sustainable and cost-effective. Further, the soundproofing solutions and the testing facilities of the Sasakura Engineering company shows the capabilities of Japanese technology to compete with other parts of the world. The technical know-how and the friendliness shown by the staff of all visited institutions and companies encouraged us to explore the more details by inquiring quotations, and understand the applicability of respective technologies in our countries.

The experience of traveling in Shinkansen from Tokyo to Okayama is wonderful. Further, I traveled in Japan Railways, metro, and subways. The punctuality of the system is incredible and able to recognize the developments

achieved by Japan in the transport sector. The time spent with the student of Okayama Gakugeikan High School was an unforgettable occasion for the tour in Japan. The close interaction with the students helped us to understand the view of the new Japanese generation towards the maritime sector in the country, and their expectations. The Welcome Reception and the Farewell Reception allowed more interaction with the Japanese maritime society, and I could able to build important future relationships with the number of individuals and institutions. Further, the visits to ancient temples and historical sites in Kyoto revealed the proud history of Japan and the natural beauty of the "Land of Rising Sun". As a Buddhist, I really enjoyed the visiting of the number of temples in Kyoto and it felt me as I am in my own country.

Although it is only one week, still I could able to learn more about Japanese culture, their tradition, and foods since the tour organized at different regions in Japan such as Tokyo, Okayama, Kobe, and Kyoto. I enjoyed a lot the cuisines such as Sushi, Tempura, Ramen, Miso soup and local alcoholic drinks, Sake, and Soju. The food and accommodation provided during the whole tour was exceptional and gave enough opportunity to mingle with the local cuisines.

While visiting a wonderful country, the tour allowed the Sasakawa fellows to get to gather each other and more strengthen our friendship. Personally, visiting Japan is one of my never-ending dreams because of its innovative technological developments and rich culture with natural beauty. Finally, I would like to thanks Dr. Yohei Sasakawa and all the staff of the Sasakawa Peace Foundation providing the opportunity for me to visit the wonderful country, Japan and build a strong everlasting relationship with Sasakawa family.

WARD, Thema Jamila (The Federation of St. Kitts and Nevis)

This is my first and hopefully many more return trips to Japan. The country is rich in history and the people and culture is very warm and welcoming no matter where you go. The Japan field studies started on May 11th, 2019 from Malmö, Sweden and arrive at Narita International Airport, Japan on May 12th, 2019 and greeted by Mrs. Miyoko Wada and Mr. Takeshi Mizunari. We were transported by bus from the airport to our hotel, Hotel Villa Fontaine Tokyo-Shiodome where our orientation program commence. Afterwards we travelled by foot to at a lovely restaurant for lunch followed by a guide tour of the Hamarikyu Garden in Chūō, Tokyo, Japan. The park itself surrounded by a seawater moat filled by Tokyo Bay.

On May 13th we departed the hotel to attend lunch before making our way to the Nippon Foundation and was greeted with such warm welcome from the staff as we anticipatedly awaited for the arrival of Dr. Yoshi Sasakawa. Dr. Sasakawa gave a welcoming speech to all students and WMU staff in attendance. Professor Carballo gave the opening statement as a representative of World Maritime University. She thank Dr. Sasakawa, the Sasakawa Peace Foundation and the Nippon Foundation for their continuous support to the students as well as the university. She expressed the gratitude and thanks from Dr. Cleopatra Doumbia-Henry, President of World Maritime University for his continued support of the Sasakawa Peace Foundation and the Nippon Foundation towards the students, the university and the WMU- Sasakawa Global Ocean Institute and the marine sector. This was followed by each student sharing their commitment and vision after they graduate from WMU and a commitment to continuing the networking created by the Sasakawa Peace Fellowship family. I, Ms. Thema Ward gave the vote of thanks on behalf of the 2019 Sasakawa Fellowship students. This was truly an honor, as I am the first from my twin island state to be awarded with the prestigious Sasakawa scholarship. This was followed by group and individual photo session with Dr. Sasakawa.

Later that day, the group visited the Ministry of Land, Infrastructure, Transportation, Transport and Tourism MLIT) of Japan. We were welcome by several members of the ministry including Dr. Otsubo, Senior Deputy Director General of Maritime Bureau and Mr. Yasuhiro Urano, Deputy Director of Safety Policy Division in Maritime Bureau (Sasakawa Fellow, class of 2012-MSEA). The WMU group were given presentations regarding facts and challenges for Japan as well as the mission and organization of MLIT. Mr. Urano gave presentation on Japan's contribution to the IMO, relevant issues on safety and security and Japan work in maritime digitalization as well as cyber security.

In the evening, we attended the welcome reception dinner. In attendance were key contributors to the Maritime industry in Japan, diplomats from several of the student's home countries as well as Sasakawa fellows and WMU graduates. The night offered great opportunities for networking among many at the dinner for the students. The night was capped off with a thank you speech and the WMU song.

On May 14th, we visited the Port and Airport research Institute (PARI) of the National Institute of Marine, Port and Aviation Technology in the morning. Their main focus is coastal disaster mitigation and restoration, formation of infrastructure for vigorous economy and society, preservation of marine interest and urbanization of oceans, and creation and utilization of coastal environment. The company has management strategy of both long and short term goals which is set forth by MLIT. The company also do research on the mitigation and restoration of earthquake disaster, tsunami disasters, storm surge and wave disasters and enhancement of port and airport

performance for industrial competitiveness, all for the protection and future for Japan. The group was blessed to witness a tsunami simulation at PARI research center.

In the afternoon, the group visited Japan Agency for Marine-Earth Science and Technology (JAMSTEC). Their aim to create a future for both mankind and the earth and works forward to integrate an understanding of the oceans, the earth, life, humanity and create a future of the earth by co-creation with society. We also visited the Shinsei Maru research ship at JAMSTEC as well as receive information and details on some of the unmanned undersea vehicles such as Urashima (cruising AUV), ShinKai 6500 as well as witnessing simulation of deep sea pressure on objects.

On May 15th the group visited Tokyo Port (Minatorie) where we were given about the history of the port starting in 1941. The port is located in the area between the estuaries of the Arakawa and Tamagawa Rivers. The port not only encompasses the metropolitan Tokyo but extends as far as the Shinetsu region and the southern part of the Tohoku area with a combine population of 40 million. The port not only has terminal but also have warehouses and distribution centers and have an array of several parks including a marine park, Kasai Marine Park. This park is now a Ramsar site for migratory birds. The group also got a tour of the display room that housed the sea lanes and routes for shipping as well as miniature display of the transportation of sake to the villages along the rivers. This was followed by visiting the National Museum of Emerging Science and Innovation (Miraikan). I enjoy myself especially listening to the performance of Asimo (Honda robot) asking all to work together towards the protection of the earth.

On May 16th Mitsui E & S Shipbuilding Tamano Works Ltd and receive a tour of the ship yard along with witnessing the different stages of several ships before completion. Afterwards we visited the Okayama Gakugeikan High School to learn about their Satoumi project in the Archipelago of the Seto Region. The work the students are doing is miraculous as they show the interactions of humans and ecosystems by using oyster shells to assist in the growth of eel grass. We visited Hinase Satoumi research Institute later in the afternoon and took a boat ferry tour of the Archipelago islands of the Seto Region.

May 17th the group visited the Nippon Maru- Japan agency of Maritime Education and Training for Seafarers (JMETS) and received a tour of the ship followed by our visit to Sasakura Engineering Co. Ltd. We learn about Sasakura work in creating generators that acts similar to a desalination plant by the uptake of sea water to produce fresh drinkable water. They also ventured into sewage treatment plants and bilge separator. Later in the evening, we attended the farewell dinner and had a second chance to network with many of Japan's finest in the Maritime sector.

May 18th the group visited Kyoto Arashiyama/Togetsu-kyo Bridge, Kiyomizu-dera Temple, the Kinkaku-ji (Golden Temple) and Arashiyama Bamboo Grove.

It was truly an experience, one that I would never forget. Thank you Arigato Gozaimashita.

SALUM, Mohamed (Tanzania)

The Japan field studies started on May 11th, 2019 from Malmö, Sweden and arrived at Narita International Airport, Japan on May 12th, 2019 and later transported to Hotel Villa Fontaine Tokyo-Shiodome for accommodation and our orientation program. The hotel was in central Tokyo and very close to a subway station. We had our lunch just nearby the hotel and afterwards we took a tour of the Hamarikyu Garden which is also proximity to our hotel and by later afternoon we checked in to our rooms and rest.

On the following day 13th May, 2019 we went first for lunch and afterwards, we had a courtesy visit to the Nippon Foundation. The Nippon chairman Dr. Yoei Sasakawa gave a welcoming speech to all students and WMU staff in attendance and later was thanked by Professor Carballo representing World Maritime University. This was followed by each student sharing with Dr. Sasakawa their commitment and vision after graduation. Ms. Thema Ward gave the vote of thanks on behalf of the 2019 Sasakawa fellowship students and followed by group and individual photo sessions with Dr. Sasakawa.

After departing from the Nippon Foundation, we visited the Ministry of Land, Infrastructure, Transportation, Transport and Tourism (MLIT) of Japan. The Maritime Bureau is part and parcel of the Ministry and we were welcomed by Dr. Otsubo, Senior Deputy Director General of Maritime Bureau. WMU group were given presentations regarding the organization structure of the Ministry and the main functions performed by the Bureau in Maritime sector and how it participates and assist in improving Maritime Sector globally through the IMO.

The evening, was followed by the welcome reception dinner. In attendance were key contributors to the Maritime industry in Japan, diplomats from several of the student's home countries as well as Sasakawa fellows and WMU graduates. I was pleased to meet Mr. John F. Kambona from Tanzanian Embassy in Japan and we had a lot of discussion over many issues of friendship between Tanzania and Japan and met also many former WMU students and it was a great place for networking and share our Maritme experiences, the party ended just before 0900pm and we returned back to the hotel ready for tomorrow busy schedule.

On May 14th, we had to travel to Yokosuka a little bit west of Tokyo to visit the Port and Airport Research Institute (PARI). The Institution is research based and completely depend on the government funds for its operation and it was established to research on the improvement of structure in the Ports and Airports for sustainability and be able to withstand natural catastrophes. We had a tour of the Institute, several presentations and even simulations including the tsunami simulation. We had learned how they study the effects of oil pollution and how to effectively clean the ocean, also how they design different structure material depending where they intended to be used. It was very useful visit. In the same day we had a visit to Japan Agency for Marine-Earth Science and Technology (JAMSTEC). The institute is focused on Marine research and deep seabed mining technology. We had a tour and visit the research vessel together with the museum displaying rare marine species, deep sea minerals and underwater mining tools.

The following day we visited Tokyo Port and explained the port development history and how at the beginning its development did not take onboard the marine environment. The port is located in the area between the estuaries of the Arakawa and Tamagawa Rivers. In the early 1990s the port expansion strategy and masterplan started to take onboard the conservation and restoration of the marine environment and current it hosts a marine park where the migratory birds have started to reaper and in the current plan it has developed sports areas and beach coastline.

The group also got a tour of the display room that housed the history of Port of Japan since the ancient time and type of vessels used for shipping. Thereafter we visited the National Museum of Emerging Science and Innovation (Miraikan) and had an opportunity to watch the performance of Honda Robot as well as observing different scientific research in geography, astronomy, physics and innovation and technology. We left for lunch afterwards we travelled to Okoyama City from Tokyo by Shinkasen Bullet train, it was really an experience to travel that fast and afterwards we had a bus ride to Tomano and reached our hotel Diamond Setouchi Marine Hotel.

On May 16th the day started by a visit to Mitsui E & S Shipbuilding Tamano Works Ltd, where we were warmly welcome and had a brief introduction of the company history in shipbuilding industry and afterwards we had a tour to the ship yard observing different stages of ship building and later boarding one vessel which is still under construction and observe how all different pieces come together. It was very good experience for us all. Afterwards we visited the Okayama Gakugeikan High School to meet with the students and have a lunch together. Thereafter they made presentation about Satoumi project in the Archipelago of the Seto region for the restoration of eel grass. It was very impressive and educative presentation that was followed by joint discussion.

After lunch and school visit we travelled to Hinase Fish Village where they focus on production of Oysters and had a presentation on how in the production went down because of sea pollution and the effort that the Institute had taken to restore the harvest including the planting of the eel grass. To observe the effort, we took a boat ride across the area for One hour and saw how the activity has changed the ocean and production has started to increase. Thereafter we took a bus trip to Kobe and reach late at ANA Crowne Plaza Kobe Hotel and checked in for the following day activities.

The next day May 17th the group visited the Sasakura Engineering Co. Ltd and learnt different technologies that are being developed by the company. I was very impressed by the noise control technology which can be used to reduce unwanted sounds and is being applied on vessels. Also we were shown desalination plant of transforming sea water into fresh water. Afterward we went and board a Seafarers training vessel owned by Japan Agency of Maritime Education and Training for Seafarers (JMETS). In that vessel we were taken through several process on onboard training and how does it provide a practical guidance to trainees who spend some months on the ocean learning the important skills of navigation. Later in the evening, we attended the farewell dinner and had a chance to network with many of Japan's finest in the Maritime sector.

May 18th we had an opportunity to visit to the historical City of Kyoto (the old capital city of Japan) and made a tour of Kyoto Arashiyama and Kiyomizu-dera Temple. This City made us to understand the history of Japan and why the city was it founded in the area surrounded by mountains.

The last day 19 May, 2019 it was our final day to Japan and we departed from the hotel in Kobe and drove to Osaka to the Kansai International Airport for our trip back to Malmo, Sweden.

It was truly an experience, one that I would never forget.

Thank you Arigato Gozaimashita.

POONTAI, Yatimaporn (Thailand)

Japan is the most beautiful country in the world. Japan has a long history of arts and culture. I have a chance to visit Japan many times. But every time that I visited, Japan still make me surprised and excited. On May 2019, I had an opportunity to revisit Japan. This time I was not only a tourist but I has represented of Sasakawa Fellowship awardee 2019 accompanied by Professor Carballo Laura and the lovely Perlheden Susanna from World Maritime University (WMU). When I arrived at Narita airport, my first impression with the warm welcome from Takeshisan and Miyo-san. After arrived, we went to Sasakawa foundation building to meet Dr. Yohei Sasakawa, the chairman of the Nippon Foundation. Dr. Sasakawa was the respectable person who I want to see. I said a word to him, and I think at that moment that I will do my best to make Sasakawa Fellowship stronger and stronger after graduating from WMU.

In the second day of Japan trip, I had a chance to explore more in Tokyo. Now it was another view as different from a tourist view because of Japanese friends. The most impressive of this trip was friendships from friends. We came from different culture, countries. But in Japan, we shared a beautiful experience. This is the best memories for me.

Mitui E & S Shipbuilding Tamano Work was an exciting place. This was the first time that I have an opportunity to visit the shipbuilding company. Japanese Shipyard is the best shipbuilding in the world. All the second vessels which made from Japan have high price than from another country because of the truths of quality of the vessel. Every part of this visit made me impressive, especially in the engine room — the huge engine made by hand with carefulness. Everybody in the company works very hard to make the company reach its goal.

Japan is a country that is at risk of experiencing many natural disasters. But Japanese people do not give up on pure natural disasters. The innovated to help them overcome natural disasters. Japanese technology development is at the forefront of the world. The visiting of National Museum of Emerging Science and Innovation, and Japan Agency for Marine-Earth Science and Technology (JAMSTEC) we're such impression of the developing of Japanese technology and innovation. Having the opportunity to visit various locations were used to experiment and design technology and equipment which use to against environmental disaster. This made me know that they had an intention to reduce the impact of natural disasters to a minimum.

On the sixth day of the trip, we went to Sasakura Engineering Co., Ltd. Where they create innovation about water. Their change made clean water from, which is used in vessels or any place that doesn't have the right condition to produce fresh water. They also produce a machine that can reduce noise that can adopt in the engine room or any place. This is the innovation that made me very impressive because it will be beneficial in the future.

Japan has a variety of food that you can ever imagine it. I'm the one who has a passion for cooking food. And Japan is the place that provides fantastic food. I was so impressive about every meal that Miyo-san brought us to eat. It was amazing food ever. The impression from Japan, it is not only food for me but also including Japanese culture and history. When we went to Kyoto, where was an exciting place of historical. Kyoto charm is visible through the ways and landscapes that indicate the traditional Japanese, which is generally rich through people, culture, food, building, palaces, especially temples and shrines that are everywhere around the city such as Kinkakuji Temple, Ginkakuji Temple. Moreover, we went to visit Okayama Gakugeikan High School, where we have shared our different culture with a Japanese student, including environmental protection. Even we come from different countries, but we all have the same goal, which is to protect our ocean and environment.

Sasakawa Foundation gave us an opportunity to travel to Japan. Some of my friends live in another continental were far away from Asia. I live to see how what people around me be happy. The smile on their face made this trip perfect. The good memorable in once in the lifetime of me has happened in Japan.

SERTER, Deniz Can (Turkey)

The Japan field study trip that participated between May 11 to 19, 2019 was an incredible opportunity to widen and diversify my career.

Firstly, the appreciation and gesture we got from the professional staff was the warmest. It was an uncommon benefit and lifetime chance to meet and to exchange with Dr. Sasakawa. It was additionally an open door for me to meet a few different characters engaged with the advancement of Japan's marine and port exercises. This remarkable seven day stretch of excursion permitted met to find and become familiar with a few perspectives about the Japan maritime community, the nation, Japanese language, cooking, custom, religion, and culture among others.

The appreciated gathering was the most amazing particularly with the nearness of a few characters of the Japanese marine sector, diplomatic personnel, creators and experts.

The accommodation given to us were prevalent quality since we were suited in inns of high caliber. Visits and visits were immaculately composed.

What grabbed my eye increasingly about the Japanese timeliness. Japanese individuals give an excess of significance to the time factor. As per them, time is a factor of improvement. As we needed to watch the 10-minute standard before exact time and it was powerful as we oblige to remind our colleagues to keep to the standard in order to be on schedule. I delighted in the 10-minute standard experience. That is the reason; we had the option to regard the arranged program.

In light of its technologies and extraordinary culture, Japan has been able to manufacture a standard of foundation. This is what makes Japan, one of the most created on the planet. The capital Tokyo is one of the loveliest urban areas on the planet particularly with a sane administration of spaces and the ideal utilization of its hydrographic system.

Concerning conduct, the Japanese individuals are inviting, agreeable and neighborly with an extremely stupendous culture and religion. Their way of life and customary model as observed when I visited the sanctuary. I was dazzled when I visited Toji and Kiyomizu sanctuaries particularly when I saw ladies and men wearing their well known Japanese outfit.

I was likewise captivated by the normal convention of bowing when welcome visitor or guests and after each visit to a site the staff guided us out and offered their thanks by waving until we were far out.

I recollect Miyo san as letting us know in the transport "Be prepared for 10 minutes waving" and we were beginning waving all. It was so intriguing and I considered it as an indication of regard and thankfulness from the people we met.

The assortment of nourishments we tried stays life-changing particularly with the flavorful Japanese sushi. I likewise refresh Green Tea for its medical advantages. I concede that through this excursion, I took in a couple of words in Japanese, for example, thank you, arigato kozaimasu, good morning, ohayou kozaimasu, how are you, genki, have a nice day, yoi ichinichi wo, good bye, sayanora.

The farewell reception was our last official event during this trek. This party took place within the hotel and it was well organized with the contribution of several guests, including the chancellor of the Kobe University and the Japanese marine community. It was an open door for us to increase our contacts so as to make a wide system which unquestionably would be beneficial for our business career and just as for our organizations.

In conclusion, I get a kick out of the chance to express my genuine gratitude to Ms. Miyo, Mr. Takashi and Mr. Kudo together with the translators for their direction and backing all through our visit. The facts demonstrate that the seven day stretch of stay was fulfilling. For future outings, I would recommend to extend the duration of the visit.

KENSEN, Matthew (Vanuatu)

The WMU-Sasakawa Fellows of 2019 trip to Japan was what one may call a 'once in a lifetime experience'! This is the typical respond one can get when asked how the WMU-Sasakawa Japan trip for WMU-Sasakawa Fellows of 2019 was like.

The trip started off in Malmö, Sweden where we board the train to Copenhagen, Denmark to catch our flight to Narita International Airport in Japan via Helsinki Airport in Finland. Upon our arrival, we were transported safely to the Villa Fontaine Hotel in Tokyo for our initial briefing which includes the welcome from the Nippon Foundation staffs as well our tour guides and we were given tips on the "do's" and "don'ts" of Japan and were also given room keys, welcome package, and off course an allowance for the entire trip from the Nippon Foundation.

Since the first day of arrival in Japan to the last day of departure at the Osaka International Airport, everything was planned perfectly by the Nippon Foundation and this was also complimented by the Japanese culture where everything seems to happen right on time. The WMU-Sasakawa Fellows of 2019 trip to Japan was indeed an eye-opening trip as well as a learning trip as the Japanese Maritime Cluster is a very large cluster that deals with almost everything maritime-related. This translates to the various types of maritime-related activities that were carried out in different cities and prefectures. So by having a team that represents all program specializations at The World Maritime University (WMU), each student can link what is taught in class to what is actually happening in the real world during the 2019 Japan trip. All the site visits to the industries in Japan is always another opportunity for students to get to see the latest and innovative solutions to the world's problems and how these industries are working day in and day out to find solutions to the growing global issues and also issues related to the maritime industry. These site visits are complemented with very informative tours within each site and each section of the industry. The industries that were visited included the heavy industries, research institutions, government ministries, privately-owned companies and State-owned companies, fisherman's associations, national museum visits, navy training vessel visit, and school visit.

Apart from the site visits during the day and official hours, students also get the chance to explore the Japanese culture and try the delicious Japanese cuisines in various cities in Japan. Students also get the chance during evenings and at night to go out and explore the night scene in the different Japanese cities. The Nippon Foundation also provides one room each to each student in some of Japan's finest hotels and so students can get enough rest to recover from a long day of educational trips and other social activities. The Nippon Foundation also organized trips to visit some of Japan's ancient temples and gardens such as the ones in Kyoto. The students also had the chance to travel on the Bullet train (Shinkansen) which is one of the fastest trains in the world.

One of the main focus of the trip was to engage students with the experts out there in the various maritime-related activities by way of increasing networks with the experts in the field. This is very useful as the maritime industry is a global industry and that in order to ensure that trade is facilitated and other maritime-related issues be solved, networking with experts is also a solution as it keeps the maritime professionals connected and by being connected, they can help each other in one way or another. Furthermore, most of the students come from least developed countries and developing countries and that by visiting Japan, they are exposed to a lot of new innovations in combating some of the maritime-related issues and the lessons learnt from Japan can then be applied in their home countries in the near future to combat the similar types of challenges facing the maritime industry.

Finally, the most important lesson from the WMU-Sasakawa Fellows Japan trip 2019 is to appreciate a family who goes out of their way to spend millions of dollars to finance students from the least developed countries to get a world-class maritime education in a globally renowned university. The memories of the WMU-Sasakawa Fellows Japan trip 2019 will be treasured for a lifetime.

PHAM, The Quyen (Vietnam)

Being visited the rising sun country – Japan has become the biggest dream of my life since I was in high school. This dream became true when I and Sasakawa Fellowship awardees 2019 were organized to visit Japan on the field study from 12/5 to 18/5/2019. This is the first time I have been to Japan so that I felt very excited. This trip was also a part of the Master course program for students of World Maritime University. I would like to say that this is the best field study and memorable one ever that I have never had. It has remained me the respectation and admiration about Japanese people as well as the country. A country that often suffers from natural disasters such as earthquakes and tsunamis, but the people always demonstrate to the world the strong rise after the disasters. On the first day of the field study, we visited The Nippon Foundation and had a great opportunity to meet in person Mr. Yohei Sasakawa- the Chairman of the Nippon Foundation. I was really impressed with his speech at the meeting. He pressed the importance of maintaining the global network of Sasakawa's fellowship students all over the world in order to promote mutual understanding and exchange maritime experiences, maintaining cooperation with the common goal of marine environmental protection and sustainable development maritime shipping. On the next six days we travelled and visited many places and experienced various activities in Japan

My first impression of Japan is about Japanese people with the characteristic of hospitality, punctuality and helpfulness. I found that the people to be extremely polite, kind and respectful. Everywhere we were greeted with cheerful smile and enthusiastic hand wave. The people were also extremely punctual and delay was regarded as a sign of disrespect. I realized Japanese people are hardworking, they work with enthusiasm to dedicate to the development of the country. To demonstrate this, I take an example of our lovely guide Miyo and Mr. Takeshi. They worked enthusiastically and helped us to obtain maximum experience throughout the trip. Especially, Miyo she had fantastic English communication skills fulfilling her job to convey the best about Japan.

from administrative visits to industrial companies, researching institutes and academic school. The trip also

provided us ample opportunities to explore many cities, temples, markets and cuisine in Japan.

The second impression is about economy development of Japan. I really impressed infrastructure of the cities where I visited. There are many high rise buildings, tidy transportations, the advanced technologies applied everywhere. The streets were incredible clean, it seemed to be difficult to see garbage on the streets. Public transportation in Japan are so convenient. We had a chance to experience the bullet train which is call Shinkasen. The train was very comfortable and speedy. It took us only 2 hours to travel a distance 400km from Tokyo to Osaka. This train was running along the coastline of the country with beautiful views of Japan from train's windows. In Tokyo Capital, we were organized to visit two places are Port and Airport Institute, and Japan Agency for Marine – Earth Science and Technology. These are the leading Japanese centers for sustainable development of economy in line with environmental protection as well as inventing advanced technologies.

More importantly, that is the impression of warm reception of Sasakawa Peace Foundation has arranged for the students. We stayed in the luxury hotels and ate delicious Japanese cuisine. We were attended a welcome party hosted by The Sasakawa Peace Foundation, where we had an excellent opportunities meeting the guests came from the embassies of our home countries, and maritime experts. This is one of the best events of my life that I have never ever had. Because I have gained many valuable experiences from professional persons. In addition, we were served with a lot Japanese traditional cuisine in warm atmosphere as a family.

Eight days and three cities and ten visits in Japan will always memorable experience for WMU Sasakawa Fellowship students in 2018. It will always remind us the price of being a member of the Sasakawa, scholarship family. After graduation, student will carry the knowledge learned to their work. I firmly believe that with the learning created by the Nippon Foundation it will bring a lot of contribution to the development of the world in general and the maritime industry in particular. Finally, I would like to express most profound gratitude and appreciation to Mr. Yohei Sasakawa, Ms. Miyo, Mr. Takashi all other staffs of the Sasakawa for the wonderful field study trip. I wish you always happy and healthy in your life. I hope that I will have the chance to visit beautiful Japan shortly again.





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