

The world is a family,  
 and all humankind are brothers and sisters.



# Japan Field Study Trip 2019

## Saturday–Sunday, May 11-12 – Malmö to Tokyo

The big day had finally come, and on Saturday May 11, 29 Sasakawa funded students and two WMU staff members, Professor Laura Carballo Piñero and myself, met at Central Station in Malmö to start our journey to Japan. Much to my delight, all the students were there well in time, and we could even catch an earlier train to the airport! Apart from a nerve-racking change of planes in Helsinki, Finland, where we had very little time to go through security and passport control, the flights went well, and we arrived at Narita Airport early on Sunday morning.

Sachi-san, SPF staff member, and our guide, Miyo-san, met us as soon as we came through the doors so we felt very welcome. After arriving at Hotel Villa Fontaine, we had an orientation meeting where we also met Kudo-san and Takeshi-san. Then only a short walk from our hotel, we experienced our first delicious buffet-style lunch in Japan. After lunch we took another short walk to Hamarikyu Gardens, and



Miyo-san guided us through this beautiful park. Standing in the middle of this amazing park, you could not believe that you were in the center of one of the 10 largest cities in the world. After check-in back at the hotel, we had the rest of the day free, and we all headed off in different directions to explore Tokyo. Professor Carballo and I very much enjoyed our visit to Asakusa temple and market.

## Monday, May 13 - Tokyo



The most important day of the week started with a very nice lunch in a beautiful hotel. Afterwards, it was time for the courtesy visit to The Nippon Foundation and our meeting with Dr. Sasakawa. He addressed us, and we all listened with much interest. The students introduced themselves, and Professor Carballo spoke on behalf of the University, while Ms. Ward from St. Kitts and Nevis spoke on behalf of the students. She noted the generosity of The Nippon Foundation and the wonderful opportunities the

Sasakawa Fellowships have made available. Despite Dr. Sasakawa's busy schedule, he very kindly offered to pose for photos with each and every one of us!

After the visit, we continued to the Maritime Bureau (MLIT), where we were met by the Senior Deputy Director General, Dr. Otsubo and his staff. An interesting presentation was made by a WMU graduate, Yasuhiro Urano. Mr. Hasanov from Azerbaijan spoke on behalf of the students, thanking the Bureau Staff for the interesting visit.

The first official day in Tokyo ended with a wonderful Welcome Reception attended by WMU alumni, diplomatic representatives and many other distinguished guests. The surprise of the evening was that the Master of Ceremonies was Ms. Riko Takahashi, 2019 Miss Japan Marine Day Awardee! A generous buffet was served, and the sushi was amazing. Mr. Rojas Trillos from Colombia spoke on behalf of the students, expressing their appreciation of the lovely Reception. The students sang the WMU song, accompanied by several of the alumni present.





**Tuesday, May 14 - Tokyo**



This day turned out to be the only rainy day during our trip, but luckily, we had all received umbrellas as gifts during the orientation meeting. Today's first site visit was in Yokosuka-city, which is situated south of Tokyo. We visited the Port and Airport Research Institute and were shown around the various experimental facilities, giving us glimpses of the extensive research work they are involved in.

After our morning site visit, we had lunch on the bus in form of a bento box, which was a new experience for many of us.

The next site visit was to the Japan Agency for Marine-Earth Science and Technology. We were introduced to their many ongoing research projects, among them forecasting earthquakes and tsunamis. We got the chance to see several of their research vessels, also the Shinkai 6500, which is a manned research submersible.

After coming back to the hotel, Professor Carballo and I were kindly invited to join a group of students heading out into the Tokyo night, very skillfully led by our Japanese student, Mr. Yuta Arai. Mr. Arai tried very hard to accommodate all of our wishes, which was not easy, since we were quite a large group, but he managed successfully. We saw the famous Shibuya crossing, took photos at the statue of Hachiko, went shopping at a Daiso – among other things. The night ended at a restaurant with food from the very south of Japan, Okinawa, where the menus were only in Japanese, so Mr. Arai ended up ordering for all of us! The staff at the restaurant were amazed that we represented so many nationalities in our group.



**Wednesday, May 15 – Tokyo to Okayama**



We had two site visits this morning. The first one was to the Port of Tokyo, where we were invited to the Exhibition room of the Tokyo Waterfront Area. As well as seeing a very interesting exhibition, we also enjoyed an amazing view over the entire Tokyo Port and Tokyo Waterfront Area, from about 100 meters above ground. A short distance from there, we continued to the National Museum of Emerging Science and Innovation. The main attractions were the Geo-Cosmos globe and the robot called ASIMO.



After the visit to the museum, we had the best lunch of the week, in my view, where the food was as beautiful as it was delicious. The desserts and ice cream had just settled nicely in our stomachs, when it was time to walk to the station and catch the Shinkansen speed train to Okayama. We travelled about 600 kilometres in 3 hours, and many of us either rested or were looking at the scenery outside the train windows. We reached Okayama where a new bus was waiting for us, and after driving south for about an hour through the green countryside, we reached Diamond Setouchi Marine Hotel, situated by the beach outside of Tamano.



The hotel served a nice evening buffet, and a few retired early, others gathered at the beach and some of us took a relaxing stroll on the beach walk.

**Thursday, May 16 – Tamano/Okayama to Kobe**

Today's morning site visit was not far from our hotel, Mitsui E&S Holdings Co. Ltd., Tamano Works, which is a huge shipbuilding company. We were shown around their fascinating facilities, looking at various assembly shops and even boarding a vessel that was under construction.

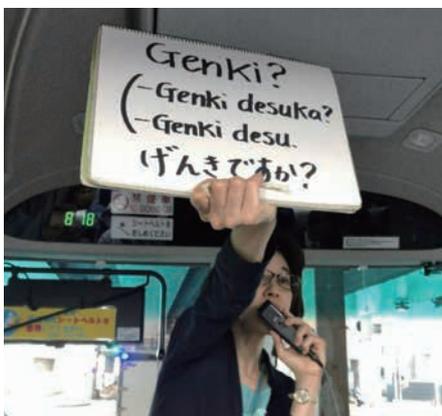


We continued to Okayama Gakugeikan High School, and we were divided into small groups to talk to two or three students each. After presentations by both the rector and students, we had lunch together in the classroom, we with our bento boxes and the students with their homemade lunches, nicely wrapped in furoshiki wrapping cloths. Ms. Al-Mahariq from Jordan thanked the school on behalf of the students. The local media was present, and we also took a huge group photo, with the photographer balancing at the top of a ladder! All the students then followed us out to the bus and waved at us until we could no longer see them. We also experienced this tradition at other site visits – the “10-minute goodbye wave”, as Miyo-san called it.



The afternoon was rounded off with a visit to Hinase Satoumi Research Institute, where we were given a very interesting presentation of their research work, followed by a boat trip in the sun, enjoying glittering water and beautiful surroundings.

Now it was time to continue to Kobe, and after a couple of hours' bus ride, we arrived at our hotel, the ANA Crowne Plaza Kobe. After checking in and collecting our main luggage which had been sent ahead from Tokyo, Professor Carballo and I were invited to join our Japanese hosts for dinner. It turned out to be one of the best evenings – and finally I got to try some sweet potato sake!



### Friday, May 17 – Kobe

Our Friday morning started early with the excellent buffet breakfast at our hotel, after which we took a short bus ride to Nippon Maru, which is the training ship for the Japan Agency of Maritime Education and Training for Seafarers. We were divided into groups and were guided around the ship by cadets.

We proceeded from there to Sasakura Engineering Co. in Osaka, which is not very far from Kobe. Here, as at all the places we had visited all week, we were received warmly and in a very organized manner. Seawater desalination and noise control were the main topics during the visit. We also took a group photo in front of the premises together with quite a number of their staff members.



The afternoon was free for us to explore Kobe on our own. We had received a tip from a colleague at WMU, so Professor Carballo, Sachi-san and I took the ropeway (cable car) up the mountain behind our hotel to visit the Kobe Nunobiki Herb Gardens. We walked through beautiful gardens, had lunch with a stunning view of Kobe, tried lavender-flavoured ice cream, rested in hammocks and then walked all the way down to the hotel again, with a stop at the waterfalls on the way down.

A farewell reception was held for us in the evening, with many distinguished guests, and it was a great opportunity for us to mingle with WMU and SPF friends, WMU graduates and other guests. The students sang the WMU song, conducted by Mr. Ijabiyi from Nigeria, who also gave the farewell speech on behalf of the students.

### Saturday, May 18 – Kobe/Kyoto

Today was dedicated to sightseeing in the beautiful surroundings of Kyoto. We started with visiting Arashiyama, on the west side of Kyoto. There we saw the Togetsu-kyo Bridge as well as the Tenryu-ji Temple, one of the headline attractions. We also passed Nonomiya Shrine before entering the bamboo forest. The light here is amazing, and if it wasn't for the crowds of tourists, you would think you were in another world! The group split up after the bamboo forest, where Professor Carballo and I decided to visit the Jojikko-ji Temple, a very peaceful place far from the crowds with a lot of stairs to climb. It was a stunning place, so it took us some time to walk around, which resulted in us not finding time to eat lunch – we settled with a soft ice cream, with flavours of

bamboo and cherry blossom, green and pink!

We continued with a visit to Kinkaku-ji (the Golden Pavilion), officially known as Rokuon-ji Temple, situated in a beautiful garden next to a peaceful pond and registered as a World Cultural Heritage Site since 1994. We ended our sightseeing tour with a visit to the Garden of Heian Jingu Shrine, which was yet another scenic experience, with ponds full of waterlilies and turtles.

After coming back to the hotel, Professor Carballo and I joined a group of students in exploring the night life in Kobe as well as finding a place to have dinner. We eventually ended up eating at a restaurant where you order the food and drinks through an ordering machine, before you take a seat, and the food is brought to you at the table. The sukiyaki I ordered tasted wonderful, especially after only having had ice cream for lunch...



### Sunday, May 19 – leaving Japan

A sad day – we had to leave this beautiful country which we had enjoyed for an entire week. I will miss the friendly and polite people of Japan and the fascinating culinary and cultural experiences that the field studies had given us all. Japan offered us all such varied experiences: from historical treasures, to hi-tech cutting-edge research, from delicious and beautiful food, to wonderful natural landscapes. We are so happy to know a little more about this fascinating country and its culture.



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# IMO's Approach to the New Stage of Global Sulphur Cap 2020



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In MARPOL Annex VI, Regulation 14 stipulates requirements regarding the sulphur content in marine fuel oil. In 2008, IMO agreed to the amendment of the regulation, and the upper limit of the sulphur content in marine fuel oil will be lowered from 3.5% to 0.5% from January 1, 2020.

There are many issues relevant to the strengthening of this regulation, which would result in a significant change in the nature of fuel used on board ships, such as methods for verifying compliance and the feasibility of supplying the fuel. Bearing in mind these issues, IMO has undertaken various preparations to ensure the smooth implementation of the global sulphur cap regulation, including the amendment of Annex VI of the MARPOL Convention and the formulation of guidelines until MEPC 74, which was held in May this year. This article presents a summary of these efforts made by IMO.

The tightening of this regulation is aimed at significantly reducing the emission of sulphur oxide (SO<sub>x</sub>) from ships and achieving benefits for human health and the environment. Therefore, governments and ships of all countries are expected to make steady efforts in the implementation of the regulation utilizing such instruments.

## Consistent Implementation of Global Sulphur Cap Regulation

The 2019 Guidelines for Consistent Implementation of the 0.50% Sulphur Limit under MARPOL ANNEX VI (Resolution MEPC.320(74)) were adopted at MEPC 74. These guidelines were developed to ensure the IMO Global Sulphur Cap is implemented in a consistent manner worldwide. The guidelines indicate the actions the ship concerned and the relevant country should take when the inappropriate use of fuel with a high sulphur content is detected or when a ship is unable to procure fuel that complies with the regulation. The guidelines also include the format of the report that ships are to submit to authorities in relevant countries when they are unable to procure compliant fuel (Fuel Oil Non-Availability Report).

## Ship Implementation Plan

To encourage vessels to prepare a "Ship Implementation Plan (SIP)" stating the procedures to be taken to achieve compliance with the regulation by January 2020, IMO

released the Guidance on the Development of a Ship Implementation Plan for the Consistent Implementation of the 0.50% Sulphur Limit under MARPOL Annex VI (MEPC.1/Circ.878) in November 2018. This document gives guidance relevant to SIP such as items to be included in the SIP as well as a manual on tank cleaning.

## Fuel Oil Availability

Under Regulation 18 of the MARPOL Annex VI, parties are required to take appropriate measures to ensure that fuel suppliers under their jurisdictions supply fuels that are compliant with the regulation. Regulation 18 also requires parties to notify IMO of the availability of compliant oil in their ports.

To encourage the steady implementation of these regulations by all parties of MARPOL Annex VI, IMO released the following two circulars in June 2019: Delivery of Compliant Fuel Oil by Supplier (MSC-MEPC.5/Circ.15) and Reporting of Data Related to Fuel Oil Availability and Quality in GISIS to Promote Greater Understanding of the Consistent Implementation of the 0.50% m/m Sulphur Limit under MARPOL Annex VI (MEPC.1/Circ.887).

## Sampling of Fuels on Board

MEPC 74 approved the amendment of the MARPOL Convention with a view to ensuring consistent implementation of SO<sub>x</sub> regulation. The main objective of this amendment is to differentiate fuel oil samples into "MARPOL-delivered samples" (samples attached to bunker delivery notes), "in-use samples", and "on board samples", and to specify methods for analyzing the respective samples.

The amendment of the MARPOL Convention is expected to be adopted at MEPC 75 in March 2020 and to enter into force in September 2021. However, it is recommended that each country commence implementation of the amended method of analysis of fuel oil samples before the entry into force of the amendment of the convention, based on Early Application of the Approved Amendments for the Verification Procedures for a MARPOL Annex VI Fuel Oil Sample (MEPC.1/Circ.882).

With respect to the sampling of in-use fuel oil, which is used for combustion in the ship's engine, sampling points are specified in the 2019 Guidelines for Onboard Sampling for the Verification of the Sulphur Content of the Fuel

Oil Used on board ships.

## Port State Control

The 2019 Guidelines for Port State Control under MARPOL ANNEX VI Chapter 3 (Resolution MEPC.321(74)) were adopted at MEPC 74. These guidelines provide guidance on implementing port state control in regard to regulations of MARPOL Annex VI including those for nitrogenous oxides (NO<sub>x</sub>) under Regulation 13 and sulphur oxides (SO<sub>x</sub>) and particulate matter under Regulation 14. These guidelines are the revised version of those established in 2009 and give guidance for port state authorities such as procedures of initial and detailed inspections.

The Guidance for Port State Control on Contingency Measures for Addressing Non-Compliant Fuel Oil (MEPC.1/Circ.881), which was adopted at MEPC 74, also provide actions that can be taken when non-compliance with regulations is detected as a result of PSC (so-called "contingency measures").

## Exhaust Gas Cleaning System (EGCS)

Under Regulation 4 of MARPOL Annex VI, the use of EGCS is permitted as an alternative compliance method for the sulphur cap regulation. The administration may give approval for using EGCS based on the 2015 Guidelines for Exhaust Gas Cleaning Systems (Resolution MEPC. 259(68)). Guidance on Indication of Ongoing Compliance in the Case of the Failure of a Single Monitoring Instrument, and Recommended Actions to Take If the Exhaust Gas Cleaning System (EGCS) Fails to Meet Provisions of the 2015 EGCS Guidelines (resolution MEPC. 259(68)) indicate actions to be taken on board when a malfunction occurs in the operation of an approved EGCS.

## Relevant Best Practice

Guidance for Best Practice for Member State / Coastal State (MEPC.1/Circ.884), Guidance on Best Practice for Fuel Oil Purchasers/Users for Assuring the Quality of Fuel Oil Used on Board Ships (MEPC.1/Circ.875) and Guidance on Best Practice for Fuel Oil Suppliers for Assuring the Quality of Fuel Oil Delivered to Ships (MEPC.1/Circ.865/Add.1) have been developed to assist in the smooth implementation of regulations by ships and fuel oil suppliers.

# Another Horizon of Economic Enhancement – Ship Recycling in Bangladesh



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## Introduction

Ship breaking or ship demolition is basically a disposal involving breaking up a ship for either the basic parts for sale or re-use or for pulling out the raw materials mainly as scrap. It is also known as ship dismantling, ship cracking or ship recycling. Wooden-hulled ships used to be simply set on fire or 'conveniently sunk'. Those wooden ships also used to be dismantled and the timbers re-used. That procedure got discontinued with the advent of metal-hulled boats. Modern ships have an average lifespan of 25-30 years before corrosion, metal fatigue and a lack of parts render them uneconomical to run. Ship breaking allows the materials from the ship, especially steel, to be recycled and made into new products. Equipment on board the vessel can also be reused.

India, Bangladesh, China and Pakistan have the highest market share and are global centres of ship breaking, with Chittagong Ship Breaking Yards in Bangladesh, Alang in India and Gadani in Pakistan being the largest ship graveyards in the world. India, Bangladesh and Pakistan account for 70-80 percent of the international recycling market for ocean-going vessels, with China and Turkey covering most of the remaining market. Only about 5 percent of global volume is scrapped outside of these five countries.

## History

During a severe cyclone in 1960, a Greek ship named M D Alpine got stranded on the shore of Sitakunda, Chittagong. It could not be re-floated and so remained there for several years. In 1965, Chittagong Steel House of then East Pakistan bought the ship and had it scrapped. It took years to scrap the vessel, but the work gave birth to the Ship Breaking Industry in Bangladesh. During the Bangladesh Liberation War in 1971,

a Pakistani ship, Al Abbas, got damaged by bombing. Later on, the ship was salvaged by a Soviet team working at Chittagong port at the time, and the ship was brought to the Faujdarhat seashore. A local company, Karnafully Metal Works Ltd bought it as scrap in 1974 and introduced commercial ship breaking to the country. The industry grew steadily through the 1980s and, by the middle of the 1990s, the country ranked number two in the world by tonnage scrapped. In 2008, there were 26 ship breaking yards in the area, and in 2009 there were 40. From 2004 to 2008, the area was the largest ship-breaking yard in the world.

In 2004 a Basel Convention decision officially classified old ships as "toxic waste", preventing them from leaving a country without the permission of the importing state. This has led to a resurgence of recycling in environmentally-compliant locations in developed countries, especially in former ship building yards. Maneuvering a large ship onto a beach at high speed takes skill and daring even for a specialist captain, and is not always successful. Next, the anchor is dropped to steady the ship and the engine is shut down. It takes 50 labourers about three months to break down a normal-sized cargo vessel of about 40,000 tonnes.

## Overview of Ship breaking in Bangladesh

Ship Breaking Yards are located in Faujdarhat, Sitakunda Upazila, Chittagong, along the 18-kilometre Sitakunda coastal strip, 20 kilometres north-west of Chittagong. Handling about a fifth of the world's total, it is the world's largest ship breaking industry. Out of approximately 50,000 ocean-going ships in the world, about 800 are taken out of service every year. At the end of their sailing life, ships are sold so that the valuable steel - about 95 percent of a ship's mass - can be reused. Some of the world's largest decommissioned ships are today scrapped at the shores north of Chittagong, which is the second largest city and major

sea port in the country. It is estimated that approximately 30 percent of the world's Light Displacement Tonnes (LDT) are scrapped in Bangladesh.

The ship breaking industry in Bangladesh is estimated at an annual turnover of around 1.5 billion dollars. Some of the ships are 350 meters long and weigh up to 15,000 tons. Up to 60 percent of the steel used in Bangladesh is believed to originate from the ship breaking yards in Chittagong. It is estimated that there are around 100 ship breaking yards along the coast, and every year new yards are being constructed.

## Benefits of Bangladesh from Ship breaking

Ship breaking plays an important role in the national economy for a number of reasons:

### 1. Production of steel:

The scrapping of ships provides the country's main source of steel and in doing so saves a substantial amount of money in foreign exchange by reducing the need to import steel materials. At present Bangladesh has a demand for 500,000 tons of metal/steel, but it has no iron ore sources or mines, which makes ship scrapping an inevitable and important source of raw materials.

More than 400 re-rolling mills have been using ship scraps as their raw materials, and the industry is currently supplying more than 60 percent of the raw materials for the local steel industry. The local shipbuilding industry also largely depends on this, as raw materials are mostly being used from scrap steel. A good number of local industries including heavy and light engineering depend on the ship breaking industry.

### 2. Green Industry

In some ways it can be considered a "green industry", as almost everything on the ship and the ship itself is recycled, reused and resold. The scrapping of ships supplies raw materials to steel mills, steel plate re-manufacturing, asbestos re-manufacturing, as well as providing furniture, paint, electrical equipment, lubricants, and oil to the number of businesses that have sprouted up specifically as a result.

### 3. Revenue Earning

It generates large amounts of revenue for various Government authorities through the payment of taxes. Every year the Government collects 10,000,000,000 Taka (US\$125 million) in revenue from the ship breaking industry through import duties, yard taxes and other taxes.



#### 4. Employment

Despite the conditions that the workers are employed under, this is an industry that employs more than 50,000 people directly, while another 150,000 people are involved indirectly. It offers work to some of the poorest people from the north of Bangladesh who would otherwise have no employment.

#### SENSREC phase I

The International Maritime Organization (IMO) and the Government of the People's Republic of Bangladesh represented by the Ministry of Industries (MOI) are jointly implementing a project entitled "Safe and Environmentally Sound Ship Recycling (SENSREC) in Bangladesh - Phase I". The key objective of the project is to make the country's ship recycling industry sustainable by helping it improve its standards related to occupational safety and health, working conditions and environmental protection.

The project is being executed by the Marine Environment Division of IMO as the implementing and executing agency, in partnership with the MOI, which acts as the national executing partner, with Bangladesh Marine Academy (BMA) as the national functional institution. The MOI coordinated the input from the different stakeholder ministries within the country, and



most importantly from the industry represented by the Bangladesh Ship Breakers & Recyclers Association (BSBRA), while IMO also collaborated with other relevant UN agencies including BRS, the International Labour Organization (ILO) and the United Nations Industrial Development Organization (UNIDO) to ensure the successful delivery of the project.

#### SENSREC phase II

The IMO-implemented SENSREC phase II project to enhance safe and environmentally sound ship recycling in Bangladesh was launched at a meeting of stakeholders in Dhaka in 2018. The project will focus on building capacity within Bangladesh to develop a legal, policy and institutional reform roadmap towards accession to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (known as the Hong Kong Convention),

and will train a variety of stakeholders within a well-functioning training system.

Speaking at the Dhaka meeting, Her Excellency Ms. Sidsel Bleken, Ambassador of Norway to Bangladesh, highlighted the significant progress made and their support for phase II. "The first phase of the project has achieved significant progresses in terms of developing health, safety and environmental standards as well as developing appropriate training programs for the industry stakeholders including its workers. Norway is pleased to launch phase II of the project and to continue supporting Bangladesh on its road to compliance with the Hong Kong Convention. The Government of Bangladesh, the ship recycling industry as well as the international ship-owners, have a joint responsibility in making this happen."

#### Conclusion

Recycling of outdated or decommissioned ships means ensuring a green shipping world. Bangladesh bears the major share of this exceptional and essential industry. However, recognizing safety as a prime and spontaneous issue, Bangladesh is heading towards ensuring a safety culture in her Ship Recycling Industry with IMO's cooperation and assistance.

## Promoting a Sustainable Blue Economy in Africa through Partnership Enhancement and Cross-Sectoral Coordination



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The blue economy has become an emerging hot topic in African countries, including those land-locked, to achieve sustainable economic and societal developments by using marine environments sustainably. Kenya, with its co-hosts Canada and Japan, held the conference on the Sustainable Blue Economy in Nairobi in November 2018. The conference brought together more than 16,000 participants from 184 countries, including heads of state. The event has built momentum for African nations to pursue a sustainable ocean economy.

I and my colleague, Mr. Masanori Kobayashi, went to the Republic of Namibia in May this year to attend a workshop on the blue economy held in the coastal town of Swakopmund, hosted by the University of Namibia. Hon. Bernard Esau, Minister for Fisheries and Marine Resources, gave the keynote speech, stressing the importance of promoting a blue economy in an inclusive manner. Mr.

Kobayashi and I also gave presentations and interacted with the participants. Namibia, one of the Southern African Development Community (SADC) member countries, takes proactive efforts to realize a blue economy in partnership with other SADC countries. Low carbon marine renewables are an important social foundation for a sustainable blue economy and should be promoted in harmony with other blue economy sectors such as marine tourism, fisheries, and seabed mining. For instance, strong winds in the coastal area of Namibia facing the Atlantic Ocean have a potential to provide the area with coastal and offshore renewable wind energy.

After the workshop, we returned to the capital city of Windhoek and visited various institutes, including the SADC Centre for Renewable Energy & Energy Efficiency (SACREEE). A 2018 Sasakawa Fellow, Mr. Tangeni Haimbala from Namibia introduced Ms. Karin Reiss of SACREEE to us, which made it possible to

visit her office. SACREEE was established in 2016 in Windhoek to contribute towards increased access to modern energy services and improved energy security. We explained about our blue economy projects by indicating that the promotion of offshore wind turbines in synergy with fisheries or tourism could foster an innovative ocean based economy in many parts of the world, and exchanged ideas on possible collaborative fields in SADC countries in the future.

During our visit to Namibia, we also met another Sasakawa Fellow, Ms. Leena Ndahafa Kagola working at Namport in Walvis Bay. I believe these direct and indirect connections with Fellows working in government sectors, maritime industries, and relevant institutions in various parts of the world could become a driving force for the cross-sectoral coordination and promotion of the blue economy.

# Combatting One of the Most Pressing Challenges for our Oceans - The Nippon Foundation's Approach to Addressing Marine Litter



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Our oceans are filled with items that do not belong there. Huge amounts of consumer plastics, metals, rubber, paper, textiles, derelict fishing gear, vessels, and other lost or discarded items enter the marine environment every day, making marine debris one of the most widespread pollution problems facing the world's oceans and waterways. The author of this article in her function as Associate Research Officer at the WMU-Sasakawa Global Ocean Institute, received the high honour to present her research on marine litter, which she is conducting at the Institute, at the UMIGOMI (Marine Litter) Zero International Symposium, and would like to share more information about her experience and the extraordinary work of The Nippon Foundation.

## Change for the Blue Project

To address various ocean issues, in 2016 The Nippon Foundation launched the Umi-to-Nippon (Ocean and Japan) project. Following this, in 2018 it launched the Change for the Blue Project in collaboration with the Ministry of Environment of Japan, to expand and develop new projects on marine litter involving the private sector, the public sector and academia. The Change for the Blue Project has three core activities: UMIGOMI Zero Week, an UMIGOMI Zero Award to recognize superior activities that can serve as models for the formulation of ocean waste policies, and an UMIGOMI Zero International Symposium. The Change for the Blue Project aims to create awareness and stresses the societal dimension of the problem. It hopes to have 800,000 people involved each year, with 2.4 million people involved over the next three years, in simultaneous projects nationwide under the banner "Don't create litter. Don't throw away litter. Pick up litter."

## UMIGOMI Zero International Symposium

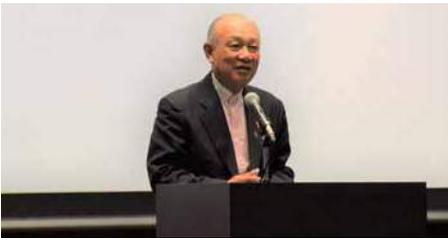
The UMIGOMI Zero International Symposium took place on June 17, 2019 in Tokyo at the headquarters of the Sasakawa Peace Foundation. It was held in conjunction with activities associated with the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth which was held in Nagano Prefecture from June 15-16, 2019.

Taking advantage of this momentum, the UMIGOMI Zero International Symposium was

attended by a wide range of interested parties from Japan and abroad. It not only provided information about international work related to marine debris, but served as a platform to disseminate information about Japan's and The Nippon Foundation's actions toward solving this issue both nationally and globally.

The UMIGOMI Zero International Symposium was opened by Chairman Sasakawa who shared his extensive experience on international collaboration in the field of ocean policy. Chairman Sasakawa reflected on his vision with regard to the need for a more intensive and streamlined international collaboration to address the entire lifecycle of plastic that lies at the core of the problem.

The Minister of the Environment, Yoshiaki Harada then shared the preliminary outcomes of the G20 Ministerial Meeting, which had concluded one day prior, and in that way set the theme for ensuing elements of the agenda. Under the diplomatic guidance of Japan, the G20 States were able to adopt an implementing framework on marine litter issues for the G20 Summit.



After Japan's comprehensive and ambitious approaches and initiatives to address marine litter were outlined and presented, The Nippon Foundation's work on marine litter was presented by Executive Director Mr. Unno. The Foundation's approach under the framework of Change for the Blue Project matches the high complexity of the issue, closely collaborating with 12 key stakeholders to create a model to address marine litter and to share best practices within and outside of Japan. Collaborations are established with industries and corporations, local municipalities, educational institutions, non-profit organisations and the Partners of The Nippon Foundation Ocean Japan Project.

In the keynote speech, Dr. Rodolfo Lacy, in his capacity as Director of the Environment Directorate of the Organisation for Economic Co-operation and Development (OECD), outlined the organisation's efforts to improve markets for recycled plastics as a means to address marine litter. Then Prof. Atsuhiko Isobe of Kyushu University delivered a presentation about his research relating to microplastic proliferation in the Pacific Ocean. Prof. Isobe stated that unless the amount of mismanaged plastic waste is reduced substantially, marine plastic pollution is likely to proceed to a point of no return, beyond which marine



organisms will be harmed, as has been shown in laboratory experiments.

Subsequently, Prof. Elaine Faustman of the University of Washington presented her research on Ocean and Human Health Context for Marine Litter. Prof. Faustman outlined that Human Health effects of marine litter could, for example, be direct through physical exposure to microplastic pollution. In this regard, the role of risk assessment and risk characterization was stressed. Then, the author of this article presented the work undertaken in the European Union to address marine litter. The European Union's approach establishes a comprehensive system which sees mandatory marine litter monitoring, the establishment of corresponding management approaches, as well as the ban and reduction targets of top single use items that end up as marine litter.

The Symposium also served as a platform to present the UMIGOMI Zero Awards in different categories, for innovation and entrepreneurial ideas from all over Japan. The awards were presented to different individuals, organisations and/or companies that have developed remarkable products or conducted comprehensive actions to address marine litter. The awards were an excellent opportunity to showcase the significant expertise and knowledge that is available in Japan.

The UMIGOMI Symposium demonstrates the very ambitious and comprehensive approach of The Nippon Foundation and Japan to address the issue of marine litter. The development of knowledge to address the many knowledge gaps and research needs stands central. Also, the nurturing of human talent and the societal dimension of this topic are an important pillar. The broad international vision and dimension of The Foundation's approach is not only evident by the strong international network relating to research, but also their strong emphasis on cooperation among and between different sectors, including industries, NGOs, academia and government. The idea to award outstanding industry, NGO and/or entrepreneurship ideas and actions is extremely important as the initiatives of certain key stakeholders can affect a significant change.

The author would like to thank The Nippon Foundation for the kind invitation and the opportunity to be part of such an important event.

# Finding My “Ikigai” at the World Maritime University



**Dr. Anish Hebbar**  
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(2006, India)

The word “ikigai” – made up of two Japanese words, “iki” meaning “life” and “gai/kai” meaning “worth” – is usually used to indicate a *raison d’être*, the source of value in one’s life or the things that make one’s life worthwhile. Besides, IMO’s work is dedicated to safe, secure and efficient shipping on clean oceans and the prevention of accidents and its adverse effects on the marine environment while the World Maritime University (WMU) works towards furtherance of these objectives, providing education, training and research services on issues related to the work of the Organization.

In this backdrop, joining the Maritime Safety and Environmental Administration specialisation at WMU was a natural choice following on a doctoral work which focused on governance of oil spill disasters and a master’s dissertation on risk communication coupled with a current focus on subjects such as risk assessment, maritime accident investigation, and domestic ship safety. Indeed, my appointment at WMU coincided with the conclusion of a major maritime safety project titled, Open-source tools for regional risk assessments for improved European preparedness and response at sea (OpenRisk).

OpenRisk addresses various critical issues in the area of pollution prevention and response, such as the lack of systematic and harmonized approaches, the lack of transparency in the methodological basis of the tools used in risk assessments, the lack of comparability of risk assessment results across geographical areas and over time, high costs of implementing regional risk assessments, and challenges in implementing risk assessment results, both at the EU member state and regional cooperation level, especially when different authorities are involved.

OpenRisk Guidelines and Tools is an open access document, intending to facilitate decision making processes within and between authorities. The suggested set of risk management processes can be adapted to the particular needs of member States based on particular national requirements and/or regional needs. The OpenRisk toolbox comprises twenty different risk assessment tools covering all three stages of a typical risk assessment process: risk identification, risk analysis and risk evaluation. The toolbox includes tools having a proven track record in maritime risk management as well as tools developed particularly for the project such as Marine Risk Index, Accidental Damage and Spill Assessment Model for Collision & Grounding (ADSAM C/G) and Maritime Event Risk Classification Method (ERC-M).

While OpenRisk aimed to improve understanding of risks and provide tools which support decision making, a new research project, BALTIMARI, focusing on the Baltic region in which WMU is currently participating, aims to review the current state of risk analysis, assess research and innovation projects that have been undertaken previously and identify knowledge gaps. The project intends to locate gaps and address the risks in maritime transportation systems and offshore energy production systems with respect to factors such as environmental pollution, autonomous vessels and human behaviour aspects. BALTIMARI also aims to study factors like cost effectiveness and readiness of current technology, analyse the quality of underlying evidence and check for scientific rigidity of any method. The project will eventually help in transferring research to benefit industry and policy environments.

Projects such as OpenRisk and BALTIMARI bring me back to ikigai. In the Okinawan culture, ikigai has been thought of as a reason to enjoy life, which is perhaps one of the reasons people don’t wish to retire and live long lives. They continue to do their favourite job as long as health permits. With exciting pathways in maritime safety and environmental governance research, I have surely found my ikigai at WMU, and indeed, heartfelt thanks are owed to H.E. Yohei Sasakawa for his noble support in my endeavours.

## Editor's note

Under the new system formed around Chairperson Kunieda, much time is being spent at each editorial meeting debating what kind of article contributions Fellows will enjoy.

Although the Newsletter carries articles that are somewhat serious, including on maritime affairs and IMO-related information from around the world, the nature of this Newsletter is essentially that of casual reading for an alumni association. In other words, “What kind of activities and lives are members pursuing in each country?” Knowing this should make it easier for members to become closer, and that is the belief I have had during my involvement since the time of the first issue.

Until now, I was optimistic that the number of contributions would naturally increase along with the number of graduates, but I have been feeling apprehensive about the recent state of contributions. I hope that Fellows haven’t become less enthusiastic in valuing the network, so I really want them to remember the feelings they had towards active participation in the Sasakawa Network when they decided to attend WMU.



On the Occasion of “The Award Ceremony for Honorary Fellows 2014”

On a private note, my wife, to whom I had been married for many years, passed away in February this year. She also was a source of support for some of my WMU activities, albeit from behind the scenes. I received heartfelt messages of condolence from several Fellows who knew her, and I would like to take the opportunity to apologize here for not thanking each of them individually.

Eisuke Kudo (Advisor, SPF)

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