2024 International Maritime and Ocean Policy Science Research Department Seminar

The International Maritime and Ocean Policy Science Research Department is pleased to announce its 2024 Seminar, which will focus on international issues related to international maritime and ocean policies associated with maritime transport, industry, research, education, and training. This department promotes research that contributes to maritime and ocean policies, such as building efficient, sustainable, and resilient supply chains through research on next-generation logistics networks based on data science, and ocean policies that are in line with national interests from the perspective of international law in the context of trends in marine living resources, marine non-living resources, and underwater cultural heritage. We also work to revitalize international collaborative research through scientific research on future international maritime education, such as collaboration with the International Maritime Organization (IMO) and the International Association of Maritime Universities (IAMU), and develop international exchange in comprehensive research. This year's seminar will include three presentations that highlight some of the efforts being made to achieve these goals.

Event Details:

Time: 10:40 ~ 12:10, Thursday, July 11th

Place: Umeki Y Hall (1F), Fukae Campus, Kobe University (https://www.maritime.kobe-u.ac.jp/en/map/)

Participant capacity: 50 persons

Participation fee: free

Theme: International Maritime and Ocean Policy Science, Research, and Education

Program (see page 2 for presentation summaries):

10:40 ~ 10:45 – Opening and introductions delivered by Department Head Matthew Rooks

10:45 ~ 11:05 – Physical Internet for Sustainable Transport and Logistics: Enna Hirata

 $11:05 \sim 11:25$ – An Analysis of the Nexus among the Three Resources in the Law of the Sea: Tatsuya Nakada

11:25 ~ 11:45 – Planning, Administering, and Analyzing a Short-Term Maritime Study Program: Matthew Rooks

11:45 ~ 12:10 – Q & A, Discussion, and closing remarks from Matthew Rooks

Participation Form (not required for faculty members):

Please complete the following participation form by 17:00, July 10th:

https://forms.gle/6FEAt1JEkgQtQEtM8

Direct any inquiries to Associate Professor Matthew Rooks at rooks@maritime.kobe-u.ac.jp

Presentation Summaries

Enna Hirata: Physical Internet for Sustainable Transport and Logistics

As the backbone of international trade and the global economy, the logistics system faces challenges such as inefficiency and increased greenhouse gas emissions. As an example of inefficiency, freight vehicle utilization has remained below 40 percent for the past decade. On the other hand, with the growth of e-commerce, the demand for delivery has more than doubled over the same period. In addition, the labor shortage in the logistics sector is getting worse every year. In terms of greenhouse gas emissions, on a global scale, the emissions from shipping alone are equivalent to the emissions from the whole of Japan. Under these circumstances, Physical Internet (PI) is attracting the most attention as a solution to these challenges. Proposed in 2010 by Montreuil et al., PI is an open, global logistics network that applies the communication mechanisms of the digital internet to physical logistics, connecting the elements of each logistics process. PI is expected to reshape the logistics network and transform the inefficient aspects of transportation to build an efficient, sustainable, and resilient supply chain. This talk will briefly introduce the concept of PI, the development of PI, and some of the recent work done in our lab.

Tatsuya Nakada: An Analysis of the Nexus among the Three Resources in the Law of the Sea

The UN Convention on the Law of the Sea (UNCLOS) attaches importance to living resources, non-living resources, and objects of an archaeological and/or historical nature. My study aims at integrating the researches of three legal marine resources. On 16 November 2024, 30 years will elapse since UNCLOS entered into force. Meanwhile there has been a remarkable development of international law, *inter alia*, in the field of making treaties to newly regulate marine living resources in light of the ecosystem approach. The most advanced example is "Discipline on Fisheries Subsidies" which was eventually adopted on 17 June 2022. This is the first environmental regulation in WTO (My Ph.D. dissertation on 28 September 2022). Second, I was the representative of the legal research team of deliberating environmental impact assessment toward the exploitation of deep seabed mineral resource under the auspices of Cabinet Office (October 2015-March 2018). I have continued pointing out the inadequacies of Japan's related legislations from the context of the negotiation of "Exploitation Regulation" under International Seabed Authority. Third, UNCLOS wording "objects of an archaeological and/or historical nature" has been generally paraphrased "Underwater Cultural Heritage," regardless of quite different definition. That's why the interaction of these three resources shall be carefully unveiled, which would thus lead to deeper understanding of international legal resources. In addition, the study of relationship between IMO and UNCLOS would be also progressed through International Joint Research Team (America, England, Philippines, Thailand, Timor-Leste and Vietnam).

Matthew Rooks: Planning, Administering, and Analyzing a Short-Term Maritime Study Program

For university students preparing for careers in international fields such those under the vast umbrella of the maritime industry, participating in study abroad programs can strengthen international ties between maritime universities, provide valuable intercultural experience, improve language and communication skills, and offer immersive learning environments not usually accessible in normal classroom learning. Short-term study abroad program are often more accessible than long-term exchanges, and provide a unique range of benefits for both the visiting and hosting institutions and student participants. This presentation will outline the goals, methods, and issues involved in the development, administration, and analysis of a short-term study program at Kobe University's Graduate School of Maritime Sciences for a group of students visiting Japan from the Massachusetts Maritime Academy that took place in May 2024. The presentation will highlight the efforts made to maximize benefits for both the visiting students and host university students, challenges involved with developing short-term programs, future opportunities created via the exchange, as well as an analysis of student participant feedback with the aims of serving as a template for other maritime institutions around the world to devise and implement similar future programs.
