

# Arctic Shipping: Research Dissemination International Workshop March 17, 2022; 14:00 – 19:00 (JST) Virtual Platform (via Zoom)

### **Host Organizers**

Arctic Sea Routes Research Group, ArCS II (https://www.nipr.ac.jp/arcs2/e/) Resilience Engineering Research Center, The University of Tokyo (http://rerc.t.u-tokyo.ac.jp/index\_en.html)

#### Introduction to the Workshop

The retreat of Arctic sea ice driven by global warming led to an emergent interest in Arctic shipping among the researchers, thus researchers from different parts of the world focus on various aspects of Arctic shipping and would have various perspectives. The Arctic Shipping: Research Dissemination International Workshop brings a unique opportunity to share research works and knowledge on Arctic shipping from researchers representing multiple countries, including Japan, France, UK, China, Korea,... The workshop is hosted by the University of Tokyo with financial support extended from the Ministry of Education, Culture, Sports, Science and Technology (MEXT). The workshop includes a series of interesting research presentations mainly focusing on economic perspectives on Arctic shipping, especially the Northern Sea Route (NSR), and an open discussion on Arctic shipping research and future prospects among the presenters and all participants.

Arctic Shipping: Research Dissemination International Workshop welcomes topics covering issues/applications and academic research include, but are not limited to:

- Economic feasibility of Arctic shipping
- Navigation with ice condition
- Environmental sustainability of Arctic shipping
- Cargo flow analysis with NSR and conventional shipping routes
- Any other topics related to the economic perspectives on the Arctic shipping

#### **Objectives of the Workshop**

- Deliver a unique opportunity to disseminate research on Arctic shipping among the researchers for further enhancement of Arctic research potential with more practical insights and implications
- Create an international platform for networking and sharing knowledge on Arctic shipping among the researchers

#### **Registration for the workshop**

 If you would like to participate in the workshop, please complete the registration form through the link (<u>https://forms.gle/LvUaiCSJGa5hEkMf6</u>) OR email your *Full name, Country, Affiliation* details to <u>chathumiayanthi@gmail.com</u>

## **Tentative Program**

| Welcome address, Introduction to the workshop  |
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| air: Prof. Ryota Wada (University of Tokyo, Japan)   |
| Prof. Olivier Faury (EM Normandie, Le Havre, France)<br><i>Title:</i> How infrastructures allow to reinforce the safety and profitability of the navigation in the NSR   |
| Dr. Xu Hua (China Waterborne Transport Research Institute, China)<br><i>Title: TBD</i>   |
| Prof. Ryuichi Shibasaki, Mr. Naoki Kosuge, Mr. Keigo Shibuya, and Mr. Sota<br>Aoyagi (University of Tokyo, Japan)<br><i>Title:</i> Feasibility of Northern Sea Route by using the global maritime container<br>shipping network simulation model |
| Ms. Ding Wenyi and Prof. Ryuichi Shibasaki (University of Tokyo, Japan)<br><i>Title:</i> Impact of Northern Sea Route on China's grain import with EU countries  |
| Prof. Shin-ichi Yamaguchi (International University of Japan, Japan)<br><i>Title:</i> The important factors in transportation for shippers and potential demand for NSR: A conjoint analysis in Japan  |
| Break (16:15 – 16:35)  |
| air: Dr. Chathumi Ayanthi Kavirathna (University of Tokyo, Japan)  |
| Prof. Lei Dai (Shanghai Jiao Tong University, China)<br><i>Title:</i> Assessing the effectiveness of METS on CO2 emission reduction and fleet<br>economic viability: considering the NSR   |
| Prof. Natsuhiko Otsuka (Hokkaido University, Japan)<br><i>Title:</i> Investigation of navigable speed and sea ice condition in the Northern Sea<br>Route   |
| <ul> <li>Dr. Seong-Yeob, Jeong (Korea Research Institute of Ships and Ocean Engineering, Korea)</li> <li><i>Title:</i> A practical ship speed estimation method in pack ice conditions</li> </ul>  |
| Dr. Chathumi Ayanthi Kavirathna (University of Tokyo, Japan)<br><i>Title:</i> Environmental and economic viability of the Northern Sea Route: Single vs. bi-<br>objective vessel speed optimization under different ice conditions               |
| Dr. Dimitrios Theocharis (Cardiff University, UK)<br><i>Title:</i> Feasibility of the Northern Sea Route for oil product tankers: The role of<br>commodity prices, in-transit inventory, and alternative operational modes                       |
| Open Discussion on Arctic Shipping Research and Future Prospects   |
| Vote of Thanks and Closing   |
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\*15 min for presentation, 10 min for Q&A