

The 12th Kobe University Brussels European Centre Symposium

Blue Economy, Green Horizons:

EU-Japan Research for Healthy, Sustainable Seas and Oceans

Organised jointly with Vrije Universiteit Brussel

with the support of the University of Kent

18 October 2022

VENUE Vrije Universiteit Brussel Conference Centre, U-Residence, Bd. Général Jacques 271, 1050 Brussels

9:15-10:00 OPENING ROOM FUJI

Moderator Introduction by the Moderator, **Ken-ichi Yoshida**, Kobe University
 Speakers **Prof. Masato Fujisawa**, President, Kobe University*
Prof. Jan Danckaert, Rector, Vrije Universiteit Brussel
H.E. Yasushi Masaki, Ambassador of Japan to the European Union
Ms. Signe Ratso, Director-General (Acting), DG Research and Innovation, European Commission

10:00-10:30 KEYNOTE SPEECH ROOM FUJI

Introduction **Tamotsu Nakamura**, Executive Vice-President, Kobe University
 Keynote **Michael Pitiot**, Writer and filmmaker, producer of award-winning international TV documentaries *Tara Océans*, *Planète Océan*, and *Méditerranée, Notre Terre*. Winner of the *Ocean Awareness Award*, International Film Festival, Prague 2022
Building Ocean Awareness, Opening New Horizons: A Key Role for Creative Media
 Response **Karin Vanderkerken**, Vice-Rector for International Affairs, Vrije Universiteit Brussel

10:30-13:30 MORNING PARALLEL SESSIONS

10:30-13:30 PARALLEL SESSION 1: 'BLUE ECONOMY': GLOBAL TRADE FLOWS, ENVIRONMENTAL ISSUES, AND GOVERNANCE OF THE SEAS. ROOM FUJI

Joint Producers **Mikio Takebayashi**, Kobe University
Bernard Siman, Vrije Universiteit Brussel and Egmont Institute

10:30-11:50 Theme 1: Sustainable Blue Economy: New Resources, Innovative Solutions for Global Economic Recovery

Moderator **Bernard Siman**, Vrije Universiteit Brussel and Egmont Institute
 Speakers **Masahiko Furuichi**, International Association of Ports and Harbours*
Environmental Ship Index (ESI) Program initiated by the IAPH
Wouter Dewulf, University of Antwerp
Disruption, Innovation and Regulation: What Can the Maritime Industry Learn from the Aviation Industry - Or is it Vice-Versa?
Kevin Verbelen, Vrije Universiteit Brussel and Agoria
Global Supply Lines: Sustainable Governance and Geostrategy

11:50-12:10 Coffee and networking break

12:10-13:30 Theme 2: Shaping International Ocean Governance for the Future

Moderator **Mikio Takebayashi**, Kobe University
 Speakers **Eva Pejsova**, Japan Chair, Vrije Universiteit Brussel
A Rule-based Governance of the Seas: A Leading Role for EU and Japan?
Erik Franckx, Vrije Universiteit Brussel
International Law of the Sea: Meeting Today and Tomorrow's Challenges
Bernard Siman, Vrije Universiteit Brussel and Egmont Institute
"Lawfare" as a Hybrid Maritime Threat to Global Governance

10:30-13:30 PARALLEL SESSION 2: OCEANS OF THE FUTURE: ADVANCES IN MARINE AND MARITIME SCIENCES: NEW TECHNOLOGIES FOR NEW HORIZONS ROOM NIKKO

Joint Producers **Minoru Takeda**, Kobe University, **Yue Gao** and **Thierry Coosemans**, Vrije Universiteit Brussel
Robert Barker, University of Kent

10:30-11:50 Theme 1: *Harnessing the Power of Oceans: Fostering Innovation for Energy Sustainability*

Moderator **Minoru Takeda**, Kobe University

Speakers **Martin Visbeck**, Kiel University and GEOMAR Helmholtz Centre
Digital Twins of the Ocean - Opportunities to future-proof sustainable development
Minoru Takeda, Kobe University
Applications of Superconductivity in the Field of Maritime Sciences
Makoto Aoki, Ochanomizu University, Tokyo*
Study of Electrode Surface Structure for the Improvement of Seawater Electrolysis Efficiency
Benedetto Allotta, University of Florence
Perspectives in Underwater Robotics

11:50-12:10 Coffee and networking break

12:10 -13:30 Theme 2: *Addressing Marine Pollution, Restoring Marine Ecosystems:*

Moderator **Thierry Coosemans**, Vrije Universiteit Brussel

Speakers **Yue Gao**, Vrije Universiteit Brussel
Biogeochemical cycle of inorganic contaminants in the North Sea and Baltic Sea
Robert Barker, University of Kent
Safe Harbours: Industry-University Collaborations in Environmental Protection
Richard Sempéré, CNRS, Director of the Ocean Sciences Institute, Université d'Aix Marseille
Plastics and their organic additives in the marine environment: Proposals to limit the risks for the Mediterranean Sea.
Simon Barnes, University of Kent
Decarbonising the maritime sector; complex, challenging and costly?

10:30-13:30 PARALLEL SESSION 3: SEAS, SCIENCE AND SOCIETIES: BUILDING AWARENESS, ENGAGING COMMUNITIES. ROOM KOYA

Joint Producers **Ken-ichi Yoshida** and **Chiaki Ogino**, Kobe University
Farid Dahdouh-Guebas, Université Libre de Bruxelles and Vrije Universiteit Brussel

10:30-11:50 Theme 1: *Science and Society: A Holistic Approach for Healthy Oceans*

Moderator **Patrick Vittet-Philippe**, Kobe University Brussels European Centre

Speakers **Chiaki Ogino**, Kobe University*
Fighting Plastic Pollution: Scientific or Societal Challenge?
Sigi Gruber, Senior Adviser for Ocean Research, European Commission
Fighting Plastic Pollution, Restoring our Oceans: From the Mediterranean to the World
Michel Claessens, Université Libre de Bruxelles
Oceans, Science and Society: Securing the Role of Science in the Political Debate
Siri Granum Carson, Director Ocean Strategic Area, Norwegian Technological National University
An Ocean of Knowledge – Towards a More Inclusive Ocean Science

11:50-12:10 Coffee and networking break

12:10-13:30 Theme 2: *Oceans Bridges: Building Ocean Awareness and Literacy, Engaging Communities*

Moderator **Farid Dahdouh-Guebas**, Université Libre de Bruxelles and Vrije Universiteit Brussel

Speakers **Stefano Cannicci**, Vice-President, University of Florence
Functional Mangrove Restoration Beyond Blue Carbon: Communities' Roles and Impact
Laura Bocchi, University of Kent and **Nobuko Yoshida***, Oxford University
Ocean Observatories Initiative: Applying typing theories of programming languages to ocean observation.
Margaret Chen, Vrije Universiteit Brussel
Rising Sea Levels: Involving Coastal Stakeholders for Building Coast Resilience.

13:30-14:20 JAPANESE NETWORKING LUNCH (WITH VIDEO PRESENTATIONS) FOYER

14:20-14:30 PRESENTATION BY EURAXESS-JAPAN AND EURAXESS-KOBE FOYER

Judit Erika Magyar, EURAXESS-Japan Country Representative

14:30-16:00 OPEN INTERACTIVE WORKSHOPS AND BROKERAGE EVENTS

Objective The objective of these workshops and brokerage meeting, involving morning session speakers and young scientists is to share mutual research interests, and to discuss funding possibilities for EU-Japan collaborative projects, in the perspective of forthcoming Horizon Europe Calls focused on Japan.

14:30-16:00 INTERACTIVE WORKSHOP/BROKERAGE EVENT A (ECONOMICS)
SUSTAINABLE GREEN ECONOMY – ‘LAWFARE’ AND GOVERNANCE OF THE SEAS **ROOM FUJI**

Joint Producers **Mikio Takebayashi**, Kobe University and **Bernard Siman**, Vrije Universiteit Brussel

Moderators **Bernard Siman**, Vrije Universiteit Brussel and Egmont Institute and **Mikio Takebayashi**, Kobe University

Contributors **Mikio Takebayashi**, Kobe University
Net Zero and its Effect on the International Cargo Transport Network
Ramin Raeesi, University of Kent
The Port of Dover ‘Clean Ferries’ Project: An Example of University-Industry Cooperation
Ra Mason, University of East Anglia*
Claiming and calming greyzones in the East China Sea: Dangers of the drift from lawfare to warfare?

Discussant **Eva Pejsova**, Japan Chair, Vrije Universiteit Brussel

14:30-16:00 INTERACTIVE WORKSHOP/BROKERAGE EVENT B (NATURAL SCIENCES & TECHNOLOGY)
TOWARDS GREEN ENERGY AND GREEN HYDROGEN. **ROOM NIKKO**

Joint Producers **Minoru Takeda**, Kobe University and **Thierry Coosemans**, Vrije Universiteit Brussel

Moderator **Thierry Coosemans**, Vrije Universiteit Brussel

Contributors **Dominik Richter**, Hydrogen Europe
Towards Green Energy and Green Hydrogen: A European Approach
Minoru Takeda, Kobe University
Marine Transportation of Hydrogen Energy: Challenges and Opportunities – the KaitaKu Project
Ivar Kruusenberg, CEO, PowerUP Energy Technologies, Estonia
Hydrogen as a Game Changer for the Maritime Sector
Isabel François, Waterstofnet (Belgium)
Hydrogen Status: Flanders Belgium
Ander Martinez Alonso, Vrije Universiteit Brussel
Hydrogen as an energy vector, a Multi-Energy System Approach

14:30-16:00 INTERACTIVE WORKSHOP/BROKERAGE EVENT C (SOCIAL SCIENCES AND HUMANITIES)
OCEAN AWARENESS: THE ROLE OF COMMUNITIES AND THE MEDIA. **ROOM KOYA**

Joint Producers **Ken-ichi Yoshida**, Kobe University, **Patrick Vittet-Philippe**, Kobe University Brussels European Centre

Moderator **Ken-ichi Yoshida**, Kobe University

Contributors **Robin Takashi-Lewis**, Mymizu, Japan*
The ‘Mymizu’ (My Water) Movement: Leveraging Community and Technology to Tackle Plastic Waste
Jonas Abs, DLR, Germany
“Plastic Pirates – Go Europe!”: On a Mission to Fight Plastic Waste Together with Citizen Scientists
Tetsuji Ida, Science and Environment Editor, Kyodo News, Japan*
Facing a multidimensional crisis of the ocean environment

Discussant **Michael Pitiot**, Writer and award-winning filmmaker

16:00-16:15 CLOSING POLICY KEYNOTE (LIVE FROM SAN FRANCISCO) **ROOM FUJI**

Introduction **Tamotsu Nakamura**, Executive Vice-President, Kobe University

Keynote **Pascal Lamy**, Chair of the Mission Board, ‘Mission Restoring our Ocean and Waters by 2030’; Coordinator of the Jacques Delors Think Tanks; former Director-General of the World Trade Organisation; former EU Commissioner for Trade
A Digital Twin of the Ocean: Why and How?

Response **Jeremy Carette**, Dean for Europe, University of Kent

16:15-16:30 CLOSING REMARKS **ROOM FUJI**

Tamotsu Nakamura, Executive Vice-President, Kobe University
Jeremy Carette, Dean for Europe, University of Kent
Hugo Thienpont, Vice-Rector for Innovation and Valorization, Vrije Universiteit Brussel

16:30-17:30 NETWORKING RECEPTION & DRINKS + SAKE TASTING BY Oh! My Saké! **FOYER**

* Video presentations, followed by live Q&A