



# MARLOG 12

Innovative Technologies for Ports and Logistics Towards a Sustainable Resilient Future

# Program

12 – 14 March 2023





# MARLOG 12

Innovative Technologies for Ports and Logistics Towards a Sustainable Resilient Future



Sunday, 12<sup>th</sup> March 2023





### Supply Chain Resilience Strategies and its Role in Enhancing Competitiveness in the Maritime Transport and Logistics

#### Session Chair

#### Prof. Maja Fošner

#### Dean, Faculty of Logistics, University of Maribor, Slovenia

12:00	Challenges and Changing Dynamics - Energy & Maritime Industry. H.E. Mr. Khamis Juma Buamim Chairman, The Dubai Council for Marine & Maritime Industries (DCMMI Emirates), UAE.
12:20	Supply Chain Trends Mr. Kristof Waterschoot
	Managing Director Antwerp Port Training Center (APEC), Port of Antwerp-Bruges International,
	Belgium.
	-
12:40	Resilience of Maritime Transport Chains – A Macro Perspective
	<u>Dr. Burkhard Lemper</u>
	President of Global Shipping Think Tank Alliance (GSTTA), Shanghai, China.
	Managing Director, Institute of Shipping Economics and Logistics (ISL)
	Professor at the Bremen City University of Applied Sciences, Germany
13:00	Resilience of Supply Chains.
	Dr. Philippe Guillaumet
	European Projects Manager, Port of Marseille, France.
13:20	Session Discussion
13:30	Coffee Break





### Requalification of Human Resources Capabilities of Port and Logistics Community for Future Professions

Session Chair

Capt. Anwar Buftain

Team Leader, Marine Affairs & Risk Assessment,

#### Fleet Operations Group

Kuwait Oil Tanker Company, Kuwait

14:00	Capacity Building for Maritime Industry Towards Zero Emissions - AASTMT Vision Post COP27
	Dr Gamal Ghalwash AASTMT President's Consultant for International Maritime Relations, Alexandria, Egypt.
14:20	An Overview of the Existing Gap Between the University Educational Offers Focused on
	Entrepreneurship and the Maritime Cruise Industry: Evidence from Romania
	Prof. Gheorghe Militaru, Dr. Andreea Barbu, Prof. Dana Deselnicu and Dr. Sandra Haddad
	Professor, University POLITEHNICA of Bucharest, Romania.
14:40	Power skills: The Key to our Professional Future
	Mrs. Ana Rumbeu
	Training Director, ValenciaPort Foundation, Spain.
15:00	Strengthening University Third Mission Through Education – Enterprise Cooperation: The Value of
	Innovation Ecosystems
	Prof. Augustin Semenescu, Dr. Loredana Manasia and Dr. Elena Cristina Udrea
	Professor, University POLITEHNICA of Bucharest, Romania.
	Vice-Director of the Industrial Engineering and Robotics Doctoral School.
15:20	Session Discussion
15:30	Lunch
13.30	





# MARLOG 12

Innovative Technologies for Ports and Logistics Towards a Sustainable Resilient Future



Monday, 13<sup>th</sup> March 2023





### Optimization of Port Infrastructure and Operation

#### Session Chair

#### Prof. Ahmed Amin Professor, Civil Engineering Department, Suez Canal University

09:00	Container Moves per Lift: The Impact of Spreader Technology on Bay Time
	Prof. Shmuel Yahalom, Prof. Changqian Guan, and Prof. Elizabeth Langmaid
	Distinguished Service Professor, Department of International Trade and Transport and Graduate Department of
	Business and Transportation, State University of New York Maritime College, United States of America.
09:20	Hydrodynamic Analysis of Ship Maneuverability at Ports Using CFD.
	Dr. Tahsin Tezdogan, Dr. Daejeong Kim and Prof. Atilla Incecik
	Associate Professor in Maritime Engineering, Maritime Engineering Research Group
	Department of Civil, Maritime, and Environmental Engineering, University of Southampton, United Kingdom.
09:40	Siflow21. Predictive Simulation of Navigation Channels and Port Infrastructure Capacity With AIS Data Assessment
	Mr. Raul Redondo, Mrs. Carmen Ayuso and Mr. José Ramón Iribarren Alonso.
	Director of the Manoeuvring and Nautical Studies Area, Siport21, Spain.
10:00	An Analytic Hierarchy Process-Based Survey to Investigate The Impact of Terminals' Service Attributes On Attracting Shipping Lines
	Eng. Aly Elrefaei, Dr. Ahmed Idris and Dr. Ahmed Kamel
	Civil Engineer, a Researcher at Maritime Research and Consultation Center (MRCC),
	Arab Academy for Science, Technology, and Maritime Transport, Alexandria, Egypt.
10:20	The Outcome of Implementing Structured SOFTES Model as a Post-Simulation Debriefing Strategy Among
	Marine Trainees
	Dr. Capt. Ashraf Elsayed
	Marine simulator instructor, Integrated simulator complex, Arab Academy for Science, Technology, and Maritime
	Transport, Egypt.
10:40	Review on Ship Recycling Industry
	Dr. Walid Bahgat and Dr. Ahmad Moussa
	Second Lecturer, Institute of Maritime Upgrading Studies, AASTMT, Egypt.
11:00	Session Discussion
11:10	Coffee Break
	•••





### Future-Proof Infrastructure for improving Port-City Integration

#### Session Chair

#### Prof. Roberto Revetria Head, Student Orientation Committee, University of Genoa, Italy

- 11:30 Dealing with Uncertainty for a Resilient Navigation Infrastructure
   Eng. Francisco Esteban Lefler
   President, The World Association for Waterborne Transport Infrastructure (PIANC), Brussels, Belgium

   11:50 An Empirical Research on Connecting Port and City Infrastructure and its Implications for the Economy – Case Study: Black Sea Ports
   Dr. Stefan-Alexandru Catana and Dr. Andreea Barbu
  - Assistant Professor, Faculty of Business and Administration, University of Bucharest, Romania.
- 12:10 PIANC Working Group 219 Joint research by PIANC and IWI to determine Guidelines for inland waterways infrastructures to facilitate tourism activities, and proceedings.
  Mr. Rudy Van der Ween

President of Inland Waterways International, Belgium.

- 12:30 Future Proof Infrastructure for Port-City: Case Study for the Sustainability of Suez Canal Entrance Groins Against Future Extreme Wave Conditions Eng. Mohamed Abouelnasr Coastal Engineer (NEOM), M.Eng Candidate, PMI-PMP, RegPM<sup>™</sup> CPPP, SFC, Egypt.
- 12:50 Implementing Sustainability in the International Airport of Sharm El-Shaikh <u>Mr. Mohamed Genina</u>, Dr. Khaled El-Sakty and Dr. Ahmed Hussein Ali Operation Specialist at the Ministry of Civil Aviation, Egypt.
- 13:10 Session Discussion
- 13:20 Break





### Smart Technologies and Innovation

# **Towards Agile Supply Chains**

### Session Chair

### Mr. Jordi Torrent

### MEDPorts Association Secretary General, Barcelona, Spain

13:40	Innovation, Digitalization, and Port Competitiveness
	Eng. Miguel Garin Alemany
	Director of International Development, ValenciaPort Foundation, Spain.
14:00	Port Authority Digitalization: what and why"
	Mr. Carles Rua
	Head of Innovation, Port of Barcelona, Spain.
14:20	A Study of the Usage of Unmanned Aerial Vehicles (UAVs) in Salvage Operations
	<u>Capt. Abdelrahman Abdelhadi,</u> Dr. Hassan Elghazouly, Dr. Ahmed Ismail and Eng. Eman Elkashat
	Marine Chief officer, Abu Dhabi National Oil Company (ADNOC).
14:40	Description Agile Sugaly Chain Management in The Equation Agricultural Eagle Sector Jacuas and
14:40	Promoting Agile Supply Chain Management in The Egyptian Agricultural Food Sector: Issues and Guidelines
	Ms. Engy Bayoumi, Dr. Sara Elgazzar, and D.r Osman Bayoumi
	Teaching Assistant, College of International Transport and Logistics, AASTMT.
	reaching Assistant, conege of international transport and Logistics, AMSTIMIT.
15:00	Foundations for the Sustainability of the LNG Supply Chain in Egypt and the Logistics Services
20000	Supporting it.
	Dr. Heba Ahmed Elbaghdady and Mr. Omar Mostafa Mohamed
	Lecturer, Department of Transport Logistics Management, College of International Transport and
	Logistics, AASTMT, Egypt.
15:20	Obtaining Green Warehouses from Converting the Kinetic Energy of Trucks into Piezoelectricity: A
	Suggested Model
	<u>Ms. Bassma Sameer,</u> Dr. Islam Hanafi, and Dr. Sahar Elbarky
	College of International Transport and Logistics, Arab Academy for Science, Technology and Maritime
	Transport (AASTMT), Egypt.

••• 8

- 15:40 Session Discussion
- 15:50 Lunch





# MARLOG 12

Innovative Technologies for Ports and Logistics Towards a Sustainable Resilient Future



Tuesday,  $14^{th}$  March 2023





# Green Transition and Renewable Energy

#### Session Chair

#### Prof. Bojan Rosi

#### Former Dean, Faculty of Logistics, University of Maribor, Slovenia

09:00	Modeling and Simulation Comparison of Conventional and Innovative Transport for Natural
	Gas
	Dr. Emanuele Adorni, Dr. Anastasiia Rozhok, Dr. Lorenzo Damiani and <u>Prof. Roberto</u>
	<u>Revetria</u>
	Professor, Department of Mechanical Engineering, University of Genoa, Italy.
09:20	Environmental Impact of Maritime Logistics Using Satellite Data
	Prof. Nikitas Nikitakos, Dr Dimitra Kitsiou, Dr. Marina Banela, Dr. Anastasia Patera
	and Dr. Afrokomi-Afroula Stefanakou
	Professor, Department of Shipping Trade and Transport, University of the Aegean, Greece.
09:40	Decarbonization of Maritime Transport in the Mediterranean. A Vision from the Ports
	Mr. Jordi Torrent
	MEDPorts Association Secretary General, Barcelona, Spain.
10:00	A Cost-Benefit Analysis of the Use of Ammonia and Hydrogen as Marine Fuels
	Dr. Anastasia Christodolou, Dr. Tuan Dong, Dr. Alessandro Schönborn, Dr. Aykut I.
	Ölçer and Dr. Dimitrios Dalaklis
	Research Associate, Copenhagen Business School, Denmark.
10:20	Alternatives Fuels for the Maritime Sector. Green Hydrogen.
	Eng. Luis Núñez Vera
	Head of European Affairs, Algeciras Bay Port Authority, Spain.
10:40	Session Discussion
10:50	Break





### Innovative Strategies for Enhancing Port Competitiveness

#### Session Chair

#### Dr. Babak Banijamali

### Vice-Chairman of Maritime Navigation Commission (MarCom) World Association for Waterborne Transport Infrastructure, PIANC

11:00	An Overview of Applying Lean Principles to Shipbuilding
	Rear Admiral Mahmoud Hosny, Dr. Ibrahim Seediek and Dr. Mohamed Elgohary
	Director of Maritime Technology Studies Institute, Alexandria, Egypt.
11:20	Mapping Forging Industry Manufacturing Optimization Approaches to Port Operations
	Prof. Nik Knez <u>, Prof. Tomaž Kramberger</u> and Prof. Bojan Rupnik
	Vice Dean, Faculty of Logistics, University of Maribor, Slovenia.
11:40	Resilience Strategies in Ports and Maritime Transport in the Mediterranean Sea – Priority Areas for
	Policy Action
	Eng. Francesc Carbonell
	Head, Transport and Development Sector, Union for the Mediterranean, Spain.
12:00	
	Resilience Strategies as a Parameter of Competitiveness in Maritime Transport
	Dr. George Vaggelas
	Partner at "Ports and Shipping Advisory"
	Associate Professor, Department of Shipping, Trade & Transport, University of the Aegean, Greece.
12:20	Use of the Geospatial Technologies and its Implications in the Maritime Transport and Logistics
	Dr. Cezar Scarlat and Dr. Nistor Andrei, and <u>Dr. Ioanid Alexandra</u>
	Lecturer, PhD, University Politehnica of Bucharest, Romania.
12:40	Session Discussion
12:50	Coffee Break





# Modern Risk Management Strategies

#### Session Chair

#### Dr. Mohi El Din Mohamed El Sayeh Dean, College of Maritime Transport and Technology

13:10	Key Challenges for the Sustainable Development of Ports and ongoing work by IAPH
	Dr. Antonis Michail
	Technical Coordinator IAPH and WPSP, International Association of Ports and Harbors, Belgium.
13:30	Risk Management in a Logistics Company
	Prof. Dana Corina Deselnicu, Dr. Andreea Barbu and Dr. Sandra Hamy Haddad
	Director of the Doctoral School of Entrepreneurship, Business Engineering and Management,
	University Politehnica of Bucharest, Romania.
13:50	Digital Twin-Based Unmanned Air Traffic Management for Emergency Response
	<u>Prof. Bojan Rupnik,</u> Prof. Tomaž Kramberger and Prof. Mateja Čuček
	University of Maribor, Slovenia.
14:10	Securing the Maritime Industry
	Dr. Mohamed Abdel Fattah
	Senior Security Architect, Cybersecurity expert, Fortinet.
14:30	Session Discussion
14:40	Break
	,