



# 3<sup>rd</sup> SNAME/RINA ONAE Annual Student Technical Conference

May 17<sup>th</sup>, 2019

Department of Ocean and Naval Architectural Engineering

Memorial University of Newfoundland
St. John's NL, Canada



## **About the conference**

The SNAME/RINA ONAE Annual Student Technical Conference is jointly organized by the Department of Ocean and Naval Architectural Engineering, Faculty of Engineering and Applied Science, Memorial University, the Society of Naval Architects and Marine Engineers Canadian Atlantic Section and Student Section, the Canadian Atlantic Branch of The Royal Institution of Naval Architects. This conference aims to bring together senior undergraduate students and graduate students in Ocean and Naval Architectural Engineering, present their research activities and design projects, and share and discuss their ideas and research with each other.

## Venue

Memorial University of Newfoundland, S.J. Carew (Engineering) Building, Room EN4002, Engineering Boardroom, Faculty of Engineering and Applied Science 240 Prince Philip Drive, St. John's, NL A1B 3X5, Canada

Please note that SPACE IS LIMITED For those wishing to attend, RSVP Required by Wednesday, May 15<sup>th</sup> at 5:00pm

## **Organizing Committee and Contact**

**Dr. Lorenzo Moro** (Canadian Atlantic Branch of RINA)

Department of Ocean and Naval Architectural Engineering, Memorial University of Newfoundland

Email: <a href="mailto:lmoro@mun.ca">lmoro@mun.ca</a>
Tel: 1 (709) 864-2755

**Dr. Heather Peng** (Canadian Atlantic Section of SNAME)

Department of Ocean and Naval Architectural Engineering, Memorial University of Newfoundland

Email: <a href="mailto:hpeng@mun.ca">hpeng@mun.ca</a>
Tel: 1 (709) 864- 6795

## Conference Agenda

#### 8:30am - 9:00am

Conference Registration

#### 9:00am - 9:10am

**Opening Session** 

## 9:10am - 9:30am

Keynote Speaker

#### 9:30am - 10:30am First Session

- Simulations of Self-Propulsion Model Tests of a Fishing Vessel Using a Body-Force Method Coupled with a RANS Solver Md Ashim Ali, Heather Peng, Wei Qiu
- 2. Cavitation Performance of Propeller Sections with and without Leading Edge Defects Shanqin Jin, Ruosi Zha, Heather Peng, Wei Qiu
- 3. Finite Element vibration analysis of a twin-screw super-yacht: influence of propeller phase angles *Alessandro Zambon, Lorenzo Moro*

#### 10:30am - 10:45am

Break and Networking

### 10:45am - 11:00am

RINA & SNAME Awards 2018

#### 11:00am – 12:00pm Second Session

- 4. Simulation Methods for Ship-Ice Interactions *Amy Price*
- 5. Low polar class ship grillage under moving ice loads *Sthéfano L. Andrade, Bruce W.T. Quinton*
- 6. Introducing the use of Reinforcement Learning Based Ship Autopilot for Reducing Hull Loads in Ice

Michael Dawson, Dennis Peters, Claude Daley, and Mashrura Musharraf

## 12:00pm - 1:00pm Third Session

- 7. Performance Evaluation and Optimization of a Hinged-typed Wave Energy Converter Wei Meng, Meng Chen, Heather Peng, and Wei Qiu
- 8. A Survey on Underwater Oil Spill Reconnaissance and Delineation with AUV *Yaomei Wang*, *Ting Zou*, *Neil Bose*

9. Exploring the Relationship Between Amount of Training and Ice Management Performance *Rebecca Thistle, Brian Veitch* 

1:00pm - 2:00pm

Lunch

## 2:00pm – 3:00pm Fourth Session

10. Definition of frequency-dependent damping properties for vibration isolators for marine diesel engines

Jacopo Fragasso, Lorenzo Moro

11. Characterization of acoustic transmission losses on board small-scale fishing vessels from Newfoundland and Labrador *Giorgio Burella, Lorenzo Moro*