

RINA International Conference on Computational and Experimental Marine Hydrodynamics 2016

MARHY 2016

(www.marhydro.com and
www.rina.org.uk/Computational_Experimental_Marine_Hydrodynamics2016.html)

24th – 25th November 2016

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

Organized by



Department of Ocean Engineering
Indian Institute of Technology Madras
Chennai (TN) – 36, PIN – 600 036, India.
www.oec.iitm.ac.in

In collaboration with



The Royal Institution of Naval Architects,
United Kingdom of Great Britain and
Northern Ireland
www.rina.org.uk

About the institution

IIT Madras is a premier centre for teaching, research and industrial consultancy in the country. The campus is situated in lush green environment and the weather in the month of December is expected to be pleasant with temperatures around 28 °C (max) and 20 °C (min). On campus guest house and hostel accommodations will be provided for the participants based upon availability and on first-come-first-serve basis.

About the international conference

The area of fluid mechanics deals with mechanics related to the fluid flow and covers liquids, gases and/or their combination set in motion. Though, in the fluid mechanics domain, primarily hydrodynamics deals with the study of liquids in motion, however it can include gases trapped in liquid or multiple phases of liquid and gas. In modern era of engineering, the hydrodynamics in marine environment – Marine Hydrodynamics – offers a wide range of applications, including calculating forces and moments on ships and offshore structures, determining the mass flow rate of petroleum through pipelines, and predicting ocean weather patterns, etc. The marine hydrodynamics offers a systematic structure that underlies and unites these practical disciplines and covers empirical, semi-empirical, numerical and computational laws derived from flow measurement, modeling and simulations and used them to solve practical problems of interest in ships and offshore structures. In general, the solution to a marine hydrodynamics problem involves computing various properties of the fluid flow (e.g. flow velocity, pressure, density, and temperature) as functions of space and time over/on ships and offshore structures. The RINA International Conference on Computational and Experimental Marine Hydrodynamics (MARHY 2016) is aimed at bringing together academicians, scientists, engineers and researchers working in various disciplines of marine hydrodynamics to exchange views as well as to share knowledge among people from different parts of the globe. In MARHY 2016, we are planning to have four keynote talks, twelve invited talks, four plenary talks and contributed research papers on critically important diverse themes like ship propulsion, ship maneuvering, marine hydrodynamics, ship resistance, underwater vehicles and ship motions. The keynote talks are associated with four dedicated sessions on: hydrodynamics of fluid-structure interaction, hydrodynamics for propulsion, experimental hydrodynamics for ocean engineering, and hydrodynamics for design.

Call for papers

MARHY-2016 invites all the researchers to submit original and unpublished work. Please submit 'extended abstract' (2-3 pages) in RINA format on A4 size in Times New Roman Script of 12-pt font. All the received abstracts will be reviewed and judged on merits including correctness, originality, technical strength and quality of presentation. The accepted abstracts will be invited for the full-length paper submission (8-14 pages). The accepted full-length papers will be published in the conference proceedings. For each accepted paper at least one of the authors has to register for the conference. The authors are requested to send the papers in soft copy as an e-mail attachment to rina.cbc@gmail.com. Or the submission can be through website submission of the RINA: www.rina.org.uk

Registration

The registration fees are:

1. For authors (industry) - 10,000 ₹
2. For authors (academic institutions) - 8,000 ₹
3. For students - 4000 ₹
4. For non-author participants - 5000 ₹
5. For international authors (industry/academic institutions): 300 USD.
6. For international authors (student): 200 USD.

To register, please complete the accompanying tear off portion of this brochure and post it to any of the coordinators alternatively send an e-mail to any of the coordinator. Some fellowships will be available to selected students for travel and registration support.

Best paper awards

The three best papers will be awarded in MARHY-2016. The decision will be taken by an expert committee and its decision will be final in this regard.

Important dates

- Abstract submission: 30th June 2016.
- Acceptance notification: 31st July 2016.
- Full paper submission due: 30th September 2016.
- Final acceptance notification: 15th October 2016.

Topics

The co-coordinators are soliciting original manuscripts that highlight recent successes and define major research challenges in all the areas of marine hydrodynamics. The non-exhaustive list of areas includes – Marine hydrodynamics for:

- Resistance, propulsion, sea-keeping, and maneuverability,
- Cavitation and cavitating flows,
- Non-linear forces due to wind, waves and current,
- Effect of slamming, sloshing, green water, run-up, and impact loads,
- Computational fluid dynamics, numerical modeling and simulation for towing/wave tank experiments,
- Hull form optimization based on integration of CAD, CAE and CFD,
- Fluid-fluid and fluid-structure interactions,
- Flow induced noise and vibration,
- High speed and energy efficient vessels,
- Offshore platforms, pipelines, risers and mooring systems,
- Renewable marine energy and ocean resources, and
- all other applications in naval architecture and ocean engineering.

Dedicated sessions

In the MARHY-2016, four dedicated sessions - Hydrodynamics of fluid-structure interaction, Hydrodynamics for propulsion, Experimental hydrodynamics for ocean engineering, and Hydrodynamics for design – are planned. Each one of dedicated sessions will open with a keynote talk and consists of three invited talks.



Prof. C. P. Vendhan
(Hydrodynamics of fluid-structure interaction)



Prof. R. P. Gokarn
(Hydrodynamics of propulsion)



Prof. V. G. Idichandy
(Experimental Hydrodynamics)



Prof. S. C. Misra
(Hydrodynamics of design)

About the conference administration

Chairperson

Prof. V. Anantha Subramanian
E-mail: subru@iitm.ac.in

Organizing coordinators

Dr. R. Sharma
E-mail: rajivatri@iitm.ac.in
Dr. R. Vijayakumar
E-mail: vijay2028@iitm.ac.in
Prof. S. K. Bhattacharyya
E-mail: skbh@iitm.ac.in

Organizing committee

Board of Patrons – Members

Prof. Bhaskar Ramamurthi
The Director, IIT Madras, India

Mr. Trevor Blakeley
RINA, UK

Sponsorship

The various levels of sponsorship are available for companies willing to show their support to MARHY - 2016. For more information or to become a sponsor, contact **rina.cbc@gmail.com**.

- Platinum sponsor (limit 2)
Amount: 500, 000 ₹ or 10, 000 USD.
- Gold sponsor (limit 4)
Amount: 300, 000 ₹ or 7500 USD.
- Silver sponsor (limit 4)
Amount: 100, 000 ₹ or 2500 USD.
- Bronze sponsor (no limit)
Amount: 50, 000 ₹ or 1, 500 USD.
- Steel sponsor (no limit)
Amount: 30, 000 ₹ or 750 USD.

International technical committee

Prof. Paul D. Sclavounos
MIT, USA
Prof. John K. Vandiver
MIT, USA.
Prof. Heinrich Soeding
TU, Hamburg, Germany
Dr. Volker Bertram
GL, Germany.
Prof. Millard S. Firebaugh,
UMD, USA
Prof. John Long
Vassar College, USA
E-mail: jolong@vassar.edu
Dr. James R. Mcfarlane
ISEL., Canada.
Dr. Jesús U. Liceaga Castro
UAM-AZC, Mexico
Prof. Philip A. Wilson
University of Southampton, UK
Prof. S. R. Turnock
University of Southampton, UK
Prof. Antonio M. Pascoal
LARSyS, IST, Portugal
Prof. Marco Ceccarelli
UNICAS, Italy
Prof. Hayato Kondo
TUMST, Japan.

- international technical committee continues

Prof. Tae-wan Kim
SNU, Republic of Korea
Prof. Seung-Hee Lee
INHA University, Republic of Korea
Prof. Martin Renilson
RMC Pty Ltd., Australia
Dr. Alexandra H. Techet
MIT, USA
Prof. Panagiotis Kaklis
University of Strathclyde, UK
Dr. Hyun-taek Choi
KORDI, Republic of Korea

National technical committee

Prof. R. P Gokarn
Consulting Professor, India
Prof. Jaywant H. Arakeri
IISc Bangalore
Prof. T. Sahoo
IIT Kharagpur, India
Prof. Om Prakash Sha
IIT Kharagpur, India
Prof. D. Sen
IIT Kharagpur, India
Shri P. K. Panigrahi
NSTL, India
Dr. K. Sudarshan
NPOL, India.
Dr. Manu Korulla
NSTL, India
Prof. K. Muralidhar
IIT Kanpur, India

National advisory committee

Dr. S. C. Misra
Consulting Professor, India
Dr. K. Satyanarayana
RIT, India
Prof. M. Ravindran
Consulting Professor, India

MARHY - 2016

Registration form

1. Name:

2. Designation:

3. Organization:

4. Address:

5. Phone number:

6. Fax number:

7. E-mail:

8. Type of participation:

- ☐ Author participating.
- ☐ Non-author participating.

9. Title of the paper (attach the soft copy):

10. Registration category:

- Author (industry) - 10, 000 ₹
- Author (academic institutions) - 8, 000 ₹
- Author (student) - 4000 ₹
- Non-author participant –5000 ₹
- International author (industry/academic institutions): 300 USD.
- International author (student): 200 USD.

Date: (Signature)

Kindly return the above to the following address: Dr. R. Sharma, Department of Ocean Engineering, Indian Institute of Technology Madras, Chennai (TN) - 36, PIN - 600 036, India.
E-mail: **rina.cbc@gmail.com**