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## ISH - NEWSLETTER

**Jully 2025** 

# Announcement for "National Conference INCHOE - 2025"

Central Water & Power Research Station (CWPRS), Pune, under the aegis of The Indian Society for Hydraulics (ISH) is organizing 7th Indian National Conference on Coastal, Harbour and Ocean Engineering INCHOE - 2025 during November 6-7, 2025 at CWPRS, Pune. The sixth edition of the INCHOE conference was organized at CWPRS during September 2018.

The rationale of the Conference is to bring together engineers/ scientists working in design, planning, construction, maintenance and research aspects of Coastal, Harbour and Ocean Engineering to interact and exchange their experiences through paper and invited lectures. The conference would be conducted in parallel sessions. A key feature of the INCHOE 2025 will be a multi-disciplinary conference with a concurrently running exhibition enriching the theme and covering entire gamut of technologies and facilities available for Coastal, Harbour and Ocean Engineering. The exhibition provides a unique networking opportunity to the exhibitors for showcasing capabilities in the field of Coastal, Harbour & Ocean Engineering.

CWPRS a premier research institute under Union Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation has been serving nation since the year 1916 rendering its services to the national needs through basic and applied research in river training and flood control, hydraulic structures, harbours, coastal protection, foundation engineering, construction materials, pumps and turbines, ship hydrodynamics, hydraulic design of bridges, environmental studies, earth sciences, and cooling water intakes using Physical and mathematical models and field and laboratory experiments. CWPRS institutes in-depth relations with its clientele, by learning their environments & challenges to enable it to offer techno-viable solutions with a sincere perspective which has always made it stand out to its vast clientele. CWPRS has offered its services to a number of projects in the neighbourhood countries as well as countries in Middle East and Africa.

An exhibition is also being organized during the conference, providing exhibitors with a platform to present their products and capabilities while offering insights into the future of technology in these sectors. By taking part as sponsors or exhibitors, stakeholders can boost their industry visibility, expand their professional networks, and access the latest research and technological innovations.

Following e-mail and web pages provide more details of the conference.

Visit the webpage https://cwprs.gov.in/inchoe2025 for brochure and other details

Contact on email inchoe2025@gmail.com for any queries related to the conference.

## Announcement for International Conference "HYDRO 2025 INTERNATIONAL"

NIT ROURKELA, Odisha, in association with The Indian Society for Hydraulics (ISH), is organizing the 30th International Conference on Hydraulics, Water Resources, River, and Coastal Engineering -- "HYDRO 2025 International" during December 18-20, 2025, at NIT ROURKELA, Odisha, India. The conference aims at providing a forum for dissemination of recent contributions from academicians, scientists, researchers, practitioners and consultants in the fields of hydraulics, hydrology, water resources, river and coastal Engineering. A Best Paper Award will be presented in each technical session under each theme. This award is designated for Early-Career Researchers.

The Conference aims to bring together engineers, scientists, and professionals involved in the design, planning, construction, maintenance, and research aspects of Hydraulics, Water Resources, River, and Coastal Engineering to interact and exchange their experiences through invited lectures, paper presentations, and panel discussions. The conference is poised to be a premier gathering of innovation and

expertise. The event is likely to witness about 400+ papers and 600+ participants, making this a unique opportunity for experts, scholars, and industry leaders to share their latest research and developments. Engaging with experts and stakeholders provides invaluable insights into emerging trends and challenges, positioning your organization as a key player in the industry.

An exhibition is also planned for exhibitors to showcase their products and capabilities, offering glimpses into the future of technology in these fields. By participating through sponsorship or exhibition, stakeholders can enhance their industry presence, leverage networking opportunities, and gain exposure to cutting-edge research and technological advancements.

Following e-mail and web pages provide more details of the conference.

Visit the webpage

https://hydro2025.nitrkl.ac.in/ for brochure and other details

Contact on email hydro2025@nitrkl.ac.in for any queries related to the conference.

# Announcements For Annual ISH Awards 2025

#### Nomination For S.N. Gupta Memorial Lecture

Prof. Vijaykumar Gupta of Colorado University, Boulder (USA) has donated a sum of Rs. 2.5 lakhs towards hosting a memorial lecture in the field of Hydraulics and Hydrological Engineering in the name of his father, late Shri S.N. Gupta, former Secretary, CBIP and Director of U.P. Irrigation Research Institute, Roorkee. The lecture series was started from the year 2003. Nominations are invited for delivering the lecture in this series. This award is given alternatively to a young scientist/ academician/ researcher below 45 years and a senior scientist/ academician/ researcher. This year it is the turn of a Senior scientist/ academician/ researcher.

The nomination letter should contain information about his expertise of the topic on which he will speak. Self nominations are generally discouraged. The lecture would be held during 30<sup>th</sup> International Conference HYDRO 2025 INTERNATIONAL at **NIT ROURKELA**, **Odisha**, **India**. The last date for receiving nominations is 30<sup>th</sup> Sept, 2025.

#### Nomination for Prof. R J Garde Young Researcher Award

ISH constituted this Award in memory of Late Prof. R.J. Garde with the deposit offered by his family and his students to promote young researchers in the field of Hydraulics and Hydrology. It shall be awarded in the form of a cash prize of Rs. 10000/-, a memento and a certificate. This year the award shall be presented during the HYDRO 2025 International Conference of the ISH to be held at NIT ROURKELA, Odisha, India. The nominations should be submitted to the ISH Secretariat for further processing. The award shall be given to young engineers, scientists and researchers who have not completed 45 years of age. The award will be open to Indian Nationals only. The award shall be given mainly for the work done in India in the area of Water Resources Engineering in general and Hydraulic Engineering in particular. One complete nomination package (Single .pdf file) should be submitted to the ISH in the form of soft copy by 30<sup>th</sup> Sept, 2025. The following information must be included in the nomination.

- Name of the Candidate with complete postal address and mobile number, E-mail, date of birth, age, on last date of nomination
- 2. Letter of nomination including a statement of not more than 500 words of the Significant Contributions and / or national/international impact and future potential.
- 3. Two letters of recommendation
- 4. Chronology of education
- 5. Chronology of jobs held
- Complete list of referred publications in journals and conferences (Scanned copies of the first page of five most recent Journal publications is to be attached)
- 7. Certificate of age should also be attached
- 8. Any other relevant information



#### Nomination for ISH R J Garde Life Time Achievement Award

The Indian Society for Hydraulics has instituted Life-Time Achievement Award for Hydraulic Engineer / Scientist from India who has contributed significantly in the field of hydraulic engineering and water resources. The award consists of Rs. 10,000/- and a citation. Nominations / proposals are invited from the ISH Life members. Self-nominations are generally discouraged. The nominations should be submitted to the ISH Secretariat for further processing. The last date for receiving nominations is 30th Sept, 2025.

#### **Nomination for Best M Tech Thesis award**

## in three categories, viz Hydraulics, Water Resources and Coastal Engineering & Best Ph D Thesis Award

The Indian Society for Hydraulics (ISH) has instituted Best M Tech Thesis awards in three categories viz. Hydraulics, Water Resources and Coastal Engineering, to encourage the young Indian students from recognized technical institutions. The Dissertation/Thesis must have been successfully defended during October 1<sup>st</sup>, 2024 to September 30<sup>th</sup>, 2025. The award will be in the form of a cash prize of Rs. 5,000/- for the M Tech dissertation on each of the above themes & a certificate. Also, apart from above, one PhD Thesis would be awarded, overall, in the areas of Hydraulics, Water Resources and Coastal Engineering having a cash prize of Rs. 10,000/- & a certificate. This year the award shall be presented during the upcoming HYDRO2025 International Conference of ISH to be held at NIT ROURKELA, Odisha, India. The recommendations should be submitted to this email ish.academicaward@gmail.com only through their respective supervisors for further processing. The award will be open for Indian nationals only. The last date for receiving nomination is September 30<sup>th</sup>, 2025.

The nomination should contain the following:

- (i) A Nomination letter shall include brief (one para) CV of the candidate,
- (ii) A Pdf file of the dissertation/thesis not exceeding 20 MB in size,
- (iii) Any other recognition received for the dissertation/thesis like Papers published in journals based on the Thesis work included in SCOPUS (cite score), SCI/SCI(E) (Clarivate analytics); reputed International/National conference proceedings, book chapters, transfer of technology, if happened,
- (iv) Names and affiliations of the referees, who acted as examiners,
- (v) The nominees are requested to submit the duly filled proforma enclosed at **Annexure-I** along with justification note as mentioned.

ISH assures full confidentiality/copyright of the dissertation/thesis, which will be used for the purpose of deciding the awards only.



# Format for evaluation of the ISH Best M Tech Thesis award in three categories, viz Hydraulics, Water Resources and Coastal Engineering & PhD Thesis Award (2024-25) Instituted by the Indian Society of Hydraulics (ISH)

l. Gene	eral Information			
Name of t	Name of the Student:			
Name of the course:				
Name and address of the Department/University/ Institute:				
Place where the Project work was undertaken:				
Duration of dissertation:Year &months				
Starting date: Completion date:				
I. Name of the research guide(s) and affiliation(s):				
III. Title of the dissertation:				
V. Thematic area of the dissertation:				
V. Evaluation Sheet:				
No	# Criteria			
1	Originality/Novelty			
2	Structure and Quality of writing			

No	# Criteria
1	Originality/Novelty
2	Structure and Quality of writing
3	Background, Literature review, Problem Definition and Objectives
4	New numerical and experimental Techniques developed
5	Presentation of results, discussion and overall conclusions
6	Significant outcome and scope of future work
7	Societal Importance
8	Publications/Patents/Copyrights (based on supporting documents)

# Please justify point-wise the evaluation criteria given above in a separate one-page note for assessment by evaluation committee.

VI.Additional Comments (if any):

VII.Name and Address, email/ Contact No. of the - self & Nominator:

#### **MEMBER IN NEWS**



**Dr. Prabhat Chandra** took over as Director, Central Water & Power Research Station (CWPRS), Pune on February 28, 2025. He is a Civil engineering Graduate and Post Graduate from IIT Roorkee (erstwhile University of Roorkee) and also a PhD. in water resources engineering. He had brief stints of work at CWC and NHPC before joining CWPRS. His main research interests include studies for hydraulic aspects for development of Ports and Harbours, stability of tidal inlets, coastal processes and morphological aspects, location of disposal grounds for dredged material, design of marine

outfalls for effluent disposal schemes, sediment yield from catchments etc. He successfully completed UNDP fellowship training programme in the field of Water Quality Modelling at Cornell University, USA. He has more than 135 research publications to his credit in various International/National conferences/seminars and Journals. He has led more than 100 projects in the field of port development and coastal engineering successfully for evolving optimum designs and layouts. He has been instrumental in development of advanced research facilities for studying wave current interactions, tides and for other coastal parameters. His major contributions include conducting important studies for successful developments at Mormugao port, VOC port, Kandla port, New Mangalore Port, Vizhinjam International Sea port and Vishakhapatnam port and for a number of fishing harbours and coastal protection works and CMIS scheme.



**Dr. L. R. Ranganath**, former Secretary-ISH and present EC member has been appointed as "Expert- Member" of "Maharashtra Coastal Zone Management Authority" (MCZMA) for three years term by Ministry of Environment, Forest and Climate Change(MoEFCC), Government of India. We are also happy to inform that he has taken over this assignment held by our former ISH President Shri.M.D.Kudale who was guide and mentor during his services at Central Water & Power Research Station. On this occasion the Indian Society for Hydraulics wishes him a successful and fruitful term in effectively protecting the coastal zone environment.

Website: https://ish.net.in/ | E-mail: secretary@ish.net.in

#### **MEMBER IN NEWS**

#### Dr. V. Sundar Honoured with Prestigious IAHR Honorary Membership Award



The Indian Society for Hydraulics (ISH) is proud to share the outstanding achievement of **Dr. V. Sundar, FINAE, Fellow IAHR, and Professor Emeritus (Formerly),** who has been conferred the **IAHR Honorary Membership Award**—one of the most prestigious recognitions in the field of hydro-environment engineering research.

The award was presented during the **41st Biennial IAHR Congress**, a landmark event held in front of an esteemed gathering of nearly 2,000 delegates from around the globe. The Honorary Membership Award is a rare and distinguished honour, bestowed upon individuals who have made exceptional and sustained contributions to the advancement of hydro-environmental sciences and engineering.

Dr. Sundar received the award from **Prof. Philippe Gourbesville**, President of IAHR, in a formal ceremony marked by high appreciation and global recognition. The ISH extends its heartfelt congratulations to Dr. Sundar for this significant accolade, which not only honours his lifelong dedication to research and education but also brings pride to the Indian hydraulic engineering community.

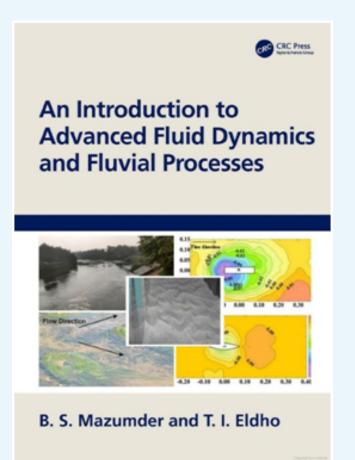
A photograph capturing the moment of the award presentation, as well as an image of the award itself, is shared below for the kind information of our readers.





## Book Review: An Introduction to Advanced Fluid Dynamics and Fluvial Processes

Authors: B. S. Mazumder and T. I. Eldho



Publisher: CRC Press, Taylors and Francis Group, Boca Raton, London, New York Year of Publication 2023/24; ISBN: 9780367428983 (hbk)

#### **Book Review by**

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In Hydraulic Engineering, it is very important to understand various fluvial processes like sediment

transport, scouring and riverbed morphology in connection with fluid dynamics. However, in literature, there are only a few Textbooks that comprehensively address advanced fluid dynamics alongside fluvial processes. The Textbook "An Introduction to Advanced Fluid Dynamics and Fluvial Processes" by Prof. B. S. Mazumder and Prof. T. I. Eldho, fills this important gap. Moreover, this book explains rigorously the theories as well as the laboratory experiments along with field works using most sophisticated electronic gadgets, which will help the new generations to progress their environmental fluid dynamics aspects.

This text book presents a thorough examination of fluid dynamics and fluvial processes in a detailed manner integrating necessary theories, recent developments, laboratory developments, instrumentation and various applications to field problems. This book combinesstate-of-the-art analytical theories, detailed description of various processes, experimental techniques and field applications that are essential to understand the areas of Fluid Dynamics, Fluvial Processes and Environmental Hydraulics. This book can be a great reference text book for engineering and applied science students, researchers, faculties and field practitioners.

In this book, Chapters 1 to 7 provide a very comprehensive literature on the basic fluid mechanics, fluid dynamics, Navier-Stokes equations of motion, boundary layer theories, turbulent flow analysis, flow measurements and instrumentations, that is essential for field practitioners, undergraduate, post graduate students and research scholars for understanding on the subject from the perspective of Civil, Mechanical, Marine and Aerospace Engineering; and geographical, geological and geomorphological perspectives. In the book,

Chapters 8 to 10 provide the basic theories on fluvial processes such astran sport of sediments with specific applications in bed form migration, geomorphological phenomena, scouring processes around hydraulic structures and pipelines. These chapters also include comprehensive literature studies on scour protection around the hydraulic structures.

In this book, the authors have put tremendous efforts to comprehensively present various important topics bridging theory and practice, and experiments in the laboratories to field application using various modern technologies. Further, a number of solved examples are presented in the book in each chapter to illustrate the subject topics discussed and exercise questions are also provided. A notable strength of the book lies in its integration of the theoretical, physical, and mathematical with experimental and field-based applications, which may not be seen in other textbooks. In this book, various theories and the concepts are explained in a very lucid manner. Further practice in fluid mechanics is interlinked with the sediment transport theories and practice in a way that expresses authors very long years of experience of teaching and research in the field.

The textbook includes 10 chapters. Chapter 1 introduces the subject as well as the outlines of the textbook briefly. In Chapter 2, authors introduce the fluid fundamental properties, laminar and turbulent flows, dimensionless numbers, open channel flows and sediment transport, and the applications of the principles of statistics and probability in the subject area. Chapter 3provides a detailed description of fluid kinematics and dynamics ,introducing different conservation equations as applied to fluid flows including several practical applications. Additionally, potential flow theory is briefly introduced to complete the foundational concepts. Chapter 4 provide detailed insights of viscous fluid flow with applications including parallel flow in straight channel, Couette flow, Hagen-Poiseuille flow, annular flow, creeping flow and Boundary layer flows. In Chapter 5, authors provided a comprehensive treatment of laminar boundary layer theory, using

Karman-Pohlhausen method and development of the relevant theories and equations in fluid dynamics and environmental flows. Chapter 6 presents a detailed the analysis of turbulent flows with all relevant theories and derivations of Reynolds averaged Navier Stokes Equations, Turbulent Kinetic Energy Equations of mean and fluctuating flows, Turbulent Kinetic Energy budget, Spectral analysis, Kolmogorov hypothesis, Prandtl's mixing length concept, and all relevant theoretical aspects are discussed. Chapter 7 discusses turbulent flow measurements using the most sophisticated electronic gadgets like ADV, LDA, PIV, URS, High-speed Motion-Scope Camera in the flume laboratory; and Ott current meter, MM511, MM527, S4, etc. in the fields like Usri River, Subarnarekha River, MississippiRiver in Illinois.In Chapter 8, authorsintroduce the fundamentals of sediment transport including grain-size distributions, characterization of sediments, incipient motion of sediments, semi-empirical theories, probabilistic concepts, effect of turbulent bursting and various theoretical and practical applications. Chapter 9 provides the fundamental and advanced theories and principles on bed load transport, suspended load and total load including the different probabilistic concepts. In Chapter 10, authors discuss the bed form structures such as ripples, dunes and sand bars and their migration process due to different flow geometries. The chapter further discusses scour around different hydraulic structures, covering theories, experimental works and methods of practice for protection against scour. Further, in the book there is a comprehensive list of references that will be especially useful to researchers who plan to undertake advanced research in the areas of fluid dynamics and fluvial processes.

This textbook can be definitely recommended for undergraduate and graduate level courses envisioned for various branches of engineering such as civil, mechanical and aerospace, etc. Further the book will be particularly useful forgeomorphologists and geologists to studyfluid dynamics, fluvial processes and environmental flows. The textbook covers diverse topics of Fluid Dynamics and Fluvial Processes. This textbook is recommended for the use

of undergraduate/ postgraduate/ Ph.D. level independent study of course to explore the area on their own interest.

Thus, the Textbook "An Introduction to Advanced Fluid Dynamics and Fluvial Processes" is a fantastic addition of a book for study in the areas of fluid dynamics and fluvial processes. The book will be an asset to Hydraulic Engineers, Researchers, Faculty and Students to obtain all necessary knowledge and immediate reference providing a

comprehensive literature in the subject area.

#### Reference:

Mazumder B.S. and T.I. Eldho (2023). An Introduction to Advanced Fluid Dynamics and Fluvial Processes. CRC Press, Taylor and Fracis Publishers, Boca Raton, pp. 660.

DOI: 10.1201/9781003000020

# List of New ISH Life Members Joined from January 2025 to June 2025

ISH MEMB. NO.	NAME	INSTITUTE
1691	Kushang Vinodhbhai Shah	MSU campus,Nr. Kritistambh, Pratapganj, Babajipura, Vadodara, Gujarat 390001
1692	Dr. P. R. Kumaresan	SRM Institute of Science and Technology, Ramapuram Campus, Bharathi Salai, Ramapuram, Chennai 600089
1693	Smt. Yempali Priyanka	Dept of Civil Engineering, COE, SVNIT, Surat 395007
1694	Dr. Ananth Wuppukondur	Department of Civil Engineering, MNNIT Allahbad, Prayagraj, UP 211004
1695	Dr. Sagar Rohidas Chavan	Department of Civil Engineering, Indian Institute of Technology, Ropar, Rupnagar, Punjab,140001
1696	Mr. Anuj Kumar Singh	WAPCOS Ltd., Pune Office, Waman Ganesh Heights, Flat No 203, Above Café Peter, Bavdhan, Pune 411021
1697	Dr. Ganta Shanmukha Rao	Department of Civil Engineering (offshore Structures Division), National Institute of Technology, Calicut (NIT Claicut), Kattangal, Calicut, Kerala 673601
1698	Shri Lavkush Gupta	Gaya College of engineering, Sri Krishna Nagar, Khizarsarai, Gaya, Bihar 823003
1699	Dr. Rohit A N	Department of Civil Engineering, Indian Institute of Technology, Delhi, Hauz Khas, New Delhi 110016
1700	Injila Hamid	Deptarment of Civile Engineering, IIT Bombay, Powai, Mumbai, Mharashtra 400076

# List of New ISH Life Members Joined from January 2025 to June 2025

ISH MEMB. NO.	NAME	INSTITUTE
1701	Sanyukta Komalchand Sathawane	Deptarment of Civile Engineering, IIT Bombay, Powai, Mumbai, Mharashtra 400076
1702	Vimlendra Mani Pandey	Deptarment of Civile Engineering, IIT Bombay, Powai, Mumbai, Mharashtra 400076
1703	Tarun Pant	Deptarment of Civile Engineering, IIT Bombay, Powai, Mumbai, Mharashtra 400076

### **Upcoming Conference (2025)**



- **7**<sup>th</sup> National Conference on Coastal, Harbour and Ocean Engineering (INCHOE 2025) Nov 6, 2025 - Nov 7, 2025, Central Water and Power Research Station, Pune
- 30<sup>th</sup> International Conference on Hydraulics, Water Resources, River and Coastal Engineering (HYDRO 2025)

Dec 18, 2025 - Dec 20, 2025, National Institute of Technology Rourkela, Odisha

- 14<sup>th</sup> Symposium on River, Coastal, and Estuarine Morphodynamics (RCEM2025) Sep 1, 2025 - Sep 5, 2025, Barcelona, Spain
- 9<sup>th</sup> W.A.T.E.R. Summer School Workshop on Advanced measurement Techniques and Experimental Research Sep 1, 2025 Sep 5, 2025, Gdansk, Poland
- The 2<sup>nd</sup> International Conference on Smart Informatics and Multi-hazard Reduction (SIMR 2025) Sep 10, 2025 Sep 16, 2025, Chengdu, China
- 6<sup>th</sup> International Symposium on Shallow-Flows (ISSF 2025) Sep 15, 2025 - Sep 18, 2025, Turin, Italy
- 5<sup>th</sup> International Symposium of Water Disaster Mitigation and Water Environment Regulation (WDWE2025)
  Oct 15, 2025 Oct 18, 2025, Chongqing, China
- 6<sup>th</sup> IAHR Young Professionals Congress Dec 3, 2025 - Dec 5, 2025, Online
- **16**<sup>th</sup> International Symposium on River Sedimentation
  Dec 14, 2025 Dec 17, 2025, University of Nebraska, Lincoln
- 10<sup>th</sup> International Conference on Physical Modelling in Coastal Science and Engineering (Coastlab26) Feb 23, 2026 Feb 27, 2026, Chennai, India

#### The Indian Society for Hydraulics

as a body accepts no responsibility for the statements made by individuals.

Amit Kulhare, Secretary,

on behalf of the Indian Society for Hydraulics,

Phone No. 020-24103483

C/o. CERC Bldg. Room No.104,