

INTERNATIONAL CONFERENCE ON MATERIALS AND MEMBRANES FOR WATER AND ENERGY

10th - 12th July, 2024

Organized by
CSIR-Central Salt and Marine Chemicals
Research Institute, Bhavnagar, Gujarat, India

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ABSTRACT
SUBMISSION
DEADLINE

April-2024

15

NOTIFICATION OF
ABSTRACT

April-2024

25

REGISTRATION
DEADLINE

May-2024

10



FOCUSED AREAS

- Water Desalination and Purification
- Industrial Waste Water Treatment
- Capacitive deionization
- Adsorbent for water remediation
- Electrodialysis and Diffusion Dialysis
- Forward osmosis
- Membrane distillation
- Ion exchange membranes
- Selective ion separation
- Electrocatalyst for water splitting
- 2D, COF, MOF materials for energy storage and conversion systems.
- Water Electrolyser for Hydrogen
- Proton Exchange Membrane
- Alkaline Membrane
- Fuel Cells / Microbial Fuel Cell
- Primary & secondary Batteries
- Electrode Materials

Sponsors

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Conference Topics

Innovations in Membrane Technology:

- Advanced membrane materials and structures
- Membrane fabrication techniques and scalability
- Novel membrane properties and functionalities

Renewable Energy in Water Treatment:

- Membrane-based technologies for renewable energy production
- Solar-driven membrane processes
- Wind and hydro-powered water treatment systems

Emerging Materials for Water Desalination and Purification:

- Development of new membrane materials
- Nanotechnology in membrane design
- Membrane-based desalination processes

Wastewater Reuse and Resource Recovery:

- Membrane technologies for wastewater treatment and reuse
- Ion exchange membranes
- Recovery of valuable resources from wastewater

Materials for Energy generation and utilization:

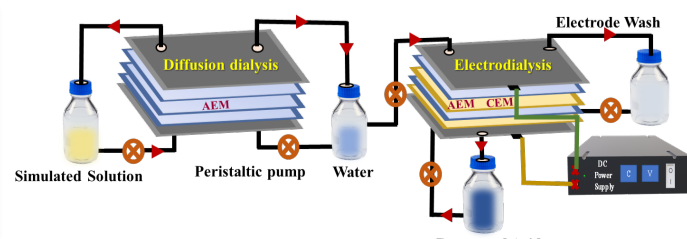
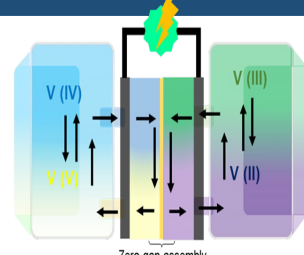
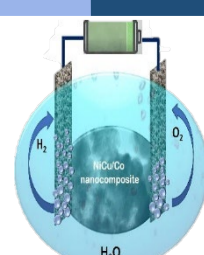
- 2D, COF, MOF materials for energy storage and conversion systems
- Electrocatalyst for water splitting
- Primary & Secondary Batteries
- Redox Flow Battery

Membranes for Energy Systems:

- Proton Exchange Membrane
- Alkaline Membrane
- Fuel Cells / Microbial Fuel Cell
- Primary & Secondary Batteries
- Electrode Materials
- Sea Water Electrolysis
- Hydrogen / Gas Separation

Green hydrogen

- Production, Storage and Transport



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CSIR-Central Salt & Marine Chemicals Research Institute

CSIR-CSMCRI is a leading Indian R&D lab known for exceptional achievements in diversified research areas. With dedicated staff and research fellows, it excels in applied research areas emphasizing on membranes, marine chemicals, water desalination, and renewable energy. CSIR-CSMCRI is engaged as a pioneer research institute for synthetic membrane designing, manufacturing, and membrane based technologies. The degree of selectivity of a membrane depends on the either membrane pore size or membrane surface charge nature. Depending on the pore size, they can be classified as microfiltration, ultrafiltration, nanofiltration and reverse osmosis membranes, while membranes with acidic charge classified as anion-exchange membrane and with basic charge classified as cation exchange membrane. CSIR-CSMCRI has developed several membrane-based technologies for water desalination/purification and to provide safe drinking water. These technologies were also commercialized and well-tested in the remote rural areas of the country. According to the Scimago Institutions Ranking World Report 2023, CSIR is ranked 61st among 1747 government institutions worldwide and is the only Indian organization among the top 100 global government institutions. Further, CSIR holds 7th rank in research and 4th rank in societal category in Asia among 384 government organizations. CSIR-CSMCRI has also using developed indigenous membranes for Energy devices including membrane electrolysis, flow batteries and fuel cells.

About the Conference

Water and Energy systems are interdependent and are strongly linked to Human and Ecosystem health. In addition, wasteful use of Water and Energy resources reduces quality of life and contributes to climate change. This three-day conference on membranes and materials for water and energy will provide an opportunity for membrane technocrats/researchers to discuss about the stable materials and membrane and sustainable energy and membrane technologies, their potential applications & challenges. Further, active synergy and collaboration between academia and industry and provide greater impact on material & membrane research and industrial end-users with emerging technologies. This conference will also provide a platform for young researchers to discuss with the R&D experts and industry person about the development and challenges.

Sponsorship Packages

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Silver Partner

INR 0.5 L + Tax

Societal activities of CSMCRI



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Key Organizers

MMWE-2024

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Mr. Vikram Karunakaram, Uniqflux LLP, New Delhi

Eminent Speakers

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Dr. Young Ho Kim Director IKCRI | Dr. RV Jasra, Sr. VP, RIL | Prof. Diganta Das Loughborough Uni. UK | Prof. V. Nikonenko Kuban State Uni. Russia | Prof. Ali Trabolsi New York Uni. UAE | Prof. P. K. Tewari IIT Jodhpur | Dr. P. Jalihal NIOT Chennai | Prof. Huacheng Zhang RMIT, Melbourne



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Prof. Shirsendu De IIT, Kharagpur | Shri J. Parikh, Chem. Proc. Ahmedabad | Prof. P. Kallem Abu Dhabi Uni. UAE | Mr. Ravi Kumar ONGC, OECT | Prof. A. Mudgal PDEU, Gandhinag | Prof. S. D. Manjare BITS, Goa | Dr. P. K. Labhasetwar NEERI, Nagpur | Dr. J K Rathore GFL, Gujarat



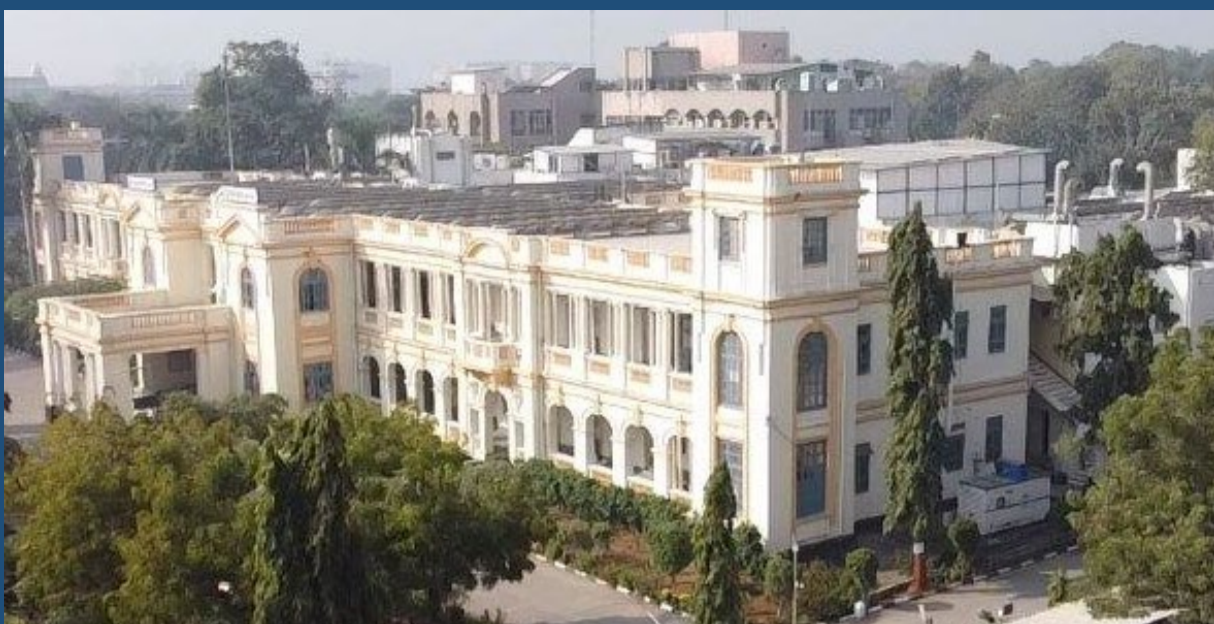
Prof. Tushar Jana Univ. Hyderabad | Dr. Debasish Sarkar MNIT, Jaipur | Dr. K. Selvaraj NCL, Pune | Prof. G. Arthanareeswarar NIT, Trichy | Prof. Ankur Jain GVU, Jaipur | Prof. Pralay Maiti IIT, BHU | Prof S. Chattopadhyay IIT, Roorkee | Dr. K. Awasthi MNIT, Jaipur



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Dr. Jayabrata Dhar NIT, Durgapur | Prof. Omar Chaalal Abu Dhabi Uni. UAE | Prof. H. Nath Tripura Uni. | Dr. Razi Epsztein Technion - Israel | Prof. Balram Tripathi Rajasthan Univ. Jaipur | Dr. Asat B. Panda CSIR-NML | Dr. Hariom Gupta CSIR-CIMAP



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Abstract Submission/ Publication/ Awards

Participants may submit their abstract in a single page of MS word format (including figure/graph) with a maximum of 300 words in Times New Roman font to mmwe2024@csmcri.res.in. The title (14 pt bold) should be followed by authors names and affiliation (12 pt) and the abstract text (10 pt).

Selected papers may be published in Elsevier and Wiley Journals as special issues with subject to peer review process. Details of journals and guidelines will be available on the conference website.

www.csmcri.res.in.

Selected presentations will be awarded by a citation and cash reward.

Registration Details

Academic personnel / Faculty / Scientist	INR 5000	Bank Details: Account Holder : DIRECTOR CSMCRI Bank Name : STATE BANK OF INDIA Branch Name: WAGHAWADI ROAD BRANCH Branch Code: 10863 Account No: 30267310153 IFSC Code (RTGS/NEFT) : SBIN0010863 MICR Code : 364002023
Research Scholars / Students	INR 3000	
Industrial Personnel / Entrepreneurs / MSME	INR 6000	
Accompanying guest (Indian Delegates)	INR 2000	
Foreign Delegates	USD 100	

***Registration fees includes registration kit, access to all the technical sessions, refreshment, and lunch at the venue.**

Online Registration Link: <https://event.csmcri.res.in/pricing-table/>

How to Reach Bhavnagar

By Plane

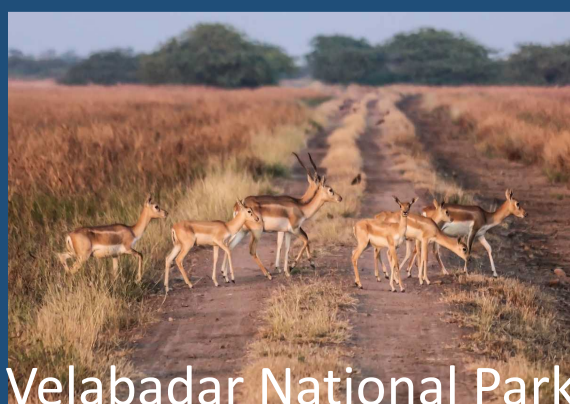
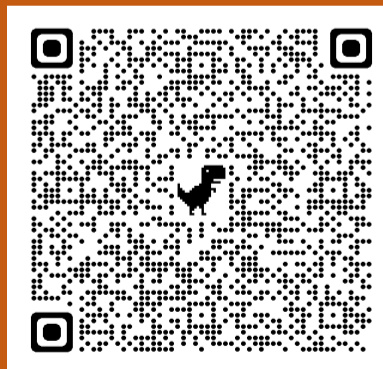
Ahmedabad is the nearest international airport. Bhavnagar is also connected with Surat and Mumbai by air route.

By Bus

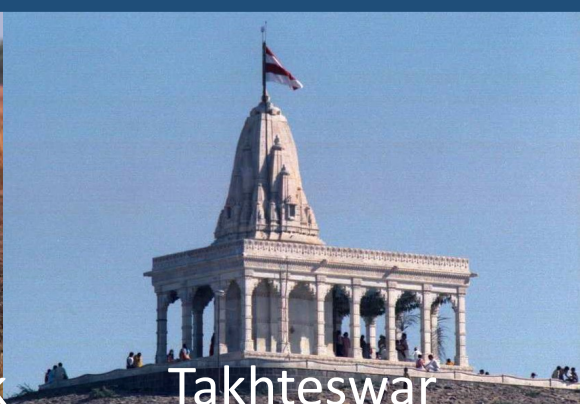
Luxury buses are available from the cities of Gujarat and Mumbai.

By Train

Bhavnagar is also connected on railway network with Ahmedabad, Mumbai and other cities.



Velabadar National Park



Takhteswar



Nishkalank Mahadev



Palitana