organized by the Institute on Membrane Technology (CNR-ITM)

3rd International Workshop on

Membrane Distillation and Innovating Membrane Operations in Desalination and Water Reuse

md-sorrento2023

April 23rd - 26th, 2023

Hilton Sorrento Palace hotel & Conference Center

Sorrento (NA), Italy



web site www.itm.cnr.it/md-sorrento2023 e-mail md-sorrento2023@itm.cnr.it



Conference Organization

Conference Organizer

Institute on Membrane Technology (CNR-ITM)

Chairpersons

Enrico DRIOLI (ITALY) Alberto FIGOLI (ITALY)

Scientific Committee (preliminary)

Hassan ARAFAT (UAE) Uwe BEUSCHER (USA) Corinne CABASSUD (France) Zhaoliang CUI (China) Mikel DUKE (Australia) Tony FANE (Australia) Jack GILRON (Israel) Lidietta GIORNO (Italy) Wanqin JIN (China) Ji Hoon KIM (Korea) Sangho LEE (Korea) Young Moo LEE (Korea) John H. LIENHARD (USA) Andrew LIVINGSTON (UK) Francesca MACEDONIO (Italy) Hideto MATSUYAMA (Japan) Hokyong SHON (Australia) Kamalesh SIRKAR (USA) Kuo-Lun TUNG (Taiwan) Matthias WESSLING (Germany) Gullermo ZARAGOZA (Spain)



Organizing Committee

Chairs

Enrico DRIOLI (ITALY) Elena TOCCI (ITALY) Alberto FIGOLI (ITALY)

Organizing Committee

Francesca ALESSANDRO Alessandra CRISCUOLI Romeo DE LUCA Mirko FRAPPA Lidietta GIORNO Roberto JERACE Francesca MACEDONIO Anna NIGRI Armenia STAFFA

Secretariat

Institute on Membrane Technology Tel: +39 0984 4920-38/12/39 Fax: +39 0984 402103 e-mail: md-sorrent02023@itm.cnr.it

Sponsor (at 30.01.2023)

Scarab Development AB

Platinum Sponsor

Venue

The MD-Sorrento2023 Workshop will be held at Hilton Sorrento Palace hotel & Conference Center. Tthe Workshop room is located in Floor "A", in Auditorium "Tritone".

The auditorium has a maximum capacity of 169 delegates. The auditorium is equipped with 1 motorized screen, 1 video projector, microphones and audio speakers, amplifier system, 1 computer. The Foyer Tritone of 350 Sq. M. has a Reception capacity of 350 delegates.



Registration fee

| Category | Early Registration before March 15, 2023 | Late Registration after March 15, 2023 |
|---------------------|--|--|
| Participants | 950 | 1050 |
| Students * | 600 | 650 |

Registration Opening: January 15, 2023

The registration fee covers participation in all conference activities, welcome reception, coffee breaks, conference dinner, printed materials, and local transportation. All participants should pay both registration fee and Hotel accommodation.

All participants should take care of their own reservations directly with the Hotel. See the website https://www.itm.cnr.it/md-sorrento2023/home/accommodation.html

*Students should send their application and a supervisor declaration certifying their status.

Scope & Contents

W embrane contactors represent an emerging technology that can lead to significant innovation in processes and products, thus offering new opportunities in designing, rationalizing, and optimizing innovative productions. Among the different operations, membrane distillation (MD) and related technologies represent a powerful tool to improve current production processes with fundamental benefits in terms of process efficiency and product quality.

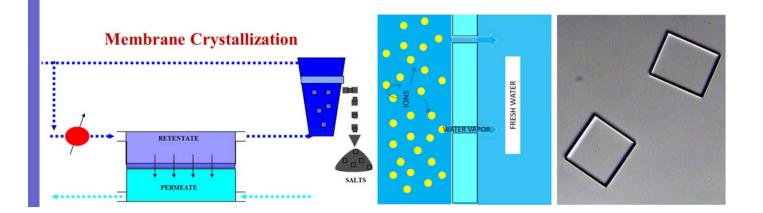
Following the first conference on "Membrane Distillation" held in Rome in May 1986 (Chairman Prof. Enrico Drioli, CNR-ITM), the International Workshop on Membrane Distillation and Related Technologies held on 9-12 October 2011, and the 2nd International Workshop on Membrane Distillation and Innovating Membrane Operations in Desalination and Water Reuse held on July 1 - 4, 2015, the 3rd International Workshop on Membrane Distillation and Innovating Membrane Membrane Operations in Desalination and Water Reuse held on July 1 - 4, 2015, the 3rd International Workshop on Membrane Distillation and Innovating Membrane Operations in Desalination and Water Reuse held on July 1 - 4, 2015, the 3rd International Workshop on Membrane Distillation and Innovating Membrane Operations in Desalination and Water Reuse will be held on April 23 - 26, 2023 in Sorrento (Sorrentine Peninsula near the Bay of Naples), Italy, organized (as the previous ones) by the Institute on Membrane Technology (CNR-ITM).

All relevant membrane contactors operations and their relevant aspects (from new membranes synthesis to modelling of the transport mechanisms, combined with alternative energy sources and applications) will be discussed.

The Workshop's purpose is to share the latest research works and technological advances in the field and its application areas. A compelling program featuring an interesting line-up of international speakers presenting in-depth information about the latest technologies and products will characterize the event. The event will represent also an excellent opportunity for networking, collaborations and partnerships among scientist coming from different areas of expertise.

Oral presentations at the Workshop are *by invitation only* from the Committee.

A **Poster session** with contributions presented by researchers and students to illustrate leading-edge research to an international audience will be available at the conference site. Prizes will be assigned for the best poster presentations given by early career researchers and students.



Topics

Membranes materials and membrane synthesis/characterization and modelling

Modeling of mass/heat transport mechanisms **Process engineering, module configurations, processes simulations and performances** Membrane fouling

Membrane assisted crystallization and other membrane-based crystallization systems

Osmotic distillation

Membrane assisted condensation

Membrane Engineering for process intensification

Membrane emulsification

Applications in food, pharmaceutical, fine chemical, water treatment (desalination and purification), and petrochemical industries

MD and related operations for biofuels productions

Hybrid systems: MD/RO – MD/MBR – MD/membrane reactors and others

Concepts implementations, scale down/scale up and microfluidics

Membrane systems in the extraction and recovery of mineral from the sea and wastewaters

Combination with renewable energy sources and low-grade waste heat streams

Hybrid systems, new applications and future developments



Abstract submission

Abstract submission for posters and lectures will be opened on January 15, 2023