



EVT2303969: Technical Meeting on Producing Potable Water Using Small Modular Reactors

24 – 27 November 2025
Rio de Janeiro, Brazil

Presentations

Title	Speaker	Institution	Member State
Nuclear Technology Applications with Social Benefits	Mr Carlos Alberto Matias	Amazul S.A.	Brazil
A 55 MWth PWR-Type Microreactor for Hydrogen–Electricity–Desalinated Water Polygeneration	Ms Maritza Rodriguez Gual	Amazul S.A.	Brazil
Nuclear Energy in Brazil	Mr Lucio D. Batista Ferrari	Eletronuclear	Brazil
Nuclear Engineering Institute: Main Projects and Activities	Mr Cristóvão Araripe Marinho	Instituto de Engenharia Nuclear	Brazil
Development of technologies for nuclear micro-reactors: The IEN Critical Unit	Mr Francisco José de Oliveira Ferreira	Instituto de Engenharia Nuclear	Brazil
Hybrid DCMD And SWRO Desalination Using a Small PWR of 75 MW(th) for Cogeneration of Water and Electricity	Mr Paulo Augusto Berquó de Sampaio	Instituto de Engenharia Nuclear	Brazil
Regulatory Aspects of SMRs for Desalination	Mr Ciro Maestre y Dutra	National Nuclear Safety Authority	Brazil
Nuclear Education at UFRJ	Mr Su Jian	Universidade Federal do Rio de Janeiro	Brazil
Membrane Technologies for Desalination	Mr Cristiano Piacsek Borges	Universidade Federal do Rio de Janeiro	Brazil
Cogeneration of Electricity and Desalinated Water in SMRs Using Low-Grade Heat	Mr Gabriel Caetano	Universidade Federal do Rio de Janeiro	Brazil
Integrated Strategies for Water Security: From Sustainable Cogeneration to Contaminated Water Treatment	Ms Carolina Palma Naveira Cotta	Universidade Federal do Rio de Janeiro	Brazil
IAEA CRP: Low-Grade Thermal Energy from Micro Nuclear Reactors in Membrane Distillation for Electricity; Distilled Water and Hydrogen Cogeneration	Mr Renato Cotta	Universidade Federal do Rio de Janeiro	Brazil
Radionuclide Stewardship: Science and Sustainability for a Responsible Nuclear Future	Ms Inayá Corrêa Barbosa Lima	Universidade Federal do Rio de Janeiro	Brazil
Modeling and Integration of Vacuum-Enhanced Air Gap Membrane Distillation for Nuclear Cogeneration of Electricity and Potable Water	Mr Kleber Marques Lisboa	Universidade Federal Fluminense	Brazil
Overview of IAEA Activities	Ms Molly-Kate Gavello	International Atomic Energy Agency	IAEA
IAEA Activities on Nuclear Desalination: The Details	Ms Molly-Kate Gavello	International Atomic Energy Agency	IAEA
Kenya's Nuclear Desalination Plant User Requirement	Mr Collins Juma Owino	Nuclear Power and Energy Agency	Kenya

Seawater Desalination: The Moroccan Experience	Ms Soukayna Boutazamat	Ministère délégué Chargé de l'Eau- Direction de la Recherche et de la Planification de l'Eau	Morocco
Challenges of SMR's in Nuclear Desalination for Sustainable Development	Ms Umaira Siddique	Pakistan Atomic Energy Commission	Pakistan
Dispatch Optimization of SMR-Driven Desalination with Reverse Osmosis Using Day-Ahead Electricity Prices	Mr Osman Kutlu	Turkish Energy, Nuclear and Mineral Research Agency; Nuclear Energy Research Institute	Türkiye

Technical Visits

Title	Institution
Argonauta Research Reactor	Nuclear Engineering Institute
LabMEMS Desalination Plant	Universidade Federal do Rio de Janeiro