

“UAE-Japan Water Tech Symposium on R&D in Desalination” Held

~ Japanese Water Technologies Contribute to
Solving Water Scarcity Issues in the UAE ~

On April 17, 2024, Japan Cooperation Center for the Middle East (JCCME), in partnership with the UAE Ministry of Energy & Infrastructure (MOEI), organized the “**UAE-Japan Water Tech Symposium on R&D in Desalination**” to address water-related challenges in the UAE. Held in Abu Dhabi, the event drew participation from 14 representatives from various entities including MOEI, Environmental Agency-Abu Dhabi (EAD), Khalifa University, Dubai Electricity & Water Authority (DEWA), and Etihad Water and Electricity (EWE).

At the beginning of the symposium, H.E. Ahmed Mohamed Al Kaabi, Assistant Undersecretary for Electricity, Water & Future Energy at MOEI, delivered opening remarks. Following this, MOEI, Khalifa University and other entities outlined their organizational structures and ongoing policies and projects.



Symposium Discussion #1



Symposium Discussion #2

UAE's Water Challenges:

The UAE side explained the seriousness of water shortages and the necessity of technological development for reducing energy consumption in seawater desalination. Particularly, issues concerning agricultural water scarcity, low food self-sufficiency, depletion of groundwater with increasing salinity levels, and measures to address the issue of high-salinity wastewater (brine water) in desalination processes underscored the expectations for Japanese technological solutions.

Research and Development in the UAE:

Khalifa University presented on their findings in basic research such as water treatment modeling using computational fluid dynamics, membrane technology using new materials such as graphene, recovery of rare metals such as lithium from brine water, and demonstration tests of pretreatment for seawater desalination and wastewater treatment. MOEI is planning to support R&D projects in the UAE, and expressed its expectations for joint R&D projects between Japanese companies and UAE research institutions.

Presentations by Japanese Companies:

Four (4) Japanese companies - Toray Industries, Inc. (RO membranes, UF membranes, NM membranes, etc.), Toyobo MC Corporation (RO membranes and BC membranes), Meidensha Corporation (ceramic flatsheet membranes), and Torishima Pump Mfg. Co., Ltd. (pumps) - delivered presentations on their respective business activities and engaged in lively discussions about membrane technologies, the characteristics and potential applications of pumps in membrane technologies and seawater desalination processes, as well as future business prospects. As the talks were vibrant and time was insufficient, additional individual discussions were decided to be held in the future.



Symposium Discussion #3



Group Photo

Conclusion and Future Cooperation:

In closing, Miyake Yasujiro, Middle East and Africa Division Director of the Ministry of Economy, Trade and Industry (METI) expressed his gratitude for the effort to have made the symposium a success, and Mr. Ahmed Al Kaabi of MOEI expressed his appreciation for the cooperation of Japanese stakeholders, companies, and JCCME.

JCCME will continue to collaborate with MOEI and other relevant organizations in the UAE to resolve water issues in the country, supporting the activities of Japanese companies.

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