

Final Statement and Recommendations

"Water Desalination Conference in the Arab Countries"

Cairo, 23 – 24 April 2019

Under the patronage of the Prime Minister of Egypt *Dr. Mostafa Madbouly*, and with the participation and cooperation of the Ministry of Housing, Utilities and Urban Communities and the Holding Company for Water and Wastewater in Egypt, Water Desalination Conference was organized during the period from 23rd to 24th of April 2019 by ARWADEX group and with the organizational participation of EXICON International Group in Cairo City Star Intercontinental Hotel, with the support of a number of regional and international organizations.

During the conference, several scientific sessions and professional discussions were held, attended by more than 500 participants, during which 30 speakers and researchers from several Arab and foreign countries presented their working papers and experiences on the themes and topics of the conference, including:

- Unifying Research Efforts in Arab Countries to Improve Desalination Technologies and Economics.
- Implementation of Renewable Energy in Desalination.
- Inventions and Innovations in Desalination.
- Institutional Building for Desalination System in the Arab Countries.
- Desalination Economics & Sustainable Water Desalination.
- Promising & New Technologies in Desalination.

In addition, four workshops were held:

1. Transition for Thermal to SWRO: Strategies for Optimal Existing Thermal Plant Operation before Retirement.
2. Uses of alternative and renewable energy in desalination stations.
3. Enabling the implementation of Inventions and Innovations in Desalination: The Egyptian Experience.
4. Novel Feed Spacer Design for Fouling Control in Membrane Filtration.

Based on what was presented in the papers and discussions during the sessions and workshops at the conference, participants recommend the following:

1. Since there are many studies and research projects in the field of Desalination are currently have been missed by time and did not went through results progress achieved by others, as well as the similarity of the subjects and outputs, there is an urgent need to activate the communication between Desalination research centers in the Arab and international countries to exchange Information and experience and to disseminate research results and studies through a central body, participants also commend the proposal made at the conference about establishing a research and information center in the Arab countries in the field of Water Desalination, and they recommend that ARWADEX group should adopt the establishment of this center under the Arab Desalination Society and launch the Desalination Research Information Center (DRIC).

2. Focusing on the researches of alternative and renewable energies that meet the aspirations to reduce the costs of energy used in various types of Desalination, by focusing on the needs of Desalination by energy, taking into consideration that researches must be carried out on the possibility of hybridization of different types of energy and different Desalination methods and technologies.

3. Focusing on encouraging new technologies and initiatives, and the need to adopt research results in the field of Water Desalination, through making partnerships with the private sector to turn the results into commercial opportunities.

4. Participants recommend that the countries using the option of Water Desalination must strengthen their water resources and unifying efforts and legislation under one central institution to develop a clear plan to achieve a better Desalination industry, like some Gulf countries.

5. Participants call the Arab governments for the need of developing clear strategies to attract the private sector to invest in the water desalination sector.

6 - Focusing on the development of national manpower in Desalination stations and developing plans to build future leaders in the Water Desalination sector.

Participants would like to thank the Prime Minister of Egypt *Dr. Mostafa Madbouly* for patron the conference and the Minister of Housing, Utilities and Urban Communities *Dr. Asem Al-Jazar* for his support to organize the conference in cooperation with the Holding Company for Water and Wastewater in its 12th edition, they also would like to thank the Minister of Water Resources and Irrigation *Dr. Mohammed Abdel Aty* who opened the conference on behalf of the Prime Minister. They also thank EXICON Group, the Conference Committees, speakers and chairmen and all those who have cooperated and supported the Conference.

Participants appreciate the big role and support provided by the sponsors of the conference, which deserves great thanks. They also recommend that organizers should send these recommendations to commissions, officials and experts interested in Desalination in all Arab countries to create effective communication between the conference and those bodies.

Issued in Cairo, April 24, 2019