

**EDS Webinar, June 23. 2021**

**16:00 – 18:00 CET / 15:00 – 17:00 GMT / 10:00 – 12:00 EST**

**[Registration click here: https://www.edsoc.com/webinar.php](https://www.edsoc.com/webinar.php)**

## **Desalination in Israel, 2 decades of experience - a future of innovation -**

**Abstracts / Program**



### **Moderator**

**Philip Davies**

### **Background**

Philip Davies is a Professor of Water Technology at the University of Birmingham, UK, and a Board Member of EDS. He began his research in desalination through the design and installation of a Seawater Greenhouse in the Canary Islands in 1993. Prior to that, he undertook research in solar energy at the Polytechnic University of Madrid. His research today combines in desalination and solar energy, as he continues to develop sustainable approaches to the purification of seawater, groundwater and wastewater. He is participating in several international projects, including INDIA H2O and IntelWATT which are both supported by the EU Horizon 2020 program.

### **Gal Zohar**

**IDS Executive Chairman & CEO**

**IDE Assets at IDE Technologies**

A results-driven and hands-on senior executive with extensive experience in strategic planning, directing growth, developing, financing and implementing infrastructure projects and new business lines, and turnaround of underperforming businesses, primarily in the Retail and infrastructure sectors in local and global (i.e. Asia and North America) markets. As an innovative thinker and resourceful problem solver, I have an innate ability to translate global strategies into local execution identifying growth opportunities and directing large multinational/multicultural teams to achieve corporate goals.

### **Introduction**

❖ **Israel Desalination Society - IDS - 10 min**

## **Abraham Tenne**

Chemical Engineer B.Sc graduated in 1973.

Worked for many years in the chemical industry and in the water sector as project manager and general management.

In the years 2005-2015 worked for the Israeli Water Authority as Head of desalination Division and Chairman of the WDA (water desalination administration).

The Water Authority is the governmental authority regulating the water sector and including all water and waste water issues in Israel.

Since 2016 working as a senior consultant on Water, Wastewater, Desalination, Solid municipal waste (waste to energy) and Clean and Renewable Energy.

### **Abstract**

#### **❖ Closing the Gap- The Israeli desalination story - 20 min**

A summary of the lecture "closing the gap- The Israeli desalination story."

Desalination in Israel in large scale facilities began to develop massively with governmental decisions from 2000 onwards.

The lecture will deal with the policy of desalination and its implementation in the coming decade with reference to future generations.

Desalination perimeters in Israel: Desalination of sea water currently desalination of about 670 MCM/Y. In the end of 2015, we reached a level sea water desalination rate of about 585 mph and about 70 MCM/Y.

The lecture will present the purpose of the Water Authority and closing the gap between supply and demand through water saving activities, water reuse and desalination.

The expected supply and demand data for the next decade will be presented and how the desalination plan is derived from them.

A comprehensive review of the current desalination plan will be provided, and existing desalination plants will be described.

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## **Prof. Rafi Semiat**

Raphael Semiat is a professor EM in the Chemical Engineering Department, Technion, Israel Institute of Technology, Haifa, Israel. Currently, Head of Chemical Engineering Program, Guangdong-Technion Israel Institute of Technology (GTIIT) and president of the Israel Desalination Society. Served as a co-editor of Desalination Journal. He was nominated to hold the Yitzhak Rabin Memorial Chair in Science, engineering, and management. He served as the chairman of the Chemical Engineering Department and the director of the Grand Water Research Institute and is in charge of the Rabin Desalination Laboratory.

He obtained his B.Sc. degree in Chemical Engineering from the Technion in 1973 and obtained his D.Sc. dissertation on MED Desalination in 1978 at the Technion. Expert in separation processes with industrial experience in IMI (TAMI), a subsidiary of Israel Chemicals Ltd, where he served as a senior research engineer and as the head of the Heat and Mass Transfer Engineering Research Department.

R. Semiat joined the Chemical Engineering Department, Technion, in 1990. His main research interests are Process Development; Separation Processes with emphasis on Desalination. Of particular relevance are the research subjects associated with membrane processes and membrane fouling prevention.

### **Abstract**

#### **❖ Desalination tips from the Israeli academy - 20 min**

The Israeli Academy is the source of technical manpower for the desalination companies in Israel. Some of the universities provide deep research relating to the problem associated with the daily operation, like solving fouling issues and related problems. However, most of the research work is aimed at deeper understanding of the desalination issues, the environmental issues involved, and the efforts towards future techniques. A glance of these activities will be presented at the meeting.

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## **Gregory Shtelman**

### **Sorek 2 Partnership Deputy Manager and Desalination Project Manager**

#### **Education / Professional Achievements:**

- MSc. in Technology Management, HIT Holon
- BSc. Chemical Engineering, the Technion, Haifa

#### **Past Positions:**

Program Manager of Modular Units Department. IDE Technologies Ltd. 2014-2018.

Manager at Sorek Desalination Plant. IDE Technologies Ltd. 2013-2014.

Project Engineer at Sorek Desalination Plant. IDE Technologies Ltd. 2010-2013.

Process engineer in the RO Department. IDE Technologies Ltd. 2008-2010.

### **Abstract**

#### **❖ IDE's innovation-led journey to providing Israel with water security - 30min**

The demand of available and affordable water resources requires day-to-day improvements and new ideas in desalination field. The trend of the reasonable desalinated water pricing is clearly observed during the last decade. As innovation leaders in desalination field, we are committed to find better ways in each and every next desalination plant. In my presentation I'll overview few innovative and crucial considerations, methods and technologies that have to be taken in account in improved design, construction and operation processes of desalination plant.