

Water Research in Israel

The 5th GWRI biannual student conference

CONFERENCE PROGRAM

08:30 – 09:00 **Registration & welcome coffee** GWRI lobby

09:00 – 09:50 **Plenary session** GWRI auditorium

Greetings Prof. Jacob Rubinstein, Technion Executive Vice President for Research | Prof. Shlomo Bekhor, Dean of the Faculty of Civil and Environmental Engineering | Prof. Ori Lahav, Head of the Department of Environmental, Water and Agricultural Engineering

Invited speaker: Dr. Tzipora Rakedzon, **Intercultural communication** (Eng)
Associate Head; Department of Humanities and Arts

09:50 – 10:00 **Coffee break** GWRI lobby

10:00 – 11:45

GWRI auditorium
Waste and Wastewater Treatment

Chair: Andrey Ethan Rubin

Evyatar Ben Mordechay Organic contaminants in fresh produce irrigated with reclaimed wastewater: Human exposure and health concerns (Heb)

Yuval Shahar Photochemical and Photocatalytic Degradation of Carbamazepine in Water (Heb)

Mor Issacs Multi-parameter characterization of process dynamics in a deammonification MBBR (Heb)

Hasan E. Ganem Optimization of phosphorus removal from agro-wastewater by iron desalinization treatment residue (Heb)

Jenny Yusim Upgrading waste-derived biogas production through genomic driven community engineering (Eng)

Rabin 405

Water systems & Management

Chair: Shany Ben-Moshe

Elad Ben-Zur Modeling Lake Kinneret Watershed hydrology under climate change and anthropogenic stresses (Heb)

Gal Perelman Optimal Operation of Water Distribution Systems Under Uncertainty (Heb)

Ofer Sinr Optimizing the Control of Decentralized Rainwater Harvesting Systems for Reducing Urban Drainage Flows (Heb)

Yaeli Benovich The Role of Rainwater Harvesting Systems in Students' Hope, Meaning in Life, and School Satisfaction (Heb)

Sriman Pankaj Boindala Optimal Booster Chlorination Scheduling in WDS under uncertainty: A Robust counterpart approach (Eng)

Rabin 406

Selected topics

Chair: Lior Monat

David Keisar Direct Wind Powered Desalination System for Off-Grid Applications (Eng)

David Benyamin Testing solutions to limit species introduction through the Suez Canal (Eng)

Ernst Uzahansky Influence of internal Kelvin waves on sound propagation in shallow water (Eng)

Maurício Nunes Kleinberg Subsurface morphology in NIPS and VIPS membranes is preserved during surface lasing with optimized laser settings and affects electrically dependent microbial decontamination (Eng)

Doron Ashkenazi Enrichment of nutritional compounds in seaweeds via abiotic stressors in integrated aquaculture (Heb)

11:45 – 12:45 **Poster session + Snacks** GWRI lobby

12:45 – 13:30 **Lunch** GWRI lobby

13:30 – 15:15

GWRI auditorium
Separation Process

Chair: Chen Dagan

Erez Ruck Novel Pt/AC-Catalyzed Processes for Water and Wastewater Treatment (Eng)

Yashas Shivamurthy-Ravindra Engineered recycling of end-of-life PV panels: insights into metal recovery by capacitive-faradaic fuel cells (Eng)

Amit N. Shocron Improved Electrochemical Boron Removal using Capacitive Deionization (Eng)

Idit Shefer Ion-Ion selectivity and its limitations in polyamide nanofiltration membranes (Eng)

Zenebu Abera Derbew Sustainable removal of ammonia from the anaerobic digester supernatant line using a PBA composite adsorbent (Eng)

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Agriculture

Chair: Sonya Altitser

Neriya perez lapid Amorphous iron-oxide montmorillonite composite for phosphate adsorption and reuse (Heb)

Yonatan Yekutiel Development of a new approach for optimizing nitrogen fertilizer application by a novel technology of real-time soil nitrate monitoring (Heb)

Michael Kusibu Mba Could cyanobacterial polysaccharides contribute to water-saving agriculture in arid regions? (Eng)

Mohammed Albream Treatment of intensive fish wastewater by ultrafiltration: from fouling propensity to membrane performance (Eng)

Shulamit Nussboim Fate of agrochemicals in a Mediterranean catchment: organic pollutants transport from the field to the stream in the field-scale (Eng)

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Porous media processes

Chair: Elad Ben-Zur

Michal Liddor Naim Early detection of clogging formation in deep water wells using microbial indicators (Eng)

Anwar Dawas Passive ozone injection through gas-permeable membrane for advanced in situ groundwater remediation (Eng)

Debanik Bhattacharjee Interplay of flow and surfactant at liquid-liquid interfaces in heterogeneous microbial communities (Eng)

Nirrit Cohen Microplastic textile fibers accumulate in sand and are potential sources of micro(nano)plastic pollution (Heb)

Danit Karsagi Nutrient (N&P) containing aerogel for hydrocarbons adsorption and biodegradation (Heb)

15:15 – 15:30 **Coffee & Hanukkah doughnuts** GWRI lobby

15:30 – 16:30 **Closing session and awards** GWRI auditorium

Invited speaker: Maayan Hagar, **Entrepreneurship & Innovation in water technologies**
T-hub Technion Entrepreneurship & Innovation Hub

Announcement of the winners in the poster and oral presentation competition

