



German-Israeli Cooperation in Water Technology Research Status Seminar 2024

Koblenz, June 18 – 19, 2024

Agenda

Monday, June 17, 2024

Arrival and Optional Individual Meetings

Tuesday, June 18, 2024

09:30 ☕ Registration and coffee

Opening and Welcome

Dr. R. Müssner (BMBF)

Greeting and Reflections

Shani Edri, Dr. M. Ben Sasson (MOST, Jerusalem)

Keynote

Prof. Dr. Martin Jekel, Berlin

YSEP – Young Scientist Exchange Program: Impressions from a Recent Stay in Israel

Miriam Urbansky

10:50 ☕ Coffee break + posters

Session 1: Projects Started in 2021

Scientific presentation and discussion of collaboration projects

11:20 Reduction Green-House Gas Emissions in the Water Treatment Sector by Integrated Technologies for Biofouling Mitigation (LowGHGWatt)

Dr. R. Bernstein (Ben-Gurion University of the Negev)

Prof. S. Witzleben and Dr. Julia Holtel (Hochschule Bonn-Rhein-Sieg)

11:50 Reducing CO₂-Emissions from Municipal Wastewater Treatment – Comparing Different Partial Nitritation/Anammox Applications (Red-CO₂-PNA)

Dr. Shelton Tarre (Technion, Haifa)

Prof. S. Lackner (TU Darmstadt)

12:20 CO₂-Reduction in Oxidation of Micropollutants – Energy Intensive vs. Novel Solar Based Processes (CatMemReac)

Prof. H. Mamane and Dr. R. Negi (Tel-Aviv University)

F. Gaulhofer (Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB, Stuttgart)

12:50 🍴 Lunch

13:50 Developing an Economic Simulation-Modelling Framework as a Decision-Support Tool for Policymakers in the Water Sector (EconWatSim)

Dr. A. Reznik (Hebrew University of Jerusalem)

Dr. J. Luckmann (Humboldt-Universität zu Berlin)

Session 2: Projects Started in 2022 and 2023

14:20 Elimination of Antibiotic Resistances, Pathogens, and Fecal Indicators, and Risk Assessment in Advanced Wastewater Treatment (ELARIA)

Prof. A. Nasser (Water Quality Research Lab (WQRL), Tel Aviv)

Prof. A. Tiehm (Water Technology Centre TZW, Karlsruhe)

14:50 A Bio-Electrochemical Detection Array for Perfluoroalkyl Acids (PFASense)

Prof. H. Ben-Yoav (Ben-Gurion University of the Negev)

Dr. S. Buchinger (Federal Institute of Hydrology BfG, Koblenz)

15:15 ☕ Coffee break + posters

15:45 Parallel Brainstorming Sessions – Future Responses to Water Stress and Drought in Israel and Germany

All participants (3 thematic groups)

16:45 Recreational break

17:15 Meet up in the lobby

17:30 🚢 Boarding for Rhine cruise excursion

18:00 Cast off – Rhine cruise inc. dinner

22:30 Approx. end of excursion at the hotel

Wednesday, June 19, 2024

Session 2 (Continued): Projects Started in 2022 and 2023

09:00 Dynamics of Micropollutants and High Affinity Particulate Matter in Lake Kinneret and its Watershed (MICROLAKE)

Prof. P. Astrahan (IOLR-KLL, Migdal)

Dr. S. Pimpke (Alfred Wegner Institute AWI, Bremerhaven)

09:30 Detection, Quantification and Treatment of Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater (DEFEAT-PFAS)

Dr. A. Ronen (Ben-Gurion University of the Negev)

Prof. S. Panglisch (Universität Duisburg-Essen)

10:00 Polyelectrolyte-Complex Nanofiltration: Optimal and Tunable Membrane Solution for Treatment and Reuse of Urban and Industrial Waste Water (PEC-NF)

Prof. V. Freger (Technion, Haifa)

Prof. M. Ulbricht (Universität Duisburg-Essen)

10:25 ☕ Coffee break + posters

10:55 Data-Driven Sewer Asset Management in Germany and Israel (DASAM)

Prof. B. Fishbain (Technion, Haifa)

Dr. N. Caradot (Competence centre water KWB, Berlin)

11:20 Removal and Degradation Platforms Tailored for Persistent Mobile Organic Compounds in Drinking Water Sources (re:PM)

Prof. Y. Mishaël (The Hebrew University of Jerusalem)

Prof. T. Reemtsma (Helmholtz Centre for Environmental Research UFZ, Leipzig)

11:45 Water Decontamination Through Sulfate-Radical Oxidation in a Nanoenabled Catalytic Filtration Process for Non-Potable and Potable Water Reuse (NEWR)

Dr. I. Zucker (Tel Aviv University)

Dr. B. Aumeier (TU München)

12:10 Reporting Back from Parallel Brainstorming Sessions – Future Responses to Water Stress and Drought in Israel and Germany

12:30 Closing Words

BMBF + MOST

12:40 🍴 Lunch / End of the status seminar



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The bilateral cooperation in water technology was established already in 1974. Since then, more than 162 projects with Israeli and German partners have led to trusted relations between Israeli and German researchers. The current seminar marks the 50th anniversary of this cooperation.

The objectives of the German-Israeli Water Technology Cooperation Program are:

- » To improve the water situation in Israel, its direct neighbourhood and/or Germany
- » To facilitate access to new markets for Israeli and German enterprises in the water and environmental sector
- » To support and strengthen bilateral and multi-lateral cooperation in the water sector as well as facilitate cooperation between science and industry

Focal themes of the 2024 status seminar are:

- » Water technology to reduce the CO₂-Footprint of the water sector or to adapt to major impacts of climate change
- » Economical optimisation in the water sector
- » New approaches for asset management of water infrastructure
- » Wastewater: recycling, reduction and reuse
- » Organic micro-pollutants, pathogens and microplastic in drinking water resources and freshwater systems

In future, even stronger efforts are required to respond to the growing pressure on the global water resources. Efficient water technology and its appropriate use are key to reach the Sustainable Development Goal 6 (Ensure availability and sustainable management of water and sanitation for all) of the United Nations. The German-Israeli water technology research cooperation aims to contribute to the SDGs by securing the required innovation.

Registration

Registration

Please register at:

<https://indico.scc.kit.edu/event/4029/>

Registration target 18.3.2024

Participation is free of charge.



Conference Venue

Mercure Hotel Koblenz

Julius-Wegeler-Straße 6 | 56068 Koblenz | Germany | Phone: +49(0) 261 136-0

<https://www.mercure-koblenz.de/en/>

A limited number of hotel rooms have been reserved at the seminar venue for members of ongoing projects from the German-Israeli Cooperation in Water Technology Research and for members of the Joint Advisory Committee (JAC). Room reservations can be made via the registration tool.

Contact

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International cooperation

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YSEP

Young Scientists

Young scientists can apply for the Young Scientist Exchange Program (YSEP). YSEP is an open call for young scientists for a training period in Israel or Germany for up to 6 months, but no less than 1 month. Funding will be provided to cover all necessary expenses of the applicant's visit abroad. For further information please refer to:

<https://www.ptka.kit.edu/young-scientists-exchange-program-ysep-2275.html>

Further Information

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