

REWA conference- 31/1/2023

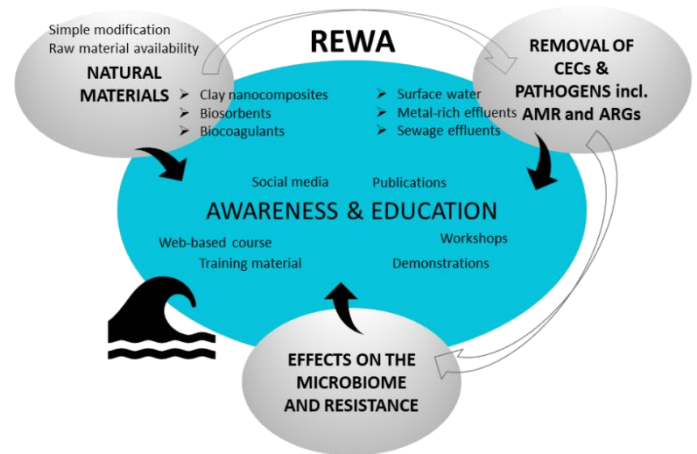
Reduction and assessment of antimicrobial resistance and emerging pollutants in natural-based water and wastewater treatment systems

REWA project, is funded by the ERA-NET Cofund AquaticPollutants 2020 Joint Transnational Call and includes delegates from Finland, Denmark, South-Africa and Israel.

The main goal of the conference is to present the strategic development and implementation of sustainable and cost-effective technologies for water and wastewater treatment at a series of sources, as dealt with in the REWA project. The scientific and technological aim is to test novel approaches based on use of specifically prepared

natural-based materials for coagulation and adsorption with advanced oxidation processes (AOPs) for the removal of contaminants of emerging concern (CECs), pathogens including antimicrobial resistant bacteria and antibiotic resistance genes (ARGs).

The conference will take place Tuesday 31/01/2023 at Tel-Hai College, Eastern Campus



Programme:

08:30-09:00 Greetings (MIGAL's CEO, Tel-Hai President)

1st session- Challenges and opportunities

09:00-09:20 Mr. Yossi Yaakovi (VP engineering & Technology)"New era of the Third line to the Negev. Management of amount and quality"

09:20-09:50 Prof. Benny Chefetz (Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem) " Wastewater-born contaminants of emerging concern in the agroecosystem: Fate and processes"

9:50-10:10 Dr. Tamar Berman (Head of Risk Assessment in Environmental Health, Ministry of Health) "PFAS Contamination of Water in Israel – Recent Results and Regulatory Response"

10:10-10:20 Dr. Tiina Leiviskä (University of Oulu, Finland) "The REWA project"

10:20-10:30 Q & A and discussion

10:30-10:45 Coffee Break

2nd session- Pathogens and antibiotic resistant gens (ARGs)

10:45-11:15 Dr Eddie Cytryn (ARO, Volcani Research Center) "Antimicrobial resistance along anthropogenic-environmental interfaces: between ecological barriers and unseen risks"

11:15-11:25 Prof Kristian Koefoed Brandt (University of Copenhagen, Denmark) "The nexus between microbial ecology and water treatment"

11:25-11:40 M.Sc. Mia Kristine Staal Jensen and Dr. Simon Bo Lassen, (, University of Copenhagen, Denmark) "Microbiome analyses for evaluation of water treatment processes"

11:40-11:50 Q & A and discussion

11:50-12:15 Coffee Break

3rd session- Contaminants of concern

12:15-12:45 Dr Adi Radian, (Faculty of Civil and Environmental Engineering Technion, Israel) "Harnessing natural clays and oxides for the removal and degradation of pervasive pollutants"

12:45-13:00 Prof Bice S. Martincigh (University of KwaZulu-Natal, Durban, South Africa) "Nanomaterials for wastewater remediation"

13:00-13:15 M.Sc. Olubukade J. Adesnami (University of KwaZulu-Natal, Durban, South Africa) "Tin vanadate-based photocatalysts for wastewater remediation"

M.Sc. Caren Kurgat (University of KwaZulu-Natal, Durban, South Africa)
"Bismuth oxyhalide-based photocatalysts for wastewater remediation"

M.Sc. Rhoda O. Adegoke (University of KwaZulu-Natal, Durban, South Africa)
"Graphene oxide-biochar composites for wastewater remediation"

13:15-13:30 Prof Giora Rytwo (MIGAL and Tel-Hai, Israel) "Combining coagoflocculation, photodegradation and adsorption"

13:30-13:40 M.Sc. Adedayo Bello (University of Oulu). "The future of tannin-based coagulants; opportunities and challenges"

13:40-13:50 Dr. Ilil Levakov, (MIGAL and Tel Hai) "Carbamazepine adsorption to clays and organoclays"

13:50-14:10 Q & A, discussion and final remarks

14:10-15:30 Lunch

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