

RBF CONFERENCE

Dresden, Germany

16 to 18 October 2023

Tuesday, 17/10/2023

08:30 COFFEE/TEA BREAK

SESSION 3: SITE INVESTIGATION, CHARACTERIZATION, AND MODELLING

Moderator: Cornelius Sandhu

09:00 Hydrogeological studies for a RBF site

Jaana Jarva, GTK, Finland

09:20 Using isotopic data in groundwater-surface water interaction study for a RBF site characterisation - Example from Vietnam

Kristiina Nuottimäki, GTK, Finland

09:40 Using groundwater model to evaluate groundwater - surface water interaction in a RBF site - A case study in Binh Dinh

Dang Tran Trung, NAWAPI, Vietnam

10:00 Potential of RBF sites with complex environmental conditions - Case studies from Agra and Punjab

Gopal Krishan, NIH Roorkee, India

10:20 The INOWAS groundwater management platform: web-based tools for real-time monitoring and numerical modelling at MAR sites

Jana Glass, TU Dresden, Germany

10:40 COFFEE/TEA BREAK

11:10 Fate of micropollutants in a RBF drinking water supply system

Dora Gere, NNGYK, Hungary

11:30 RBF along with reactive barriers for the removal of emerging contaminants from drinking water

Ligy Philip, IIT Madras, Chennai, India

11:50 Transformation of potentially persistent and mobile organic micropollutants in column experiments

Muhammad Zeeshan, GEA, Germany

12:10 Testfilter experiments for defining DOC biodegradation during RBF with a focus on climate change effects

Elnaz Zehtabian, HTW Dresden, Germany

12:30 LUNCH BREAK

SESSION 4: WORLDWIDE CASE STUDIES AND POST-TREATMENT

Moderator: Yan Zheng

14:00 Twenty years of Egypt progress in RBF

Mohammed Shamruk, MECC, Qatar

14:20 Development and challenges of RBF in the Himalayas - Examples from Uttarakand

Prakash Kimothi, CCRBF/UJS, India

14:40 Disinfection of RBF on the case study Haridwar

Martin Wagner, TZW Dresden, Germany

15:00 Potential of RBF in NE India for community water supply

Medalson Ronghang, BBEC, Kokrajhar, India

15:20 BF + Solar Driven Onsite Chlorine Generation - a perfect fit for decentralized drinking water supply?

Phillip Otter, AUTARCON GmbH, Germany

15:40 COFFEE/TEA BREAK

16:00 Prospects for RBF in the mining-impacted Damodar river catchment

Priyabrata Banerjee, CSIR-CMERI, Durgapur, India

16:20 MAR/RBF in Chennai, South India

Lakshmi Narasimhan, Anna University, India

16:40 A special horizontal collector well for RBF in Paußnitz

Carsten Leibenath, UBV, Germany

17:00 RBF Perspectives

Thomas Grischek, Cornelius Sandhu, HTWD, Germany

17:20 CLOSING CEREMONY

Wednesday, 18/10/2023

8:00-18:00 Technical excursion to Waterworks Torgau, Saxony

Meeting place: RBF Conference venue front building

13:00 - 14:00 Lunch at **Alter Elbehof**

INTERNATIONAL RIVERBANK FILTRATION CONFERENCE DRESDEN, GERMANY

PROGRAM

16 to 18 October 2023

MARITIM HOTEL DRESDEN -
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RBF CONFERENCE

Dresden, Germany

16 to 18 October 2023

Monday, 16/10/2023

08:00 REGISTRATION AND COFFEE/TEA BREAK

09:00 WELCOME

Thomas Grischek, Organizer, HTW Dresden, Germany

Yan Zheng, IAH MAR Commission

Matthias Krüger, FEO, AWE, Germany

Thomas Käseberg, SachsenEnergie, Germany

SESSION 1: RBF DEVELOPMENT, CHALLENGES, GEO-HYDRAULIC ASPECTS AND SYSTEM DESIGN

Moderator: Thomas Grischek

09:30 **KEYNOTE:** Prerequisites for implementing MAR in China

Yan Zheng, SUSTech, China

10:00 **KEYNOTE:** Objectives, advantages, and limitation of RBF with special regard to bacterial topics

Hans-Peter Rohns, Stadtwerke Düsseldorf, Germany

10:30 PHOTO SESSION

10:45 COFFEE/TEA BREAK

11:00 **KEYNOTE:** Recent developments in US RBF

Chittaranjan Ray, University of Nebraska, USA

11:30 **KEYNOTE:** Overview of RBF projects in Egypt

Mohamed Abdel Hadi Afifi, HCWW, Egypt

11:50 Effects of droughts on RBF in Torgau

Sven Schirrmeister, FEO, Germany

12:10 RBF in Dresden, Germany

Cornelia Zarbock, SachsenEnergie, Germany

12:30 LUNCH BREAK

19:00 WELCOME DINNER & BEST POSTER AWARD

Altes Wettbüro, Antonstr. 8, 01097 Dresden

Tasty food & The Voltz Brothers Music

SESSION 2: WATER QUALITY ASPECTS

Moderator: Saroj Sarma

14:00 Benefits and challenges of BF for the drinking water supply of Berlin

Christoph Sprenger, Anne König, KWB, Germany

14:30 Microbial community shifts and elimination of antibiotic - resistant organisms during RBF in Budapest

Bernadett Khayer, NNGYK, Hungary

14:50 BF – a barrier for organic micropollutants in drinking water treatment?

Hilmar Börnick, TU Dresden, Germany

15:10 Predicting the removal efficiency of (new) organic micropollutants during soil passage

Bas van der Grift, KWR, Netherlands

15:30 COFFEE/TEA BREAK

16:00 Water chemical composition variability at Kępa Bogumiłowicka RBF site, southern Poland: effects of RBF on the groundwater quality

Krzysztof Janik, University of Silesia, Poland

16:20 The occurrence and transport behaviour of PFAS at RBF sites: A case study of the Upper Danube Basin

Ali Obeid, TU Wien, Austria

16:40 Water quality monitoring to understand heavy metals and organic micropollutants pollution in Goa

Kavita Patil, TERI, India

POSTER PRESENTATION

PO-1 Development status of RBF in South Korea

Jaehoon Jeong, South Korea

PO-2 Development status of riverbed infiltration gallery and backwashing technology in South Korea

Jaehoon Jeong, South Korea

PO-3 Maintenance of radial horizontal collector wells

PO-4 Pilot test perspectives for RBF in public supply in the State of Sao Paulo

Eloisa Cherbakian, Ana Silva, Brazil

PO-5 Effect of RBF on the occurrence of pharmaceutical and personal care products in groundwater of the Kępa Bogumiłowicka site

Kinga Slosarczyk, Krzysztof Janik, Poland

PO-6 MAR in arid regions, a Jordan case study

Qasem Abdelal, Raneem Alshakhatreh, Jordan

PO-7 Evaluation of RBF at Zarqa River in Jordan

Othman Almashaqbeh, Jordan

PO-8 Assessment of LULC changes and semi-urban water demand for sustainable water management

Samson Haile, Medalsong Ronghang, India

PO-9 Comparative evaluation of GIS- based models for mapping the vulnerability of shallow groundwater to pollution in SE Hungary

Abdelouahed Fannakh, Barta Karoly, Andrea Farsang, Hungary

PO-10 Development of a generic RBF model for the assessment of exposure of persistent, mobile and toxic and other industrial substances

Dwight Baldwin, Germany

PO-11 Teaching and research field “Groundwater” of the TUD – Infrastructure and opportunities for experiments

Thomas Fichtner, Germany

PO-12 Potential of microplastic transport during RBF

Jiaying Ding, Germany

PO-13 RBFsim – A tool for early assessment of RBF

Prabhas Yadav, Germany

PO-14 The pharmaceutical compounds diversity at Śrem RBF site located in Warta River valley

Krzysztof Dragon, Roksana Kruć-Fijałkowska, Dariusz Drożdżyński, Józef Górski, Poland

PO-15 Feasibility of large-scale RBF in Vietnam

Ngoc Anh Hoang, Germany

PO-16 RBF combined with on-site chlorine generation for decentralized drinking water supply in Assam

Fazlur Rahman, India

PO-17 Enhancement of higher education on MAR in the MENA water sector – MENAWAT

Cornelius Sandhu, Thomas Grischek, Q. Abdelal, H.C. Dekkaki, A.-S. Bernoussi

Contributing to
safe drinking water supply
by riverbank filtration