Fraunhofer

IFAT 2016

30th May to 3rd June 2016, Fair Munich
Hall A5, Booth 217/316

WATER MANAGEMENT

Fraunhofer UMSICHT

- Decision support system to optimize the water management
- Saving water through separating waste streams
- Recovery of nutrients
- Closing loops

Fraunhofer ISI

- Water in the city of the future: innovative water management and cross-sectoral concepts in the context of present and new challenges
- i.WET: integrated concept for water energy transition
- Evaluation of sustainability of innovative technologies and system solutions
- Serious Game for the design, planing, and visualization of integrated water infrastructure systems
- Evaluation of water contamination by micro pollutants as well as the derivation and evalaution of input reduction measures

WATER TREATMENT

Fraunhofer UMSICHT

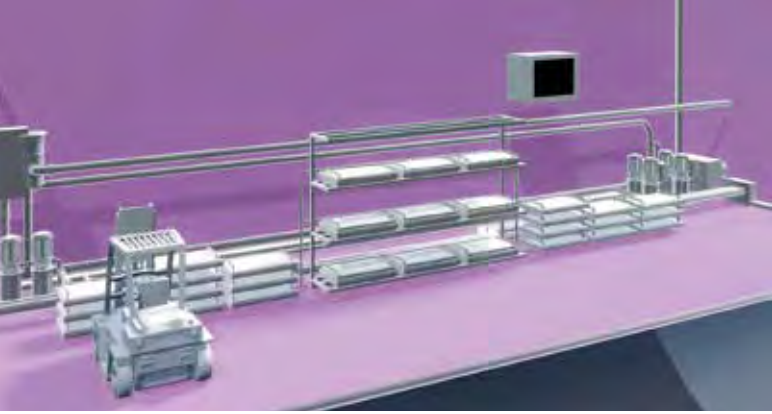
- Membrane processes

Fraunhofer IKTS

- Integrated chemical- and biology-free AOP and membrane processes
- Membrane-based reactor systems for production-related treatment and recycling of waste and process water under harsh conditions (pH, temperature)
- Development and implementation of ceramic special membranes for efficient separation processes
- Electrochemical and photocatalytic water purification and water disinfection
- Recovery of valuable materials from waste (metals, nutrients)

Fraunhofer IGB

- Water treatment with AOP technologies: e.g. with plasma, photolysis, electrooxidation and -reduction
- Desalination with electrochemical separation processes, e.g. capacitive deionization
- Wastewater purification with decentralized electrochemical production of H_2O_2
- Nutrient recovery from wastewater and sludge
- Electrochemical phosphorus recovery from wastewater



- Efficient biological wastewater purification with fixed-bed circulation reactors

SLUDGE TREATMENT

Fraunhofer UMSICHT

- Conversion of biomass
- Concentration and treatment

Fraunhofer IFF

- Concepts for the thermal treatment of sludge
- Process optimization in sewage plants by big data analytics

Fraunhofer IKTS

- Functionalized natural flocculants for sludge dewatering

FRAUNHOFER INSTITUTES AND ESTABLISHMENTS

Fraunhofer Water Systems Alliance SysWasser
www.syswasser.de

Fraunhofer Institute for Factory Operation and Automation IFF
www.iff.fraunhofer.de

Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB
www.igb.fraunhofer.de

Fraunhofer Institute for Ceramic Technologies and Systems IKTS
www.ikts.fraunhofer.de

Fraunhofer Institute of Optronics, System Technologies and Image Exploitation IOSB
www.iosb.fraunhofer.de

Fraunhofer Institute for Systems and Innovation Research ISI
www.isi.fraunhofer.de

Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT
www.umsicht.fraunhofer.de

WWW.FRAUNHOFER.DE

Expert contact
Fraunhofer Water Systems Alliance SysWasser
Prof. Dr. Dieter Bryniok
c/o Fraunhofer Institute for Interfacial
Engineering and Biotechnology IGB
Phone +49 711 970-4211
Nobelstrasse 12 | 70569 Stuttgart
www.syswasser.de

Press contact
Tobias Steinhäußer
Phone +49 89 1205-1308
tobias.steinhaeusser@fraunhofer.de
Fraunhofer-Gesellschaft
Hansastrasse 27 c | 80686 München
www.fraunhofer.de

Project coordinator
Dipl.-Ing. Christian Bringmann
Fraunhofer Institute for Interfacial
Engineering and Biotechnology IGB
Phone +49 711 970-4069
Nobelstrasse 12 | 70569 Stuttgart
www.igb.fraunhofer.de