



JPI Water joint research Projekt MOTREM: Integrated processes for Monitoring and Treatment of Emerging contaminants for water reuse

The MOTREM project is included in the European Water JPI Pilot Call for projects on topic “Emerging water contaminants – anthropogenic pollutants and pathogens” and is framed within the Joint Programming Initiative “Water Challenges for a Changing World” (Water JPI). The project involves the collaboration among research and industry partners in a European level.

The MOTREM project focuses on the development of integrated processes for monitoring and treatment of emerging contaminants (ECs) and/or improving the efficiency of the existing ones for the removal of these micropollutants in municipal wastewater treatment plants (WWTPs), especially for the aspect of water reuse. Main advanced technologies to be studied for the effective elimination of micropollutants are Advanced Biooxidation Processes (ABOP) and Photochemical Advanced Oxidation Processes (PAOP).

Universität Stuttgart, BiOS, is mainly involved in assessment of optimized technologies for the monitoring of the WWTP operation regarding the removal of ECs, including analytical methodologies and measurements of integrative parameters. Moreover, is a main contributor on the identification of the most representative ECs along the waterline of different WWTPs for the evaluation and monitoring of the efficiency of the wastewater treatment processes.

Through combined expertise, the MOTREM Project aims the establishment of effective and sustainable strategies on the treatment of Emerging Contaminants in wastewater treatment plants. Apart from supplying scientific knowledge, the results from the project may give commercial solutions to the market and contribute to the compliance with current water frameworks on detection of ECs in water bodies, such as the European Water Framework directive (EC/2000/60), or more stringent future demands.

Financing Institution:
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Contact:
Prof. Dr. rer. nat. habil. Jörg W. Metzger (ISWA), Dr. Bertram Kuch, Eleni Laski, M.Sc.
Project partner:
Universidad Rey Juan Carlos (Coord.) University of Helsinki Università di Torino Aqualia Gestion Integral del Agua S.A. Bruker Española, S.A.
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