

Einladung zum AVT-Kolloquium im Wintersemester 2022

Wir laden Sie ganz herzlich ein

am **Mittwoch, den 14.12.2022**
um: **17:30 Uhr**
in den **HS-A005**
Erdgeschoß, Forckenbeckstraße 51, Aachen

Bioverfahrenstechnik
Prof. Dr.-Ing. Jochen Büchs

Chemische Verfahrenstechnik
Prof. Dr.-Ing. Matthias Wessling

Computational Systems
Biotechnology
Prof. Dr. rer. nat. Wolfgang Wiechert

Elektrochemische Reaktionstechnik
Prof. Dr. rer. nat. Anna Mechler

Fluidverfahrenstechnik
Prof. Dr.-Ing. Andreas Jupke

Soft Matter Process Engineering
Prof. Dr. rer. nat. Ronald Gebhardt

Systemverfahrenstechnik
Prof. Alexander Mitsos, Ph.D.

Dr. Jörg Winter

NX Filtration

Advanced Hollow Fiber Nanofiltration Membranes

Warm and dry summers are becoming a reality in the north western part of Europe. The shift in climate is already resulting in alarmingly low levels of groundwater. This water is intended to be used for irrigation and industrial use. At the same time, groundwater is also one of the most important sources for producing potable water in many European countries. This results in water scarcity, also in traditionally wet regions of Europe. Next-generation hollow fiber NF membranes based on polyelectrolyte multilayers are suitable for direct treatment of alternative water sources, such as surface water and (biologically treated) wastewater. In the last years, these membranes have come of age and are now commercially used in various water treatment processes. The main benefits of these new chemistries for NF membranes on hollow fibers include micropollutant and organics removal, fouling resistance, chlorine tolerance, minimal pretreatment, reduced chemical usage, and cleanability at a wide pH range. These benefits lead to significantly lower operating costs and considerable CO₂ footprint reduction.

In this presentation we will discuss the versatility, stability, and maturity of these selective commercially available polyelectrolyte multilayer based hollow fiber membranes and will provide an overview on how they are used in a multitude of (commercial) applications.

Im Anschluss an den Vortrag besteht die Möglichkeit mit Snacks und Getränken miteinander ins Gespräch zu kommen.

Wir freuen uns auf Ihre Teilnahme!