



We create chemistry

Purpose of the Internship

In many applications the Ultrafiltration (UF) feed water has experienced a chain of treatment processes before getting in touch with the UF membrane. These processes are often supported by the addition of chemicals, which are not specified or tested on PES membrane compatibility. Their impact on the UF membrane performance is not known. Therefore it is planned to perform tests on different, process typical or project specific, chemicals and their impact on the membrane. For this work, the impact of organic flocculants in the pretreatment processes "sedimentation" and "flotation" will be tested in combination with the membrane. BASF provided a matrix that illustrates the molecular weight and ionicity of the specific Polymers. Chosen Polymers out of this matrix will be tested.

The major task for this internship is to develop a guideline for the usage of organic flocculants in combination with inge UF membranes.

Scope of work:

1. Research characteristics/ specifications of BASF's organic flocculants including the main applications the specific products are used for
2. Perform the tests with organic flocculants in the lab. Required units and equipment will be provided
3. Develop a cleaning strategy that recovers the initial performance of the membrane after the experiments
4. Develop a strategy to evaluate the compatibility of the polymers and the membrane

Personal skills of the master student should include thinking in systems, excel know-how and a good and quick perception.

A valid driver's license is required. The company will not provide housing.

inge GmbH
Patrick Buchta
Head of Application Technology

inge GmbH
Flurstrasse 27
86926 Greifenberg, Germany
Tel. +49 8192 997-700
Fax +49 8192 997-999
info@inge.ag
www.inge.basf.com

Managing Board
Dr. Peter Berg
Daniela Calleri

VAT
DE213269940

Trade Register
Amtsgericht Augsburg, HRB 23537

Bank Account BNP Paribas S.A.
SWIFT/BIC BNPADEFFXXX
EUR transfer IBAN DE20 5121 0600 4220 4010 14

