

INTERNSHIP OPENINGS

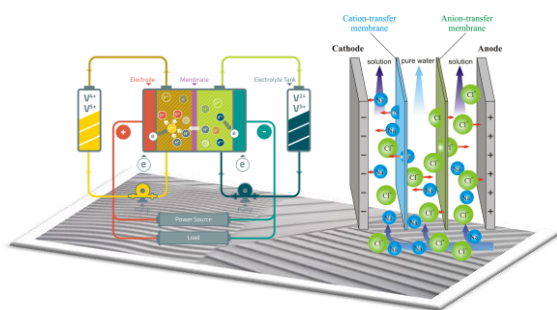
tempting opportunity to gain experience in industry oriented research

PROJECT: ION EXCHANGE MEMBRANE FORMULATION

The IEx Coating Project is focused on the controlled modification of Amer-Sil's porous membranes for improved performances in redox flow batteries (RFB) and electro dialysis (ED). Ion exchange membranes are fabricated by deposition and curing of ionomer coatings on porous substrates and then tested to understand the correlation between material chemistry and performance in application.

Key project activities:

- *Membrane fabrication:* polymeric coating formulation , application and curing;
- *Membrane testing:* ion permeability, polarization curves, chemical stability, mechanical properties, laboratory scale application tests.



JOB DESCRIPTION

Internships at Amer-Sil fully involve the trainee in the company research activity, including project management meetings, project revisions and safety briefings. Everyday work is organized to be a well balanced blend of laboratory and office work:

- *Laboratory work will include:* formulation and fabrication of hierarchical ion exchange membranes, characterization and application testing of such membranes in laboratory scale experiments - RFB cycling, ED experiments;
- *Office work will include:* report writing, small literature searches.

WHAT WE OFFER

- An engaging experience in application oriented research, working side-by-side with PhD students in EU funded research projects (FlowCamp - <https://bit.ly/32Q9kvU>, EXCEED - <https://bit.ly/32LBHeV>)
- To take part in our young, dynamic R&D team of about 12 researchers (3 PhDs);
- Insights into everyday industry operations;
- 6 months with flexible start from February/March 2020;
- Living cost contribution.

YOUR PROFILE

- You are a student in chemistry related master studies (chemistry, chemical engineering, polymer engineering, material science) – possibility for Master Project;
- You are interested in polymeric materials for energy storage and electromembrane processes;
- You have a good knowledge of spoken and written English.

AMER-SIL

Headquartered in Luxembourg, Amer-Sil is a membrane manufacturer. Its PVC/silica hybrid microporous membranes and nonwoven gauntlets are world leading products in the lead acid battery market. Moved by a strong desire of innovation, Amer-Sil is conducting intensive research in the membrane technology field for application in redox flow batteries and electro dialysis.

Contact to apply or hear more about the internship:

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INTERNSHIP REFERENCE: 2020-1-IEX



Amer-Sil S.A.
Membrane Technology