

Job description

Job title

Chemical Process Engineer for Chemical Synthesis

About NovaMea

NovaMea SA is an EPFL Startup with a research center located in an EPFL innovation park in Saint-Sulpice (VD), Switzerland. The company aims to develop, produce, and sell electrochemical energy storage and conversion technologies and devices. The company currently focuses on anion exchange membrane water electrolyzers which can be used for the production of green hydrogen. NovaMea's technologies and products are superior to competitors in terms of cost, scalability, compatibility with renewable energies. The company expects to make a significant contribution to the construction of a zero-emission energy system.

Job summary

The Chemical Process Engineer will develop and produce ionic (organic) polymers for the development of advanced anion exchange membrane for green hydrogen production, in accord with requirements of high performance, long life, and low cost. In this capacity, the person will be responsible for the scale-up and optimization of polymerization process. The person will also coordinate with internal or external engineers for the build of pilot plant and production lines for polymer production.

Duties and Responsibilities

- Produce polymers at lab and pilot scales to support the casting of membranes
- Lead research and development projects related to polymer production
- Screen and design the reactor and stirring paddle at different scales to reach sufficient mass and heat transfer
- Safety assessment and control of the polymerization process
- Optimization of the reaction parameters to increase the conversion and efficiency
- Improve the strategy of waste recycle and treatment

Qualifications and skills

1. A master's degree in Chemical Engineering or related fields, with a focus on Process Engineering for Chemical Synthesis. In exceptional case, a bachelor degree with extensive prior experience can be considered.
2. Prior experience in polymer or organic synthesis is preferred
3. Solid grounding in engineering fundamentals: heat & mass transfer, thermodynamics, reaction engineering.
4. Familiarity with production processes at both lab scale and pilot scale, including agitation, reactor, temperature and safety control, purification and waste treatment
5. Experience in laboratory experimentation, polymer characterization and data analysis (DSC, TG, NMR, GPC etc.)

The above list of duties and responsibilities is indicative. Other duties or responsibilities may be assigned after discussion.

6. Collaborative leadership style in motivating, developing and empowering diverse teams
7. Fluency in English, both spoken and written
8. Authorization to work in Switzerland

Benefits

1. Contributes to the development and implementation of a new cutting-edge green technology
2. Builds-up agile and decisive, value-driven, and business-focused leadership
3. Working in a dynamic, international, and collaborative team environment
4. Competitive compensation

Applications

Please send your CV and application letter to Mr. Xingyu Wu, CEO, NovaMea SA, E-mail:

xingyu.wu@novamea.swiss

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