SunGreenH2
Melbourne, Australia

Mechanical Engineer

SunGreenH2 is an award-winning venture backed green hydrogen company building world leading high performance electrolyser component technology for low-cost green hydrogen production at scale.

We are expanding our fast growing team with a Mechanical Engineer to join our product development team. Key deliverables will be testing and prototype construction, testing different component assemblies while working closely with the stack design team to get new electrolyser stack designs up and running for rapid testing and prototyping. You will be tasked with the responsibility to further develop and optimize our electrolyser stack.

Responsible For

1. Designing different components of the electrolyser stack
2. Assembly, testing, and optimization of electrolyser stack, balance of plant and full system
3. Analysis of fluid (liquids, gases) behavior
4. Rapid prototyping of new system components with seamless reporting in parallel
5. Setup of measurement technology and commissioning of development test benches
6. Providing support with documentation for prototyping of electrolyser stacks and system

Your Profile

- Mechanical engineer with strong focus on component design and fluid dynamics
- Knowledge of measurement technology and sensors
- Understanding of devices working under pressure
- Excellent communication skills in English
- Detail-oriented, meticulous & well-organised
- Strong team player; self-starter with can-do attitude
Experience in the following simulation aspects would be a plus:

- Ability to perform simulation for the development of the electrolyser stack
- Good knowledge of mechanical modelling (CFD or similar software) for two phase or multiphase modeling
- Knowledge in using CAD-software tools (Solidworks, CATIA)
- Hyperplastic and viscoelastic-plastic material
- Gaskets creeps and viscous response in “pressure device” and / or in sealing modelling
- Fluid-structure interaction
- Experience with design of sealing systems (o-ring and gasket)