

Chemical Engineer Hydrogen and Derivatives

OPPORTUNITY

Ainira Industries is currently seeking applicants for Chemical Engineer Hydrogen and Derivatives to build upon the pioneering work and already prominent position within the Australian green molecules sector. Particularly important trait we are looking for is the breadth of chemical engineer's knowledge and their ability to develop interdisciplinary solutions for cost-effective production of green hydrogen and derivatives.

JOB DESCRIPTION

Headquartered in Melbourne, Australia we are an international renewables powerhouse with a diverse range of renewable and alternative energy assets and operations. We have offices on four continents, over 220 highly skilled staff, and maintain a steady line of upcoming projects in the renewables arm of the business. With our significant investment in technology and infrastructure, we strive to maximise the value of the energy we produce for the world along with a commitment to enhance Ainira's value to society.

Reporting to the Engineering Manager Renewable Energy, this role is to provide specific technical expertise related to the hydrogen production and utilisation, to the projects, operations, and new business initiatives. Chemical Engineer will be responsible for the Hydrogen Electrolyser System's high-level design, contract specifications, and system safety, ensuring projects meet the performance and service requirements defined in the contract, by law, exacting focus on safety.

RESPONSIBILITIES

- Primary point of contact for Green Hydrogen engineering and production, currently for EU and APAC
- Provide technical support for operating plants, liaison with licensors, catalyst vendors, and operations
- Review existing operation to identify improvement opportunities, and participate in the planning of operating plant turnaround activities, necessary to ensure long term reliable operation
- Technical leadership in the projects and new business initiatives, carry out evaluation and technology selection of H₂ utilisation for low-carbon fuel production and CO₂ emission reduction initiatives
- Participate as a Lead Process Engineer in the execution of Hydrogen related projects by reviewing the various process documents at different stages of capital projects (Concept, FEED, Detailed Engineering)
- Engage in techno-economic evaluation of new technologies, catalysts or adsorbents related to low carbon hydrogen production and associated fields, and recommend suitable deployments
- Develop Company's internal capability to generate basic parameters: high-level heat and mass balance, utility and energy consumption, broad equipment specifications, and process performance
- Know-how input into Engineering Standards or Best Practices related to the subject field or related to new business opportunities; also to assess plant performances and verify licensor data in new projects
- Support the company's long-term strategy for Sustainability through research and development activities in the field of new green hydrogen and green derivatives production technologies
- Identify, establish and operate technology assets that accelerate product and innovation

- Provide technical leadership and resources with engineering and manufacturing expertise to peers, and collaborate across the organisation to introduce and adopt new technologies to enable efficiencies
- Review and evaluate product quality, cost effectiveness, and manufacturing performance to standards, and take action as necessary to correct variances
- Prepare and arrange reports, budgets and forecasts and presenting them to governing bodies, and meet regularly with direct reports to review performance
- Maintaining awareness of the competitive market landscape, and industry expansion opportunities
- Represent the organisation at official occasions, in negotiations, at conventions, seminars, public hearings and forums, and liaising between areas of responsibility

SKILLS and ABILITIES

- BSc in Chemical or Process Engineering from a recognised university is required; MSc seen favourably
- 10-15 years' of Process Engineering experience in the field of Hydrocarbon or Chemical industries
- 8-10 years' experience in the green/grey hydrogen production and purification technologies, such as Electrolysis, Steam Reforming (SMR/ATR), Gasification (POX), Water Gas shift and PSA technologies
- 5-7 years' field expertise either in operations or in the commissioning of a hydrogen production unit
- Strong design experience in order to take a lead role as the company representative when working with licensor or engineering contractors performing studies or detail engineering for hydrogen projects
- Comprehensive process simulation experience in standard software like HySys or Pro-Max to model process diagrams independently, analyse the performance of existing units or review the licensor's data
- Demonstrated high degree of initiative, creative problem solving, attention to detail, and calm under fire
- Comfortable driving multiple initiatives at a rapid pace, making thoughtful recommendations with available data for new plants or expansion of the existing units
- Strong project management skills a must – 5 years-plus of experience managing engineering teams
- Outstanding communications skills also a must – succinct and to the point in one-on-one, small group and public speaking events for a variety of content (e.g. presentations, proposals, strategies etc.)
- Capable of overseeing multiple cross-functional teams in all project activities for multiple concurrent projects necessary for the successful commercial launch of new products
- Able to engage effectively with others on the senior management team in sales, product, manufacturing, finance, and legal, as well as to presenting effectively at Executive Management and Board level

COMPENSATION

The Company offers a competitive compensation and benefits package, including cash and company stock.

APPLY

Click "Apply" below or use form in the Contact section – quote the reference number HR-RNW-0075. Only the shortlisted candidates will be contacted. Thank you for your interest.

Recruitment agencies, please note that no agency candidates will be accepted.