

## “Accelerating R&D Excellence in the chemical and pharmaceutical processing industries”

**Prochem Solutions Pte Ltd (Prochem)** provides specialized, services to support and accelerate the R&D cycles of leading organizations in the chemicals and pharmaceuticals industries. We utilize our expertise in **Structure Property, Separations, and Reactions** supported by **Mathematical Modelling** to enable our clients to achieve their goals faster. Leveraging our diverse knowledge and expertise, we operate highly collaboratively either as an embedded part of our clients’ R&D chains, or as a supplier of complete and specific key solutions.”

“Headquartered in Singapore, Prochem currently has an office and laboratory at the Science Park. The company also has two full-function laboratories at the Institute of Chemical and Engineering Science (ICES). At ICES Prochem also has access to all their support functions such as analytical testing. Prochem is in the process of developing its own state-of-the-art laboratories and administrative center.

We are seeking for energetic, driven, highly competent professionals to fill the following positions:

### Scientist / Senior Scientist

(Mathematical Modelling, Reactions, Separations)

Successful candidate would be a thought leader in his / her area with peer recognition and a track record of innovation and successful research work in an industrial, research institute or academic environment. This role also presents the unique opportunity to mentor, train and lead Engineers and Chemists as well as ensure high quality talent retention and capabilities improvement in support of the company’s growth goals and vision.

#### Job Scope

- Lead, mentor and train teams of Engineers and Chemists
- Ensure talent retention
- Spearhead capabilities improvement

#### Requirements:

- Ph.D. (Chemical Engineering / Chemistry) from a globally renowned university
- About 15 years of experience in Chemicals / Pharmaceuticals research
- Experience in process development, scale-up and manufacturing processes including reactions, crystallization and various unit operations
- Experience of independently handling laboratories / Engineering groups with budget responsibilities and customer interactions
- Experience handling multiple projects and managing multiple teams simultaneously from commencement to successful implementation of projects

### Senior Engineer

(Chemical Engineering)

The successful candidate will be tasked to prepare technical specifications of laboratory equipment, design and conduct experiments and collect data based on project requirements. Applicants with exposure to working with a multi-functional team on a time bound project will have an advantage.

#### Job Scope

- Conduct statistical analysis of data
- Perform consistency checks
- Furnish mathematical models using data collated from experiments
- Apply Chemical Engineering knowledge to design, scale-up and analyze according to requirements

#### Requirements:

- M.E. / B.E. (Chemical Engineering)
- Minimum 5 years’ relevant experience in the Chemical Processing Industry
- Adequate exposures to a variety of unit operations, chemical processes and laboratory operations
- Possess in-depth knowledge of chemical engineering software applications
- Good understanding of practical industrial operations
- Able to work closely with peers

### Senior Research Engineer (2)

#### 2 positions in the following areas:

- **Crystallization & Solids Processing**
- **Modelling and Simulation**

Successful candidates will lead a team comprising Senior Engineers to achieve project objectives. Candidates with exposure to a variety of unit operations, processes and laboratory operations as well as those with exposure to working with a multi-functional team on a time bound basis will have an advantage.

#### Job Scope

- Conceptualize and propose innovative scientific ideas
- Provide necessary technical inputs for customer proposals
- Design and execute experiments
- Analyse and interpret data
- Fit data obtained from experiments into mathematical models
- Apply Chemical Engineering knowledge to design, scale-up and analyze according to requirements
- Train and lead fellow Senior Engineers and Engineers

#### Requirements:

- PhD in Chemical Engineering
- Minimum 5 years’ relevant experience in chemical research
- Experienced in completing at least one project cycle, from inception to successful implementation

#### Special Considerations:

- Exceptional candidates with M.E. Chemical Engineering with relevant experience will also be considered
- Candidates who are Modelling and Simulation engineers must have in-depth knowledge of mathematical modelling of chemical engineering systems, numerical methods, simulation softwares and statistical analysis
- Candidates who are Crystallization engineers must have hands-on experience in generation of crystallization data, design of crystallizers and knowledge of solids handling and the relevant processing equipment

### Senior Chemist

#### 3 positions in the following areas:

- **Analytical Chemistry,**
- **Reactions**
- **Solid State Chemistry**

Successful candidates will be tasked to assist in laboratory set up and lay-out design in addition to successful execution of experiments according to specifications. Applicants with exposure to working with a multi-functional team on a time bound project will have an advantage.

#### Job Scope

- Monitor technical specification of laboratory equipment
- Set up and commission equipment
- Design as well as conduct experiments and collect data
- Conduct statistical analysis of data and perform consistency checks
- Apply relevant knowledge in chemistry to design experiments and interpret data obtained

#### Requirements:

- B.S. or M.S. in Chemistry
- Minimum 5 years’ experience working in a chemical laboratory
- Experience in setting up and designing experiments, and independently operate complex analytical systems
- Able to handle multiple projects simultaneously and deliver on deadlines
- Good understanding of practical industrial operations
- Able to work closely with others

#### Special Considerations:

- Analytical Chemists should possess good knowledge of instrumental analysis and spectroscopy
- Reactions Chemists should have in depth knowledge of catalysis and synthetic routes
- Solid State Chemists should be knowledgeable in areas relating to crystallization, crystallography, surface properties and other related science

### Senior Research Chemist

#### 2 positions in the following areas:

- **Analytical Chemistry**
- **Organic Synthesis**

Successful candidates will lead a team comprising Senior Chemists to achieve project objectives. Candidates with extended exposure to a variety of unit operations, processes and laboratory operations as well as those with exposure to working with a multi-functional team on a time bound basis will have an advantage.

#### Job Scope

- Conceptualise and propose innovative scientific ideas
- Provide necessary technical inputs for customer proposals
- Design and execute experiments
- Analyze and interpret data
- Fit data obtained from experiments into mathematical models
- Train and lead fellow Senior Chemists and Chemists

#### Requirements:

- PhD in Chemistry
- 5 years’ relevant experience in chemical research
- Experience in completing at least one project cycle from inception to successful implementation

#### Special Considerations:

- Candidates with M.S. Chemistry discipline with relevant skills and experience may be considered
- Candidates with analytical chemist background must have hands-on experience and in-depth knowledge of GC, HPLC, MS, UV-Vis and DSC. The ability to interpret NMR, spectroscopic and crystallographic data would be an added advantage
- Candidates with synthesis chemist background must have knowledge of synthetic routes including asymmetric synthesis, bio-catalytic or chemo-catalytic and organometallic catalysis

Interested applicants kindly attach a recent photograph together with full details of your transcripts and resume to:

[hr@prochemsolutions.com](mailto:hr@prochemsolutions.com)

*We regret that only shortlisted candidates will be notified.*