

## Oil & Gas – Chemical Engineering Job Description

### Job Summary

Within the oil and gas division, our operations focus on fixed and floating offshore structures, terminals, refineries, petrochemical plants and subsea pipelines. Having worked on 1000 oil and gas installations around the world, we are now the operator's 'go to' company for difficult challenges from life extension to innovative new design. Become part of a team of over 650 experts located in North America, Australia, the Middle East, Europe and the UK

We have opportunities for Chemical Engineers to join our growing teams based in **Aberdeen, Glasgow, Edinburgh, Epsom.**

### Responsibilities

As one of our graduates, you will be involved in real projects from day one, with exposure to some of the most demanding projects in the UK. We encourage vision, problem-solving, ambition, enthusiasm and drive. We recognise that people are the key to our success and our graduates are the future of our business. Therefore we ensure that we provide them with a varied workload and encourage them to extend themselves in order to reach their potential. Below we have included some brief information on the various responsibilities of our graduates, but further information will be given throughout the interview process:

With the support of the **Scotland** teams you could work on the following:

With the support of the **Edinburgh or Glasgow** team you would work on the following:

- Provision of **Process Safety support** to Major UK and International Oil & Gas Companies;
- Conduct consequence analysis such as fire and explosion assessments, toxic gas dispersion and flash fires;
- Assist with the preparation of Regulatory documents such as Control of Major Accident Reports (COMAH) and Safety Cases;
- Gain firsthand experience of working on some of the largest offshore projects in the World;
- Site visits to onshore and offshore facilities in the UK as well as overseas;
- Participate in HAZID and HAZOP studies;
- Engage with other Engineering disciplines with the opportunity to get involved in other Energy sectors such as power and renewable
- All aspects of reliability and safety study work relating to the offshore and downstream oil and gas industry.

With the support of the **Aberdeen** team you would work on the following

- *Provision of **Process Engineering support** to Major UK and International Oil & Gas Companies;*
- *Development of oil and gas processing concepts for oil and gas production and primary processing facilities;*
- *Execution of process engineering studies for optimisation and debottlenecking of operational plant;*
- *Preparation of process engineering project documentation including PFDs, P&IDs, equipment data sheets and general equipment and system sizing calculations;*
- *Site visits to onshore and offshore facilities in the UK as well as overseas;*

- *Participate in HAZID and HAZOP studies;*
- *Engage with other Engineering disciplines with the opportunity to get involved in other Energy sectors such as power and renewable*
- *The development of engineering software applications.*
- The team is also looking for a Technical Application Developer role, which combines the responsibilities above; with developing engineering software tools to support the work. People with experience in programming, including Visual Basic (VB), Visual Basic for Applications (VBA), C#, C++, FORTRAN, or other programming languages would be an advantage."

Within the **Aberdeen subsea engineering** teams you could:

- Develop your career alongside highly qualified engineers who are leading technical developments across the globe
- Provide solution-focused engineering consultancy and multidisciplinary design services to our clients
- Undertake multi-phase flow assurance and process engineering
- Enable challenging deep water and high pressure, high temperature developments

**When making an application to our Scotland offices please make us aware of any preferences you have in relation to these roles**

With the support of the **Epsom** teams you could work on the following:

- We are also looking for students to support our **Fluid Mechanics and CFD** team (one of the world's leading CFD consultancy teams), through computer model generation, calculations to support such models, and post-processing and production of reports
- In addition site work, involving measurement campaigns in support of CFD model development and validation, are a significant part of the work
- Most projects will be in oil & gas and power (gas turbine) related areas of fluid mechanics, but successful candidates will also be able to work in all aspects of Fluid Mechanics as opportunities across the Group (typical examples are Building Design, Nuclear Power, Water, Tunnels Engineering and Renewables)

With the support of the **Safety and Reliability** team you could:

- Work on safety and risk studies relating to the offshore and downstream oil and gas industry
- Contribute to major oil and gas projects across the world
- Become involved in other sectors, such as the industrial gases and chemicals industry or fire safety within the nuclear industry
- As part of the **Reliability & Asset Management** team you would be carrying out high quality technical work delivering performance improvement to UK and overseas clients in the energy and oil and gas sectors through the application of:
  - RAM (Reliability, Availability and Maintainability) engineering and modelling, using in-house and proprietary software tools, and
  - Carrying out assignments involving maintenance strategy development using Reliability Centred Maintenance (RCM) and related techniques.

We also have opportunities to join the **Process & Simulation Technology team**

- Supporting the delivery of Oil & Gas Engineering Design & Consultancy projects

- Performing process engineering studies using advanced process simulation tools such as Hysys dynamics ®, UniSim Design ® or Wanda ®
- Delivering engineering solutions and recommendations to clients within a project environment
- Being part of a dynamic and collaborative team
- Finding new and better ways of doing things

**When making an application to our Epsom office please make us aware of any preferences you have in relation to these roles**

### **Requirements**

We are looking for individuals that have the ability to think laterally and possess a sound understanding of engineering principles. Ideal candidates will be able to demonstrate strong interpersonal skills and will be able to build and develop relationships, both internally and externally.

Candidates should hold or be expected to achieve a degree classification of 2.1 or above at MEng level in Chemical or Process Engineering (or equivalent) and have achieved Grade B or above in both Maths and Physics A-Levels (or equivalent).

**Using the information given in this job description please provide us with any information on relevant degree modules when completing the application form.**

Successful candidates will be eligible to join our Graduate Development Programme with a view to becoming Chartered with the IChemE, and therefore their degree must be accredited by the relevant professional body.