

multi-chem[®]

A HALLIBURTON SERVICE

Internship

“Optimization of Flow Assurance Product Line and Performance Evaluation Method Development for Eastern Hemisphere Oil Fields”

The hosting company : Multi-Chem, a Halliburton service.

Halliburton is one of the world's largest providers of products and services to the energy industry. With approximately 50,000 employees, representing 140 nationalities, and operations in approximately 70 countries, the company serves the upstream oil and gas industry throughout the lifecycle of the reservoir – from locating hydrocarbons and managing geological data, to drilling and formation evaluation, well construction, completion and production optimization.

Multi-Chem, a Halliburton Service is a product service line (PSL) which provides specialty oilfield chemicals to oil and gas producers to mitigate emulsion, corrosion, scale, paraffin and asphaltene related issues.

Internship period:

Minimum 20 weeks

Type of internship:

Materials Science, Chemistry or Chemical Engineering student seeking experience in an industrial lab; offers a unique opportunity to contribute to the development of a new, developing Technology Center. The intern will be fully integrated to a diverse team of 10 people.

Internship Localization:

Amsterdam Science Park, Matrix Building VI

Internship description:

The scope of the project is “Optimization of Flow Assurance Product Line and Performance Evaluation Method Development for Eastern Hemisphere Oil Fields”

The objective of the research project is to:

- Develop new, stable product formulations for application in the area of flow assurance in the oil field, specifically for Eastern Hemisphere requirements. Flow assurance includes, scale inhibitors, wax inhibitors, wax dispersants and asphaltene inhibitors.

- Develop industry leading test method capabilities to evaluate and quantify performance of aforementioned products. Author test methods to be included in the global Halliburton Management System (HMS). Examples of test methods intern to develop are: manual pour point test, hot water dispersant test and asphaltene content test method.
- Qualification of chemicals from regional suppliers to optimize supply chain
- Experimental product performance screening to quality performance and cost specific to various regional market requirements. Examples of test methods intern to implement to quantify performance include coreflood and dynamic scale loop testing.
- Support the development of a laboratory that aims to maintain ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 certification. ISO audit scheduled during internship period.

This internship is well suited for someone interested to developing a career in an industrial chemical laboratory. Skills developed during this internship include:

- Oil field chemistry, and specific technical challenges within the Energy Sector
- Understand various chemical compositions of crude oil and produced water, and how the physical, property relationships can create challenges due to deposition. Develop knowledge on how to use chemistry to mitigate these challenges, and quantifying performance of the chemistry based on specific conditions of the field and composition of the crude or brine.
- Formulation chemistry, including stability testing and specification definition for large scale production
- Supply chain optimization; develop an appreciation for technical decision making where profitability and margins are a variable to be considered. Technically qualify alternative raw suppliers to develop an optimized product line for the Eastern Hemisphere.
- Technical communication skills in a professional working environment prepare and present group meeting presentations and publish work methods.

For more information on the type of projects at Multi-Chem, a Halliburton Service visit our website <http://www.halliburton.com/en-US/ps/multi-chem/multi-chem.page>

Internship description:

Multi-Chem is seeking an ambitious, assertive student that is interested to gain experience within an industrial lab.

No previous work experience required, but the candidate has demonstrated initiative and safe laboratory working practices.

Wage: 550 €/month