

Pfizer UK Undergraduate Programme 2018/2019

APIM Chemical Engineering Undergraduate

Worldwide Research & Development / Pharmaceutical Sciences

Chemical Research & Development

Department Overview

Pharmaceutical Sciences is responsible for the development of novel pharmaceuticals from potential drug targets. Once a drug candidate has been selected it is passed to Chemical research and Development (CRD), which includes Active Pharmaceutical Ingredients Manufacture (APIM), who will work to design and identify the most economically viable synthetic routes specific to the drug candidate. The selected route is then developed and modified into a safe, environmentally friendly, cost effective, reproducible manufacturing process within the Process Development Facility.

The Process Development Facility at Sandwich is a small scale manufacturing facility. This 'state-of-the-art' £60 million pilot plant facility consists of 22 batch reactors, of 250 to 2500 litre capacity, with all ancillary receivers, filters, centrifuge, and drying equipment. In addition, there are two high pressure hydrogenation units and new manufacturing technologies.

What can I achieve and what will I be responsible for whilst completing a placement at Pfizer?

The successful candidate will assist the Process Engineering Team in a range of engineering activities to support Process Development Facility operations.

During your year with us in **API Manufacture** you will be involved in a variety of tasks depending upon the placement, which may include:

- Design of plant or process improvements and enhancements
- Process scale-up from lab to Pilot Plant and to manufacturing scale plant
- Manufacturing equipment commissioning and validation in a pharmaceutical plant environment
- Process and equipment problem solving and troubleshooting
- Development and trials of new manufacturing technologies
- Utilising and applying advanced engineering software including Aspen, Dynochem or Visimix, to solve scale-up challenges
- Gaining process understanding through use of process analytical technologies

Throughout this placement you will increase your knowledge in aspects of both practical and theoretical chemical engineering whilst developing your interpersonal, team and communication skills. You will work directly with teams including manufacturing technicians as well as engineering and validation groups.

Pfizer also offers a diverse environment which allows employees numerous opportunities to grow and develop. This is a great chance to be part of the bigger picture, and to assist in ensuring Pfizer maintains a strong and diverse workforce as well as developing a talent pipeline of future Pfizer colleagues. It is also a fantastic way to obtain a better understanding of the pharma industry and the type of roles it has to offer.

What other opportunities and benefits do Pfizer offer?

You will have the opportunity to network with a wide range of other scientific and engineering disciplines including Manufacturing Engineers; US based Chemical Engineers and other specialists in Organic Chemistry, Kinetics, Crystallisation, Hydrogenation and Process Safety as part of our global Chemical Research and Development department. It is a fantastic way to obtain a better understanding of the pharma industry and the type of roles it has to offer.

You will have the opportunity to support volunteering activities, including STEM activities to inspire potential engineers and scientists of the future.

When can I start?

Placements will start on 3rd September 2018 and will run for 12 months.

PERSON SPECIFICATION

Type of person we are looking for, in relation to **'Skills'**, **'Knowledge'** and **'Motivation'**:

- Applicant should be studying for a Chemical Engineering degree or similar.
- Ability to work effectively in a team environment.
- Enthusiasm and pro-active approach

Please note that we only accept application forms. Please do not send over your CV or cover letter as they will not be considered.