

Pfizer UK Undergraduate Programme 2018/2019

Material Characterisation Undergraduate

Global Technology Services, Pfizer Global Supply

Material Characterisation Team, Technology and Business Support

Department Overview

The Material Characterisation Team provide a centralised facility to provide all Pfizer manufacturing sites (including external supply network) with advanced characterisation methods to evaluate the physical and other solid state properties of materials. Materials range from the input active pharmaceutical ingredient, through excipients, process intermediates and final dosage forms. The overall aim is to provide process understanding during troubleshooting investigations but also enable a proactive approach to assess the impact of changes in processing and sourcing strategies on the key API attributes that impact on final drug product performance.

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

We are seeking a scientist to work effectively within a team of motivated and self-driven colleagues to provide timely material characterisation support to Pfizer Global Supply Network. You will utilise a suite of different material characterisation methods to evaluate the physical properties of pharmaceutical ingredients (such as particle size and shape), determine the solid state properties of those materials (including polymorphism) and employ material assessment methods to understand flow and other attributes linked to material manufacture. You will also utilise spectroscopic mapping and imaging methods to determine the matrix structure of solid dosage forms and also methods developed to better understand the final attributes of non-solid drug products. The data will be used in combination to enable material sciences to act as an interface role between input raw materials and final drug product performance.

Other responsibilities will include:

- Determination of physical attributes for API's/excipient's using a range of characterisation techniques.
- Determination of solid state attributes for API's/excipient's using a range of characterisation and thermodynamic techniques.
- Optimization of tests to describe key API/excipient's attributes, and how these relate to DP performance.
- Evaluation of novel characterisation technologies and development of existing technology platforms to address a new focus area which you will lead.
- Evaluating, interpreting and reporting of results through presentations and technical reports, particularly translation of scientific output and technical content into a language understood by wide customer base.
- Supporting implementation of safety and GMP procedures where appropriate

What other opportunities and benefits do Pfizer offer?

This placement will provide training on the operation of an array of state of the art material science techniques. There will also be the opportunity to learn how to interpret the data obtained from these instruments by subject matter experts. In addition to working on exciting troubleshooting investigations from sites around the world, you will also be offered the opportunity to take part in STEM activities, encouraging young people to get involved with science.

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':

Technical Ability

- An appreciation of modern solid state particle characterisation techniques such as particle size, shape and surface area
- An awareness of the principles of solid state characterisation
- Comprehension of spectroscopic methods (including mapping and imaging approaches) and their application to pharmaceuticals
- Evidence of good laboratory and experimental skills
- Ability to independently design and carry out experiments
- Understanding of statistical and chemometric approaches for data analysis and interpretation
- Good awareness of laboratory safety
- Sound skills in literature searching and application of findings

Presentation

- Clear, well organised, enthusiastic and concise presentation
- Open and responsive to suggestions and questions
- Experienced in writing scientific laboratory work

Motivation

- Strong interest in subject and show desire and ability to expand knowledge, learn and develop.
- Ability to co-ordinate and organise own work effectively.

Personal Characteristics

- Enthusiastic, energetic, reliable, ambitious and hard-working.
- Good awareness of customer relations
- Ability to co-ordinate and organise work and resources effectively.

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