

# Chemistry Undergraduate Industrial Placement with Indicatrix Crystallography

**Academic Year:** 2021/22

**Salary:** £19,000 per year

**Start Date:** 01 August 2021

**Duration:** 9 months

## About Indicatrix and ENaCt

Indicatrix (ICX; [www.Indicatrix.co.uk](http://www.Indicatrix.co.uk)) is a newly formed Contract Research Organisation that has spun out of Newcastle University's chemistry department. ICX was founded in 2019 by Dr Michael Hall and Dr Michael Probert following the discovery and subsequent publication of their highly acclaimed invention: Encapsulated Nanodroplet Crystallisation (ENaCt) – a novel technique which allows crystallisation experiments to be performed at scales previously unthinkable.

Using ENaCt technology, ICX undertakes contract research for leading pharmaceutical and agrochemical companies helping them to access previously inaccessible crystalline forms of bioactive molecules (e.g. new drugs) in combination with structural analysis via single crystal X-ray diffraction.

For more information about the discovery of ENaCt you can find an open source link to the paper here: [Encapsulated Nanodroplet Crystallization of Organic-Soluble Small Molecules: Chem \(cell.com\)](#)

## Working for ICX

This placement offers the student a unique chance to see the development of a company from its earliest stages. Unlike working for much larger companies working for a micro-entity such as ICX means that each and every set of experiments performed by the student will contribute directly to the success of the company. Furthermore the student will help contribute to a diverse range of tasks throughout the company perhaps most exciting amongst these is the further development of the company's intellectual property.

## Job Role

The role undertaken would be that of a Research Scientist, performing high-level research in collaboration with some of the world's largest pharmaceutical companies, as well as undertaking methodology development. Under the supervision of the founders of the company, the student would be one of the first in the world to be trained to use ENaCt as well as the associated analytical techniques (e.g. single crystal X-ray analysis). Responsibilities would include the planning and execution of experimental work, focussing on the crystallisation of bioactive molecules.

## What We're Looking for

ICX wants a hard-working, self-motivated and independent student who is excited to work as part of a small and dedicated team within a new and developing area of solid-state chemistry. They would ideally be studying for an MChem in Chemistry or a closely related subject, have an excellent academic record and a hunger to drive the company forwards. The student must be eligible to work in the UK. If you're interested in applying then please send an email (including CV and cover letter) to: [Thomas.winstanley@indicatrix.co.uk](mailto:Thomas.winstanley@indicatrix.co.uk)

Deadline for applications is the 01<sup>st</sup> July 2021

