

The UK National Ion Beam Centre – an EPSRC National Research Facility

The Surrey Ion Beam Centre is an ISO9001 certified part of the UKNIBC, funded by EPSRC to support micro-electronics and quantum technology research and development by academia and industry in the UK

The Ion Beam Centre allows users to undertake a wide variety of research using ion implantation, ion beam analysis (IBA) and micro-beam analysis. The Ion Beam Centre also has extensive processing and characterization facilities specifically for semiconductor research.

The facility **includes ion implantation facilities from 2keV up to 4MeV** for most ions in the periodic table. End stations for the accelerators are available in a **class 100 clean room** environment specifically for the support for semiconductor applications, hot and cold implantation is also available on sample sizes up to 40x40cm.

Ion beam analysis techniques include RBS, ToF-ERD, PIXE, PIGE, NRA, IBIC and IBIL. Full ambient analysis capability available.

New deterministic and single ion implanters developed specifically in support of solid state quantum technology applications available.

All UK Universities

- Aston University
- Cardiff University
- CSE (Culham)
- Exeter School of Mines
- Imperial College
- UK-UK
- Nottingham University
- Queen Mary University
- STFC
- UCL
- University of Bangor
- University of Birmingham
- University of Bristol
- University of Cambridge
- University of Durham
- University of Exeter
- University of Huddersfield
- University of Lancaster
- University of Leeds
- University of Liverpool
- University of Loughborough
- University of Manchester
- University of Newcastle
- University of Nottingham
- University of Oxford
- University of Salford
- University of Sheffield
- University of Southampton
- University of Strathclyde
- University of Surrey
- University of Sussex
- University of Ulster
- University of Warwick
- University of York

Users of the UKNIBC

The IBC supports ~£124M of EPSRC grants
EPSRC provide ~£1M/annum to support UK
academia access to the UKNIBC
EU and commercial users contribute ~£800k/annum



EU Universities

Università degli Studi di Napoli Federico II,
Naples, Italy

Departamento de Bioingeniería e Ingeniería
Aeroespacial, Universidad Carlos III de
Madrid

Ghent University, Belgium

École Polytechnique Fédérale de Lausanne,
Switzerland

Delft University of Technology, Netherlands

University of Bern, Switzerland

Norwegian University of Sci & Tech, Norway

Lithuania

University of Groningen, The Netherlands

University of Jyväskylä, Finland

Federal University of Rio Grande, Brazil

Moscow State University, Russia

University of Nebraska, USA

Tokohu University, Japan

University of North Texas, USA

Chalmers University, Sweden

Luxembourg Inst Sci Tech, Luxembourg

Federal University of Sao Paulo, Brazil

University of Leoben, Austria

University of Kyoto, Japan

Shanghai Jiao Tong University

Rutgers University, New York, USA

Companies

3SP

Adaptix Imaging

Alcatel - IIV Lab

Almae Technologies

AMAT - Varian

Astra Zeneca

BP

Centrum Vyzkum Rez

Cohesion

Delect99

Edison Photonics

Element 6

Energy Filter

Evans Analytical

Exelixis

First Sensor

GSK

Harvard University

Hitschi

Huawei

IMEC

Ingalgas Research, Caceres, Spain

Intelligent Fingerprinting Ltd

IDS Innovation

IonOptika

Jacobs

Kalam

Loughborough Surface Analysis Ltd

Lucidson

Lumination

Neolaris

Oxensia

Pal Scientific

Plasma

Prima Electro

PRP Opto Electronics

Raytheon

Rockley Photonics

Ruiz Royce

Scottish Police

SOTEC

Sony EIC

Tagamart

Taiwan National Central University

Teer Castings

Teraviva

UCL Mullard Space Science Lab

Xenon Healthcare

