

# Synthesis and Solid State Pharmaceutical Centre (SSPC)

The SSPC is a global hub of pharmaceutical process innovation and advanced manufacturing, leading the way for next-generation drug manufacture. It is the largest research collaboration in Ireland and one of the largest globally in the pharmaceutical sector.





With funding of €42 million, the SSPC links experienced scientists and engineers across academia and the pharmaceutical industry, so they can work together to address critical scientific and industry-focused research challenges. It comprises 22 industry partners, nine Irish research organisations and 12 international academic collaborators.

#### **Research Areas**

- > New frontiers in pharmaceutical synthesis
- > Crystal growth and design
- > Drug product formulation and manufacture
- > Advanced biopharmaceutical technologies

### Research programmes

The SSPC community of 132 researchers is involved in 20 research projects. These span the entire pharmaceutical production chain, from synthesis of the molecule to the isolation of the material and the formulation of the medicine.

## **Research Performing Organisations**

- > University of Limerick
- > University College Cork
- > University College Dublin
- > Trinity College Dublin
- > Dublin City University
- > NUI Galway
- > Athlone Institute of Technology
- > Waterford Institute of Technology
- National Institute for Bioprocessing Research and Training

#### Industry and commercialisation

The SSPC aims to deliver relevant solutions that address the manufacturing needs of pharmaceutical companies and, through this, to build a highly innovative pharmaceutical community in Ireland.



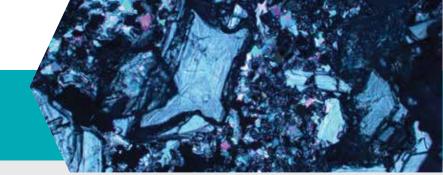
# Industry partners include:

- Abbvie
- **Alkermes**
- Allergan
- **Amebis**
- **APC Limited**
- **Biomarin**
- **Bristol Myers Squibb**
- **Clarochem Ireland**
- **Eirgen Pharma**
- Eli Lilly
- **FMC**
- Genzyme: A Sanofi Company

- Glantreo
- GlaxoSmithKline
- Innopharma Labs
- Janssen
- > Merck Sharp & Dohme
- **Novartis**
- Pfizer Inc
- Roche
- Scale-Up Systems
- > UCB Pharma

# **Facilities**

- Kilo labs
- Pilot plants
- In-situ PAT systems
- **HEL polyBLOCK**
- LabmaxTM reaction vessel
- Particle visual measurement (PVM)
- > X-ray diffraction (XRD)
- Focused ion beam (FIB) milling system
- Atomic force microscope (AFM)
- Raman spectroscopy



# **Key Contacts**

#### **Prof Kieran Hodnett**

Scientific Director kieran.hodnett@ul.ie

Kieran Hodnett is Professor of Chemical and Environmental Science and the former Dean of the Faculty of Science and Engineering at the University of Limerick. His current research interests are polymorphism in pharmaceutical compounds and active pharmaceutical crystallisation into excipient matrices. He has produced more than 120 peer-reviewed journal articles, which have over 2,800 ISI citations, and has supervised 30 PhD students to completion.

#### Jon O'Halloran

General Manager jon.ohalloran@ul.ie

#### James McNamara

Industrial Liaison Officer james.mcnamara@ul.ie

#### **Dr Abigail Pattenden**

Funding Project Manager abigail.pattenden@ul.ie

#### **Yvonne Diggins**

**Communications Officer** yvonne.diggins@ul.ie

## **Dr Sarah Hayes**

Education and Outreach Officer sarah.hayes@ul.ie

#### Synthesis and Solid State **Pharmaceutical Centre**

Materials and Surface Science Institute (MSSI) University of Limerick Limerick Ireland

+353 (0)61 234629

twitter.com/SSPCentre facebook.com/sspcentre slideshare.net/SSPCCommunications linkedin.com/pub/synthesis-and-solid-statepharmaceutical-centre/7a/991/89b























Wilton Park House, Wilton Place, Dublin 2, Ireland

Tel: +353 (0)1 6073200 Fax: +353 (0)1 6073201 Email: info@sfi.ie www.sfi.ie