

Imperial College
London

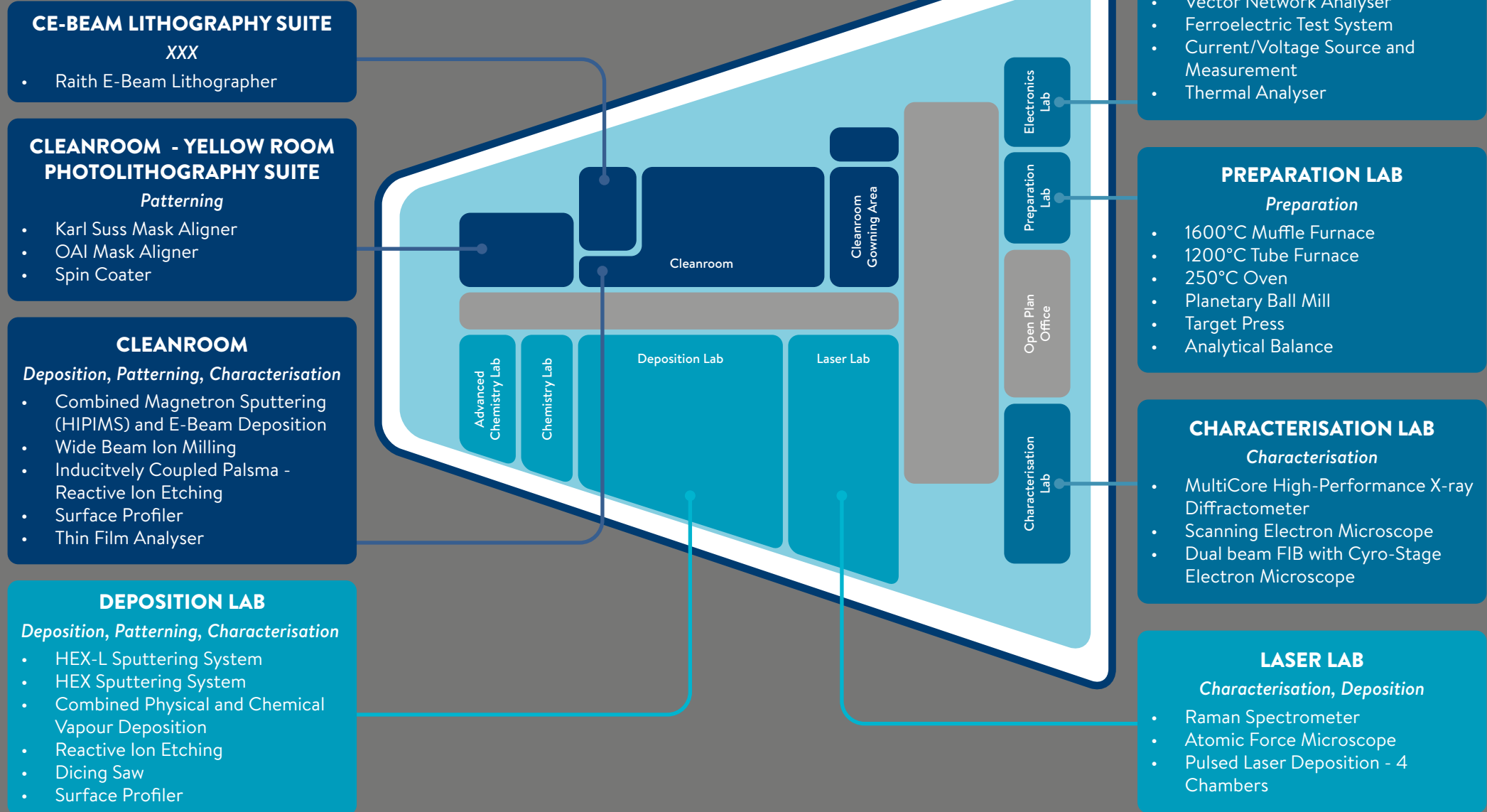
HENRY
ROYCE
INSTITUTE

**THIN FILM
DEVICE
MATERIALS
PLATFORM**

ROYCE

The new Royce Thin Film Device Materials Platform at Imperial College London provides a platform for the construction of bespoke thin film devices, from deposition and patterning to electrical and physical characterisation, embracing the entire research and development lifecycle.

The facility was originally founded by Prof Neil Alford and Dr Peter Petrov in 2001 and is open to users from both academia and industry. It is located on the 8th floor of the new, state-of-the-art Sir Michael Uren Hub based at Imperial's White City campus.



CE-BEAM LITHOGRAPHY SUITE

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- Raith E-Beam Lithographer

**CLEANROOM - YELLOW ROOM
PHOTOLITHOGRAPHY SUITE**

Patterning

- Karl Suss Mask Aligner
- OAI Mask Aligner
- Spin Coater

CLEANROOM

Deposition, Patterning, Characterisation

- Combined Magnetron Sputtering (HIPIMS) and E-Beam Deposition
- Wide Beam Ion Milling
- Inductively Coupled Plasma - Reactive Ion Etching
- Surface Profiler
- Thin Film Analyser

DEPOSITION LAB

Deposition, Patterning, Characterisation

- HEX-L Sputtering System
- HEX Sputtering System
- Combined Physical and Chemical Vapour Deposition
- Reactive Ion Etching
- Dicing Saw
- Surface Profiler

ELECTRONICS LAB

Characterisation

- Room Temperature Probe Station
- Cryo Probe Station
- RF LCR Meter
- Semiconductor Device Analyser
- Vector Network Analyser
- Ferroelectric Test System
- Current/Voltage Source and Measurement
- Thermal Analyser

PREPARATION LAB

Preparation

- 1600°C Muffle Furnace
- 1200°C Tube Furnace
- 250°C Oven
- Planetary Ball Mill
- Target Press
- Analytical Balance

CHARACTERISATION LAB

Characterisation

- MultiCore High-Performance X-ray Diffractometer
- Scanning Electron Microscope
- Dual beam FIB with Cyro-Stage Electron Microscope

LASER LAB

Characterisation, Deposition

- Raman Spectrometer
- Atomic Force Microscope
- Pulsed Laser Deposition - 4 Chambers



To enquire, please contact

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 Engineering and
Physical Sciences
Research Council