



Your Research Partner for Photonics Solutions

**CENTRE FOR
ADVANCED PHOTONICS
& PROCESS ANALYSIS**

CAPPA

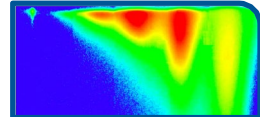
Innovation Through Light

Overview of Capabilities

CAPPA Provides Photonic Solutions for:

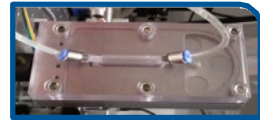
Research

- Semiconductor Light Sources
- Dynamics of Complex Systems
- Interaction between Light & Materials



Product Development

- New Semiconductor Materials & Devices
- Optical Test Equipment
- Illumination for Industrial Applications



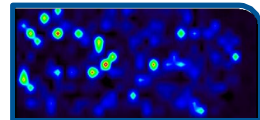
Process Improvement

- Applied Spectroscopy for Process Control
- Advanced Inspection Technologies
- Analysis of Products & Processes



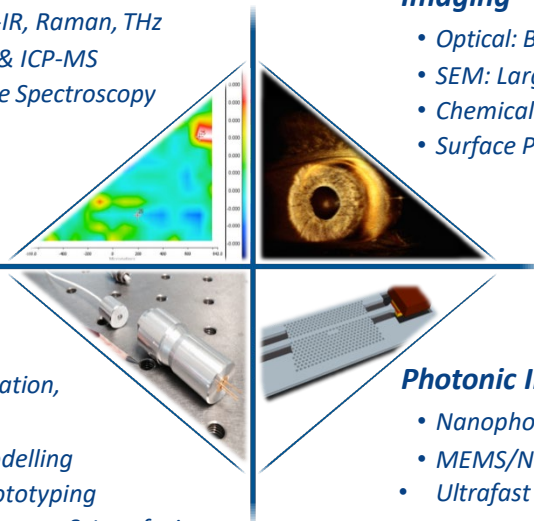
Consultancy

- Wide Array of Contract Services
- Imaging: Optical, SEM, Surface Profiling
- Identification: UV to IR, Mass Spec.



Material Properties

- Optical: UV-Vis, NIR, FT-IR, Raman, THz
- Mass Spectrometry: LC & ICP-MS
- X-Ray: Energy Dispersive Spectroscopy
- Particle Sizing: Laser Diffraction & Imaging
- Physical: Tensile testing



Imaging

- Optical: BF, DF, DIC & Fluorescence
- SEM: Large chamber environmental
- Chemical: Raman & FT-IR Imaging
- Surface Profiling: Contact Profilometry

Design & Prototyping

- Optical design: Illumination, Fibre Coupling
- Device Simulation & Modelling
- 3D Printing for rapid prototyping
- Equipment Control Software & Interfacing

Photonic Integration

- Nanophotonic device fabrication
- MEMS/NEMS structures
- Ultrafast (fs) processes characterisation: pump-probe, TRPL



MTU

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