



CAPABILITY

Photonics



Find out more
www.uk-cpi.com



Our expertise spans multiple markets and technology areas, allowing us to complement your current capabilities and helping you overcome your specific photonics challenges. We support you through the entire development cycle, providing you with access to a community of technical and commercial innovation specialists, as well as our customised facilities and equipment.

CPI's photonics capabilities

Our team of experienced engineers can provide assistance in all areas of photonics, with particular expertise in:

- Optical system design
- Fibre optics
- Spectral Imaging
- Optical Coherence Tomography
- Laser system design
- Fluorescence lifetime imaging
- Confocal microscopy



Optimised design

From the outset, we optimise your product design for manufacture by ensuring it can be realised in a cost-effective manner at a scale appropriate for your market application. Our BS-EN ISO 13485:2016 accredited quality management system allows us to develop medical-grade products with our clients, while ensuring we demonstrate compliance to all relevant legislation. With our experience in the latest optical techniques and modelling software, we can design and produce advanced optical systems and integrate these into custom instruments or devices.

Manufacture and scale-up assistance

We are able to provide additive manufacturing for rapid prototyping of your products, allowing the fast realisation of a concept, as well as low volume production for prototyping. Our facilities include a dedicated space for assembly and manufacture, allowing us to develop the manufacturing process and take you from prototype to production-ready product. By running a pilot manufacturing line, we can resolve any issues, produce products for trials and market testing, and eventually help you transfer the process for mass manufacture.

Access to pre-clinical validation

We offer pre-compliance testing to meet medical device regulations, and we are able to assist with the development and validation of your technology using human tissue samples. We can also offer a range of optical characterisation and imaging techniques, such as laser scanning confocal microscopy with fluorescence lifetime imaging or spectral imaging. Our ionising radiation laboratory offers a flexible space for X-ray system test and development, and for experiments involving liquid radioisotopes.

Commercialisation support

We understand that running a business is more than just developing a product. We can help guide you through to commercialisation with support such as locating investment funds for business growth, co-writing bid proposals for public grant-assisted funding or looking at Innovation readiness with our Innovation Integrator® methodology. We also have strong links with regional and national healthcare networks, allowing us to assess novel technology, advise on clinical trial planning and delivery, or find a clinical champion for your device.

Capabilities for development and scale-up

With a combination of world-class facilities and industry relevant expertise, we work with partners to bring their innovative ideas to market sooner, with reduced risk. Work alongside CPI staff to co-develop your products in state-of-the-art laboratories for optics, imaging, design, validation, prototyping, manufacture and sampling. Along with CPI's established capabilities in formulation, flexible hybrid electronics, printable electronics, biotherapeutics and digital technology, we can provide a unique environment to develop your medtech solutions.

Let's innovate together

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