

Spring 2023 Update

Spring is finally here and we are reaching out to you our valued partners, to let you know we are still busy looking for further funding to continue our excellent work at the Centre for Photonics Expertise. In the meantime, there are many different ways that you can continue to work with the CPE group of partner universities with whom you have developed such good research relationships during the initial CPE program.



Together, we have a range of different facilities and programmes to support you and your businesses to continue to grow and we are making it our personal mission to ensure that we can signpost you as effectively as possible to each of these areas.

Please do explore our newsletter as it gives details of the support available and the various ways in which you can engage with each university institution, including named contacts and website links where you can learn more about the various opportunities available.

As always, we look to you to let us know if there are areas of support or further development that you are particularly interested in. Please get in touch with Carole Eccles, Business Development Manager, who will work with you and connect you with the best people to support your next stage of development.

CPE Project Outcomes

86 
R&D Projects


3 
Net Jobs Created

60 
Enterprises Supported

5 
Funded PhD/MRes Studentship

17 
Enterprises engaged in
multiple collaborations

16% 
Multi-Academic Industry
partnership

£2.2M 
Grant Applications Submitted
£1.2M Awarded

70% 
Longer-term collaborative
partnership due to CPE

CPE Director, Professor Caroline Gray, receives OBE award at Windsor Castle

On Wednesday 1st February, CPE and OpTIC Technology Centre Director, Professor Caroline Gray, formally received her OBE award from HRH Prince William during a ceremony held at Windsor Castle.

Caroline was awarded the prestigious honour during the 2022 Queen's Platinum Jubilee celebrations in recognition of her contribution to the Optics industry and businesses in Wales.



How you could benefit from Knowledge Transfer Partnerships

Knowledge Transfer Partnerships (KTP) provide access to academic expertise for businesses who want to grow, innovate or improve their economic performance.

A KTP will generally involve a three-way collaboration between a company or organisation, an academic team and a skilled graduate. KTPs place a high-calibre graduate, known as an Associate, in an organisation to deliver a project of strategic importance to the business. The Associate graduate is employed and jointly supervised by an academic expert/mentor from the partner University along with a senior member of the organisation.

Projects are focused on embedding new knowledge and capabilities within an organisation so that it can be used to achieve growth objectives.

Our partner institutions all have KTP offerings to link forward thinking businesses with our world class knowledge bases so that together we can deliver innovative projects led by inspired and driven graduates.

If this sounds like it could support your business to grow and develop, then get in touch with your nearest institution via the links below.

- [Wrexham Glyndwr University](#)
- [University of South Wales](#)
- [Aberystwyth University](#)
- [Bangor University](#)



CPE Case Study:

Solar powered lighting and ventilation for tents and parasols

Company: Ebbah Sustainovation
CPE Lead Partner: University of South Wales
Location: Swansea, Wales



Ebbah Sustainovation prides itself on being at the forefront of the implementation and innovation of sustainable solutions for businesses and organisations, as well as providing a 'one-stop solution' for a range of engineering project delivery for their clients.



Ebbah Sustainovation approached CPE to seek optical expertise to develop a product for the lighting and ventilation of tents / parasols powered by solar panels.

The final product was intended to be affordable for a range of applications and settings, specifically where access to a reliable and consistent energy supply may be difficult.

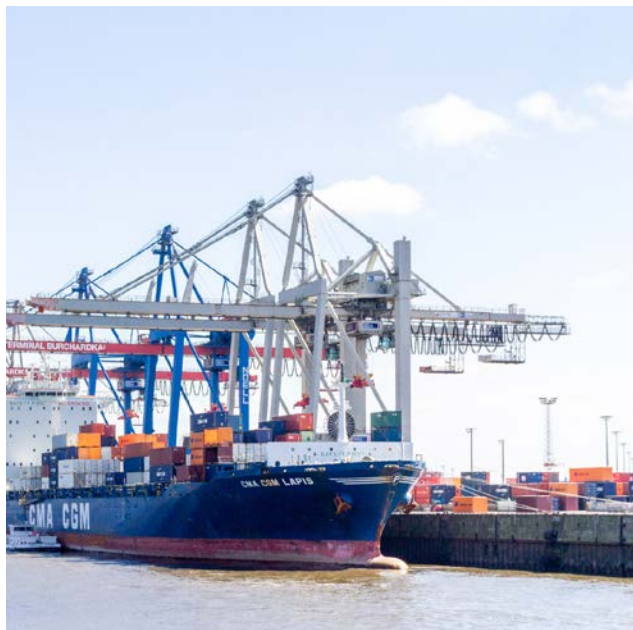
A final prototype was completed and both CPE and Ebbah Sustainovation teams are confident that this will be a valuable product used worldwide.

Sign up to the UK Export Academy

The UK Export Academy is the Department for Business and Trade (DBT)'s flagship online and in-person learning platform which covers everything to do with export.

It is free to join and features on-demand content, events, masterclasses, webinars and seminars. It is also suitable for both new and more established exporters, no matter which sector you work in.

If you are interested in registering with the UK Export Academy, or wish to find out more information, visit [UK Export Academy](https://www.ukexportacademy.gov.uk) today!



CPE Equipment Focus

Thin-Film Coating Facility:

The CPE Thin Film Coating Facility is situated at Wrexham Glyndŵr University's OpTIC Technology Centre in St Asaph.

It features an industry benchmark vacuum coating plant along with key supporting equipment for optical analysis and environmental testing.

CPE's £1.2m research and development thin-film coating facility is the first of its kind in Wales and allows companies to develop thin-film technology products and applications. CPE's team of thin-film specialists work closely with companies to support prototype development, as well as production scale commercial R&D developing thin-film vacuum deposition processes and products.



High-power Femtosecond Fibre Laser:

Bangor University's CPE team have recently acquired and installed a state-of-the-art high-power femtosecond fibre laser system (model: Jasper X0 30W from Fluence) in their lab. The system is highly robust, reliable, flexible and tuneable, offering >100 uJ maximum pulse energy, 200kHz-20MHz repetition rate, 200fs – 20ps pulse duration, and four working wavelengths (1030nm, 515 nm, 343nm, 258nm).



Some applications of this laser include micromachining, glass cutting, surface structuring, ophthalmology, semiconductor & OLED manufacturing, solar cell manufacturing, security marking, stents and medical device manufacturing.

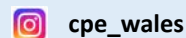
Contact Us



The CPE team continues to explore funding opportunities to help support your business to resolve any product or process issues. For more information or to arrange a viewing at any of the CPE partner university sites, please get in touch via the contact details below:

Tel: 01745 535232
Mobile: 07860 715213

Email: admincpe@glyndwr.ac.uk
Web: www.cpe-wales.org



in Centre for Photonics Expertise (CPE)