

HOW PHOTONICS CAN **SUPPORT YOU**

Photonics is a key digital technology enabling a transition towards fast, green (sustainable) and flexible manufacturing. Quality control of manufactured parts can become a non-destructive online capability, driven by the integrated use of photonic sensor technology for process parameter monitoring. Laser-based manufacturing with free choice of energy

distribution will allow functional changes and design features to be implemented flexibly, with complex multiscale features and multidimensional geometrical arrangements which are not possible with conventional manufacturing methods.

Start your photonics innovation journey with our support.



DEMO & EXPERIENCE CENTRES



In addition to providing innovation support, PhotonHub Europe acts as a one-stop-shop matchmaker between European SMEs and the existing European ecosystem of photonics training providers. This extensive training offering is presented as a single online catalogue of the European Photonics Innovation Academy.

ONSITE TRAINING OPPORTUNITIES

Discover photonics at the one-day Demo Centres and become fully immersed at the three-day hands-on Experience Centres situated across Europe.

Specialty Optical Fibres for Sensing Applications in Industry

Demo Centre by RISE Research Institute of Sweden



Optics and Freeform Optics

Experience Centre by Vrije Universiteit Brussel B-PHOT



Laser-Based Manufacturing: Welding of Metals and Advanced Surface Patterning — Experience Centre by AIMEN Technology Centre



FREE ONLINE INTRODUCTORY TRAINING OPPORTUNITIES

Half-day online sessions are delivered throughout the year.

View our complete training schedule and register your interest at ecosystem.photonhub.eu or by scanning the QR code.

DISCOVER

how PhotonHub can support your business with photonics





**PhotonHub
Europe®**

PHOTONICS INNOVATION HUB
FOR EUROPE



PHOTONICS²¹

PHOTONICS PUBLIC PRIVATE PARTNERSHIP

DISCOVER HOW YOU CAN

- ✓ **Optimise fabrication yields** through smart in-line monitoring systems
- ✓ **Increase product quality** in laser-based machining through advanced dynamic beam shaping
- ✓ **Reduce overall costs** of energy, material and maintenance through advanced photonics sensors

Explore all possibilities
on photonhub.eu

Avail of a
**free initial
assessment
by top experts**

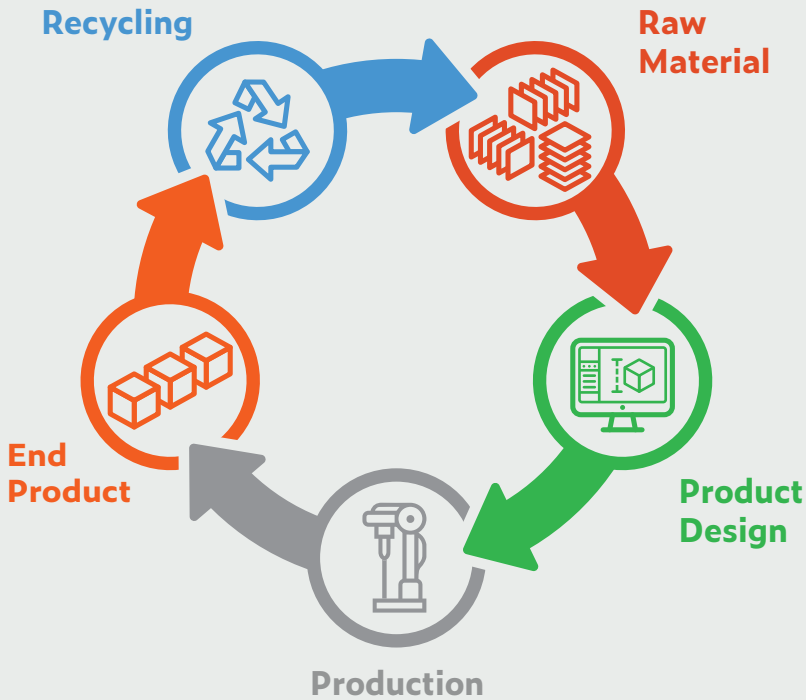
for European
SMEs

Delve into how your business could minimise the risk and expense of deep technology innovation through "test-before-invest" support from PhotonHub.



**PHOTONICS IN
MANUFACTURING**

EMPOWERING THE FULL MANUFACTURING LIFECYCLE



LENS ARRAY FOR IMAGING SYSTEMS TO AUTOMATE PRODUCTION LINES

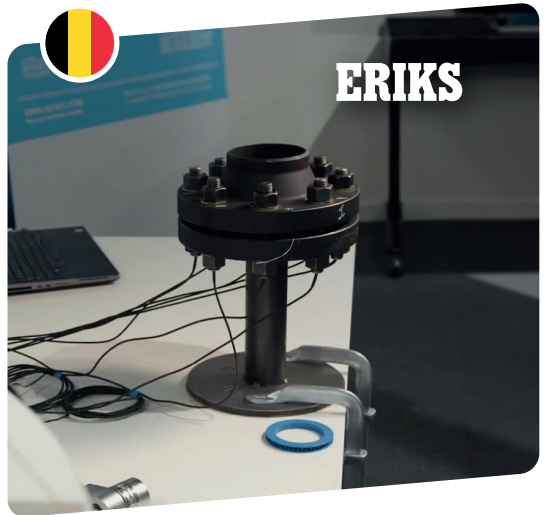
The Imaging Source is one of the leading manufacturers of industrial cameras, frame grabbers and video converters for production automation, quality assurance, logistics, medicine, science and security. Vrije Universiteit Brussel (VUB) designed and fabricated a 6-channel multiview multiresolution imaging system as a passive distance estimation device which can be used in various domains such as autonomous vehicles.

EXAMPLES OF COMPANIES SUPPORTED WITH PHOTONICS INNOVATION PROJECTS

FIND MORE ON PHOTONHUB.EU

MEASUREMENTS WITH FIBRE SENSORS FOR THE PETROCHEMICAL SECTOR

ERIKS is an international industrial service provider and multi-product specialist offering a wide range of high-quality mechanical engineering components and associated technical and logistics services. Vrije Universiteit Brussel (VUB) developed a fibre sensor for measurement of seating stress in flange gaskets for application in the petrochemical sector.



REDUCING WASTE THROUGH CUTTING- EDGE PHOTONICS TECHNOLOGIES

EnviroPET Ltd is an environmental technology company based in Scotland with a mission to transform the world of PET recycling. VTT developed an optical probe sensor to assess raw material properties in the injection moulding machine directly, improving Polyethylene Terephthalate (PET) melting and processing to reduce waste, improve product quality and increase output.

Scan the QR code overleaf to watch a short video on this project.