

## 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 partners across Europe provide both onsite and online training for industry. This extensive training offering is presented as a single online catalogue of the European Photonics Innovation Academy.

### ONSITE TRAINING OPPORTUNITIES AT DEMO AND EXPERIENCE CENTERS

Discover and become fully immersed in photonics through in-person training delivered at the Demo & Experience centers listed below. The schedule of upcoming training can be found at [photonhub.eu](https://photonhub.eu) or by scanning the QR code.

- |   |   |
|---|---|
|  VUB               |  Politecnico di Milano |
|  Joanneum Research |  Łukasiewicz IMiF      |
|  HiLASE           |  WUT                  |
|  CNRS            |  AIMEN               |
|  Fraunhofer      |  RISE                |
|  LZH             |  EPFL                |
|  FORTH           |   |

### FREE ONLINE INTRODUCTORY TRAINING OPPORTUNITIES

Half-day online sessions are delivered throughout the year.

View our complete training schedule and register your interest at [photonhub.eu](https://photonhub.eu) or by scanning the QR code.



PhotonHub has received funding from the European Union's Horizon Europe programme under the Grant Agreement n° 101189537, in Public Private Partnership with Photonics21.

PH-MAIN-2502-1.0



## 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](https://photonhub.eu)

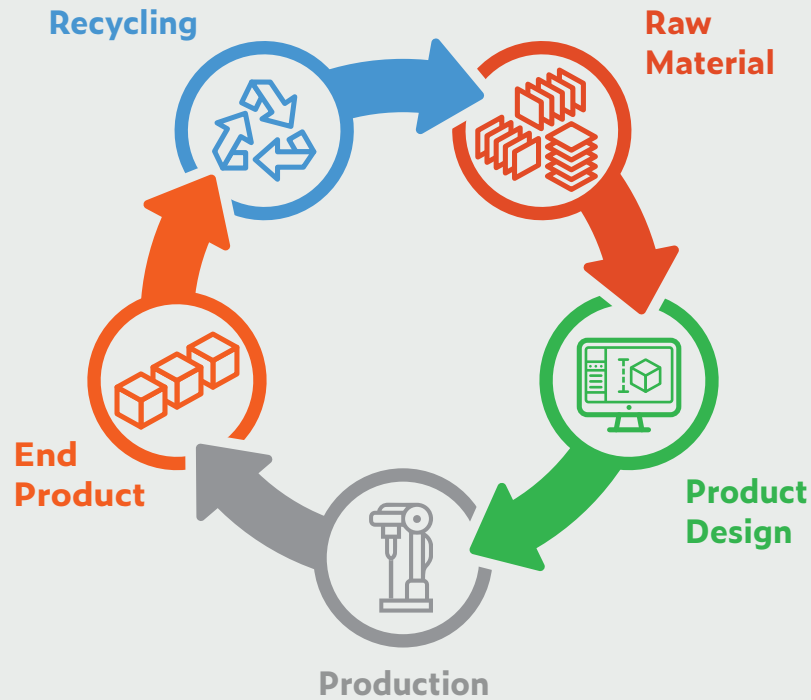
Avail of a **free initial assessment by top experts** for European SMEs

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 & INDUSTRY 5.0

## EMPOWERING THE FULL MANUFACTURING LIFECYCLE



## EXAMPLES OF COMPANIES SUPPORTED WITH PHOTONICS INNOVATION PROJECTS

FIND MORE ON [PHOTONHUB.EU](http://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.*



### 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.

