New EU project will shed light on the potential of Photonics for Life Science on a regional level

The EPRISE project, “Empowering Photonics through Regional Innovation Strategies in Europe”, brings together nine leading photonics innovation clusters and national photonics platforms around Europe with the aim of supporting companies who use photonics to enter into four Life Sciences market sectors where Europe holds a leading position, namely, Medical Technologies, Pharmaceuticals, Agriculture and Food.

The regional focus of this project is particularly interesting and unique. Photonics is one the six Key Enabling Technologies (KETs) selected by the European Commission in 2009 and therefore one of the main topics to be considered by the regions when developing their Research and Innovation Smart Specialisation Strategies (RIS3).

As a technology, Photonics deals with the generation, detection and manipulation of light and is usually intertwined with electronics. Although photonics underpins the modern smart phone, a device which most people now own and use every day, the term photonics itself is still not in very widespread public use and is largely misunderstood. This is probably one important reason why only 11 European regions have explicitly prioritised photonics in their RIS3.

The EPRISE project aims to reverse this situation by engaging with the regions in Europe and highlighting the potential of the Photonics sector to them. Regional authorities will be presented with facts about the economic benefits and high societal impact of Photonics as a key enabling technology in their region and with concrete funding scenarios to promote inter-regional cooperation.

Europe’s photonics industry is facing global market competition and has to cope with a very high speed of technological developments in the field. While scientists and researchers have made great strides in advancing the application of photonics in these market sectors, there is still plenty of work to be done. Companies developing photonics-based products for these markets face highly specific Go2Market challenges such as long time to market adoption, complex regulatory frameworks and high barriers to market entry. The EPRISE consortium will organise a series of European photonics workshops, the European Photonics Roadshow, from 2018 onwards with the aim of providing Small and Medium Enterprises (SMEs) with solutions on how to overcome the market entry barriers. Pre-arranged business to business meetings at these events will boost collaboration between companies at both regional and national European levels.

The project coordinator, Cecilia Pinto from photonics innovation cluster Optitec in France commented – “We are delighted to be able to announce the start of this new support programme in Photonics which will see a Europe-wide cooperation between regional photonics clusters, National photonics networks and regional authorities to help companies, particularly SMEs, to accelerate the
commercialization of new photonics products in the Life Sciences markets. Such a joined-up approach will surely benefit consumers, patients, providers and manufacturers together.”

The EPRISE project is a 30-month coordination and support action of Horizon 2020 part of the Photonics Private Public Partnership. A kick-off event took place on February 9 in Brussels and attracted more than 50 participants, among others Mr Philippe Vannson, the new Head of European Commission’s Photonics Unit, Mr Richard Tuffs, the Director of ERRIN, Mr Carlos Lee, General Director of European Photonics Industry Consortium and more than 25 regional representatives.

Ends

Notes to Editor

The project partners include;

POLE OPTITEC (France)

OPTITEC is a leading French photonics cluster, located in the south of France (Provence-Alpes-Côte d’Azur and Occitane regions) specialized in complex optics and imaging systems dedicated to space, aeronautics, defence, medical, food industry and green photonics applications. With more than 220 highly committed members, among them 130 companies, it represents more than 25% of French R&D in optics and an annual turnover of 1.3 billion euros and 10 000 employees. The cluster has labelled more than 290 national R&D projects worth a total of 550 million euros and 120 million euros of subsidies.

SecPho (Spain)

SECPhO – Southern European Cluster in Photonics and Optics Association cluster was founded in 2009 in Terrassa (Barcelona), Spain. The cluster brings together companies, innovation centers and research groups in the photonics and optics sector in Spain. Currently it is comprised by more than 60 members. The mission of the cluster is to facilitate and improve the competitiveness of the Spanish Optics and Photonics sector by reaching major growth and profitability. SECPhO’s main objectives are:

• To foster innovation in the field of photonic and optic technologies;
• To generate business opportunities for companies;
• To provide technology centres and research groups with access to projects.
OpTecBB (Germany)

OpTec-Berlin-Brandenburg e.V. (OpTecBB) was founded 15 years ago. It is as an initiative of companies and scientific institutions in Berlin Brandenburg to support and explore optical and micro systems technology together. The professional network of companies, research institutes, universities and federations is supported by relevant ministries in Brandenburg and the Berlin Senate. Today, the association has more than 100 institutional members (some 70+ companies and about 30 research organizations). OpTecBB offers its members six focus groups: (1) Lighting Technologies, (2) Laser Technologies, (3) Optics for Communication and Sensor applications, (4) Optical and X-ray Analytics, (5) Biomedical Applications and Ophthalmology and (6) Micro Systems Technologies.

OPTOSCANA (Italy)

The Institute of Applied Physics “Nello Carrara” (IFAC) is part of the Italian National Research Council (CNR), which is the main public organisation pursuing research and innovation in Italy. IFAC is also the legal entity which acts as the coordinator of the Regional Photonics Cluster of Tuscany “OPTOSCANA”, which includes about 120 enterprises, research centres and other organisations, many of them active in the Photonics field.

PhotonicsNL (Netherlands)

The Association PhotonicsNL was founded in September 2013 and is the National Technology Platform (NTP) for Photonics in the Netherlands. The main objective is to support Dutch stakeholders in the field of photonics by actively stimulating cooperation and cross-fertilization between industry, universities and R&D institutes aiming for fundamental and applied research, technology development and education in photonics. Other objectives are to stimulate photonics innovation and to increase the level of awareness of the importance of photonics for our economy.

The forerunner institution Foundation Photonics Cluster Netherlands (PCN), founded in 2006, has merged into the new association in order to boost the participation of all stakeholders and connect to the national and regional governments.

CPI (UK)

The Centre for Process Innovation (CPI) is a UK based technology innovation centre and the process arm of the High Value Manufacturing Catapult. Established to support the UK process manufacturing industry, CPI collaborates with universities, SMEs and large corporates to help overcome innovation challenges and
develop next generation products and processes. Operating across a broad range of technologies, including photonics, we support our partners at every step of the way; from concept to market; business support to technology development; from scale up to supply chain intervention.

Photonics Bretagne (France)

Photonics Bretagne is a booming cluster of SMEs, research centers and schools, promoting the development of photonics in Brittany (France). Our mission is to support industrial and technological development of our members to generate economic growth and direct/indirect employment opportunities in Brittany, a region with a unique concentration of SMEs, research centers and Schools in the field of Photonics. The action plan of the organization is to:
- Assist SMEs in their business development
- Accelerate Transfer technology
- Develop competitive intelligence in SMEs
- Provide project engineering assistance
- Boost SME’s visibility at tradeshows
- Promote leverage effect of photonics technologies

PhotonicSweden (Sweden)

PhotonicSweden (PS) is the national platform for the Swedish photonics. It is an economic association which is a not for profit organisation. It was founded in 2011 by merging the activities of an association of companies called Swedoptronics with the networking activities of the Swedish Optical Society (SOS). PS also manages the operational business of the SOS. PS has built working groups mirroring the ones of Photonics21.

Photonics Finland (Finland)

Photonics Finland is an association established to facilitate co-operation between companies, public authorities and research institutions. It is open to all operators in the photonics industry and seeks to enable them to realise their full potential by supporting a variety of activities, ranging from basic research to product development and commercialisation. Together with Photonics Finland Joensuu Science Park Ltd. Photonics Finland offers expert services to develop the businesses of all small and medium-sized firms both in the Joensuu area and Nationally within Finland. Photonics Finland runs a centre of expertise programme especially in the fields of bio-economy, photonics and manufacturing.