**Press Release Vrije Universiteit Brussel**

**Photonics Digital Innovation Hub secures €19 million**

**to boost SME growth and ensure Europe’s global competitiveness**

**PhotonHub Europe – a new pan-European photonics digital innovation hub –has been awarded €19 million investment from the EU’s Horizon 2020 programme.**

**PhotonHub Europe will help European SMEs and mid-caps become highly competitive digital businesses through faster and smarter deployment of photonics-based technologies, directly creating over 1.000 new high-tech EU jobs and nearly €1 billion in new revenues and venture capital by 2025.**

Photonics – the science and technology of light – is a key digital technology that is radically transforming the traditional industrial base. Photonics technologies are being used to create and launch exciting new products in wide-ranging end-user application domains such as Health, Digital Infrastructure, Manufacturing, Safety, Security, Space & Defence, Agro-Food, Mobility & Energy.

Think of optical fibres which allow for faster and richer online communication and computing; optical sensors which monitor the quality of our food, air and water; photovoltaics which power green energy; lasers which facilitate high precision manufacturing and nanotechnology; new optical lenses with incredible features for machine vision to enable everything from non-invasive medical devices to autonomous vehicles and robotics. All powered by photonics.

“*Photonics is essential to the functioning of new applications which are powering the new industrial wave – Industry 4.0 – and which are also critical to our ability to fundamentally address the enormous global societal and environmental challenges of our times*”, said Prof Hugo Thienpont, Director of **Brussels Photonics (B-PHOT) at the Vrije Universiteit Brussel (VUB)** and overall coordinator of PhotonHub Europe. “*European industry needs to be at the forefront in innovating with photonics, making the most of our combined strengths across all parts of the innovation value chain, and working collaboratively across all member states, to support European business innovation and growth. This is the motivation behind the establishment of PhotonHub Europe which is directly building on top of over 15 year of previous European projects and collaborative efforts by all of the organisations involved in developing and integrating the infrastructure necessary for such a major undertaking*”.

**One-stop-shop for European Photonics**

In order to accelerate the uptake and deployment of photonics technologies by European industry, PhotonHub will establish a single photonics innovation hub which integrates all of the best-in-class photonics technologies, facilities, expertise and experience of 53 top competence centres across Europe under one roof as a one-stop-shop solution with open access for any company anywhere in Europe that wants to innovate with photonics.

As a result, PhotonHub will provide European companies, in particular “non-photonics” SMEs and mid-caps that are first users and early adopters of photonics, with open access and guided orienteering through the PhotonHub front office at the Photonics Innovation Campus of the Vrije Universiteit Brussel. Photonhub will thus offer a broad range of services and capabilities covering training and upskilling supports, “test before invest” innovation support or supports to find investment.

**Economic impact: 1.000 jobs and 1 billon**

PhotonHub Europe will work with the local photonics hubs from the “lighthouse regions” where photonics is already well established in order to develop best practice models for SME innovation support and to disseminate these best practices widely to support the development of new innovation hubs covering most regions of Europe. Referring to this key initiative, Dr Roberto Pini of **CNR National Research Council of Italy in the Tuscany region** and another of the core partners in PhotonHub Europe, said “*Our region has for many years now been developing and implementing its smart specialisation strategy in photonics with strong success. Through PhotonHub, we are delighted to now be able to join forces and network with other European regions with a similar focus on photonics innovation and SME business growth to share our experiences, learn from each other, and make the cross-border innovation ecosystem even stronger”.*

PhotonHub will collaborate with key European associations such as the European Regions Research and Innovation Network (**ERRIN**) and the Assembly of European Regions (**AER**) to help disseminate the support model for photonics innovation and grow the pan-European ecosystem of local photonics hubs, as well as working closely with well-established pan-European SME support networks such as Enterprise Europe Network (**EEN**) and the European Business Network (**EBN**) to open up access to the photonics innovation ecosystem for all European SMEs.

“*Our mission at EEN is to help ambitious SMEs to innovate and grow internationally, providing international business expertise with local knowledge through our local contact points in every country*,” said Ms. Barbara Andreani of **EEN Brussels**. “*Our collaboration with PhotonHub fits perfectly with our strategic objectives to accelerate innovation and digitalisation by enhancing the SME outreach of the European Digital Innovation Hubs such as PhotonHub and helping many more SMEs to access the hubs’ digital testing infrastructures, especially in a cross-border setting. We are also particularly delighted to see the strong involvement of the local photonics hubs in PhotonHub as it ties in with our own plans to further strengthen coordination of the European network with regional policy for more localised cooperation and signposting to the best solutions for SMEs across our combined networks*”.

Furthermore, through its close collaboration and alignment with the European Technology Platform for Public-Private Partnership between the EC, academia and industry – **Photonics21** – on the strategy for photonics development in Europe, and by tightly linking the activities of PhotonHub with those of other European Digital Innovation Hubs through its digital community-building platform, PhotonHub will ensure fast user-friendly access for European SMEs to the broadest possible range of advanced photonics expertise and technologies on the European scale, covering the entire value chain from TRL3-8.

“*Most critically, in these times of high uncertainty and disruption in global supply chains, photonics has become an even more important key enabling technology for the transformation of production methods in European manufacturing for increased competitiveness of local supply chains and the boosting of Europe’s technological sovereignty*,” said Prof. Hugo Thienpont of the VUB and overall coordinator of PhotonHub. “*By combining local proximity with cross-border added value, PhotonHub will be a critical accelerator for innovation, digital transformation and SME business growth in Europe and an essential source for powerful networking opportunities across a pan-European innovation ecosystem*”.

PhotonHub Europe will commence operations from early 2021 and will be operating a continuous open call for companies to apply for its support services. Applications for support will be facilitated online through the PhotonHub website located at **www.photonhub.eu**.

There are two important levels on which PhotonHub expects to deliver its impact. **Firstly,** on the digitisation and competitiveness of end-user industry in Europe in particular SMEs through the uptake of photonics. In its first four years of operation, PhotonHub expects to achieve one-to-one expert discussions on photonics innovation ideas with at least 8.000 companies – 90% of which will be SMEs – with nearly 6.000 training engagements, 280 companies benefitting from investor matchmaking, and over 250 companies receiving cross-border innovation support for TRL acceleration. PhotonHub expects that these and other support activities will in that timeframe alone directly result in the creation of over 1.000 new high-tech EU jobs and nearly 1 billion euro in new revenues generated and new venture capital raised.

**Secondly,** PhotonHub will also measure its impact on the wider ecosystem of local photonics hubs in Europe, and in particular the leverage factor on regional and national funding for photonics innovation which is expected to add at least another 75 million euro on top of the EC funding, as well as implementing the business plan for sustainability of PhotonHub itself, which will continue to operate as the PhotonHub Europe Association long beyond the initial 19 million euro investment from the EC.

**Contact for Further Information**

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**List of the PhotonHub Europe partner organisations**

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| **No.** | **Participant Organisation Name** | **Country** |
| 1 | Vrije Universiteit Brussel | Belgium |
| 2 | Center National de la Recherche Scientifique | France |
| 3 | Institute of Communication and Computer Systems | Greece |
| 4 | LioniX International | Netherlands |
| 5 | Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek | Netherlands |
| 6 | University of Ghent | Belgium |
| 7 | Politechnika Warszawska | Poland |
| 8 | AIMEN Technology Centre | Spain |
| 9 | ALPhANOV - the Optics and Laser Technology Center | France |
| 10 | Laboratoire d'Electronique et de Technologie de l'Information | France |
| 11 | Conzorzio Nazionale Interuniversitario per le Telecomunicazioni | Italy |
| 12 | Foundation for Research and Technology Hellas | Greece |
| 13 | Łukasiewicz Research Network –  Institute of Electronic Materials Technology | Poland |
| 14 | Karlsruhe Institute of Technology | Germany |
| 15 | Leibniz-Institut fuer Photonische Technologie E.V. | Germany |
| 16 | LIGENTEC SA | Switzerland |
| 17 | Laser Zentrum Hannover | Germany |
| 18 | Research Institutes of Sweden | Sweden |
| 19 | SMART Photonics BV | Netherlands |
| 20 | Scuola Superiore Sant'Anna of Pisa | Italy |
| 21 | Universitat Politècnica de València | Spain |
| 22 | CARTIF | Spain |
| 23 | EL.En S.p.A | Italy |
| 24 | Leonardo | Italy |
| 25 | Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung E.V. | Germany |
| 26 | Technische Universiteit Eindhoven | Netherlands |
| 27 | Swiss Center for Electronics and Microtechnology | Switzerland |
| 28 | Interuniversitair Micro-Electronica Centrum VZW | Belgium |
| 29 | Teknologian Tutkimuskeskus VTT oy | Finland |
| 30 | Tyndall National Institute, University College Cork | Ireland |
| 31 | Consiglio Nazionale delle Ricerche | Italy |
| 32 | École Polytechnique Fédérale de Lausanne | Switzerland |
| 33 | Joanneum Research Forschungsgesellschaft mbH | Austria |
| 34 | Universitat Politècnica de Catalunya | Spain |
| 35 | Fundacio Institut de Ciencies Fotoniques | Spain  (Catalonia) |
| 36 | University of Southampton Optoelectronics Research Centre – Centre for Process Innovation | UK |
| **LOCAL PHOTONICS HUBS** | | |
| 37 | Photonics France | France |
| 38 | PhotonDelta | Netherlands |
| 39 | Flanders Make | Belgium |
| 40 | Optec-Berlin-Brandenburg | Germany |
| 41 | OptoNet – Photoniknetzwerk Thüringen | Germany |
| 42 | Photonics Finland | Finland |
| 43 | Hellenic Photonics Cluster | Greece |
| 44 | Lazerinių ir inžinerinių technologijų klasteris | Lithuania |
| 45 | Polish Technological Platform on Photonics | Poland |
| 46 | Photonics Sweden | Sweden |
| 47 | Confindustria Toscana | Italy |
| **BUSINESS SUPPORT PROVIDERS** | | |
| 48 | 24IP Law Group France SARL | France |
| 49 | AMIRES | Czechia |
| 50 | European Business Network (EBN) | Belgium |
| 51 | European Photonics Industry Consortium | Belgium |
| 52 | FundingBox | Poland |
| 53 | TechTour | Bulgaria |