



Research position in European Training Network on Integrated Photonics for Autonomous Vehicles

Company

VPIphotonics™ sets the industry standard for end-to-end Photonic Design Automation comprising design, analysis and optimization of components, systems and networks. We provide flexible simulation software and design services supporting requirements of integrated photonics, optoelectronics and fiber optics applications, optical transmission system and network applications. VPIphotonics leverages a strong history of innovation and expertise in building professional simulation software solutions. The company is headquartered in Berlin, Germany with an office in Norwood, MA, USA, and a network of regional representatives and resellers around the world. For further information, please visit us at www.VPIphotonics.com.

Position

A three-year research training position is open at VPIphotonics in Berlin, Germany, as part of the EU-funded European Industrial Doctorate Innovative Training Network (Drive-In: Integrated Photonics for the next generation of autonomous Vehicles using InP technologies) involving the University of Vigo (Spain) as Academic Partner, and VPIphotonics as Industrial Partner.

The DRIVE-In project aims to provide cutting-edge training to young researchers in the emerging field of integrated photonics, fostering its application in the automotive industry through the development of novel generic Indium-Phosphide Process Design Kits as well as the creation of disruptive simulation tools and modelling procedures for use in optoelectronic systems. The researcher will combine academic research and industrial knowledge to overcome specific challenges of the integrated photonics sector, related to hybridization of integrated photonics and microelectronics, increasing Photonic Integrated Circuit (PIC) complexity, availability of PIC design tools, need for high-performance Free Space Optic devices and need for software simulation and fast-generation layout models. The researcher will be trained by the members of the Drive-In consortium and external industrial partners such as Bright Photonics, CTAG and Fraunhofer HHI via intensive practical and hands-on training, and training with courses on integrated photonics, devices and circuit simulation. The researcher is encouraged to pursue a Ph.D. The program covers the whole value chain, from research and design to manufacturing, thereby forming a strong interdisciplinary network between technical sciences and industry to overcome specific barriers in the integrated photonics sector.

Requirements

We value individuals possessing a team-oriented work style, the ability to adapt quickly to new challenges and a strong motivation to learn. Only candidates with the willingness to work in our office in Berlin, Germany will be considered. Furthermore, we value the following skills and abilities:

- Master's degree in physics, electrical engineering or similar discipline
- Excellent academic qualifications
- Basic experience in optics and solid-state physics is desired
- Fluency in English
- Matlab or Python knowledge is a plus
- Knowledge of VPIphotonics simulation tools is a plus

The successful candidates will be employed on a full-time basis with a competitive salary in accordance with the H2020-MSCA-ETN rules and the personal circumstances of the applicant. To qualify, the candidate must not have resided or carried out his/her main activity in Germany for more than 12 months in the 3 years immediately prior to the recruitment. The candidate must not possess a doctorate degree (Ph.D.) and needs to have less than 4 years of full-time equivalent research experience after graduation with a degree allowing to start a Ph.D.

To be considered, send your detailed resume by **15 January 2020** to jobs.ETN-1019@VPIphotonics.com.