

Research position in European Training Network on Wideband Optical Networks

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 active/passive integrated photonics and fiber optics applications, optical transmission system and network applications, as well as cost-optimized equipment configuration. 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, visit us at www.VPIphotonics.com.

Position

A three-year research training position is open at VPIphotonics in Berlin, Germany as part of the European Training Network WON (Wideband Optical Networks, H2020-MSCA-ETN). The researcher will be trained by the members of the WON consortium, and is motivated to pursue a Ph.D. on a topic related to the efficient modelling of high-capacity wideband transmission systems. The research objective is the identification and implementation of novel modelling techniques and design methods addressing wideband transmission and high-volume data processing, using the advantages of latest photonics and digital/analogue electronics technologies. The researcher will be taught on the fundamentals of coherent optical fiber-based transmission systems, and trained in modelling techniques and computer-aided design methods for such systems and related technologies. While training and research will take place for the majority of time at the premises of VPIphotonics and the closely situated Fraunhofer Heinrich Hertz Institute in Berlin, several two-month visits to partnering universities in the WON consortium are envisioned.

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 a valid EU Work Permit and 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 electrical engineering or similar discipline
- Excellent academic qualifications
- Basic experience in digital optical communications
- 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 shall 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 should not possess a doctorate degree (Ph.D.) and should 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, please send your detailed resume by Feb 28, 2019 to jobs. GmbH@VPIphotonics.com.