Postdoctoral researcher
in the field of digital optical communication (Marie Curie IAPP programme)

Position

A 12-months Experienced Researcher (ER, 4-10 years Postdoc) position is open at VPIphotonics in Berlin, Germany, as part of the Marie Curie IAPP project "Green Initiative for Future Optical Networks" (GRIFFON, FP7-PEOPLE-2012-IAPP, http://astonishgriffon.net/).

The overall scientific objective of GRIFFON is to develop a fibre optic coherent communication system with increased capacity, distance (over 300 km) and reduced power consumption based on ultra-long 2nd order cascade fibre Raman amplification with suppressed polarization impairments and DSP to suppress linear and intra-channel nonlinear transmission impairments.

The aim of the recruitment is to bring new knowledge and competency into VPIphotonics and the project consortium. The candidate is expected to take a lead in developing new DSP algorithms within the project.

Main duties and responsibilities:

- Developing new DSP algorithms for compensation of nonlinearities using various simulation techniques
- Prototyping a DSP module for integration into the VPIphotonics software
- Coordinating the DSP-related aspects of the Transfer of Knowledge (ToK) activities
- Publishing results in peer-reviewed journals, at conferences and project meetings
- Preparation of the project deliverables and reports

Benefits

- Involvement in the project consortium with well-recognized project partners
- A competitive salary package and mobility allowance, in accordance with the Marie Curie IAPP programme rules and regulations
- Coverage of research- and training-related activities
- A professional working environment and a friendly team at VPIphotonics

Requirements

- Comprehensive experience in development of DSP algorithms for optical communications
- Good understanding of nonlinear fiber transmission and related modeling techniques
- Solid simulation background in the field of optical transmission in general
- Strong publications record
- Fluency in English
- Matlab or Python knowledge is a plus
- Knowledge of VPIphotonics simulation tools is a plus

In order to qualify, the candidate must possess a doctorate degree (Ph.D.) or have at least 4 years of full-time equivalent research experience after graduation with a degree allowing to start Ph.D. studies.

At the time of recruitment, 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 his/her recruitment under the project. Compulsory national service and/or short stays such as holidays are not taken into account.

Only candidates with a valid EU Work Permit and the willingness to work in our office in Berlin, Germany, will be considered.

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. For further information, visit us at www.VPIphotonics.com.

If you wish to apply, please send your CV and copies of your degree awards to jobs.GmbH@VPIphotonics.com **by November 15, 2015**.