Researcher

We have a Research position available on Numerical modeling of Germanium-Silicon Quantum-Confined-Stark-Effect electro-absorption modulators (EAM) and Avalanche Photodetectors (APD).

For our new ICT EU research project SIPHO-G, Advanced GeSi components for next-generation silicon photonics applications, we are seeking a new team member with a strong interest in modeling the quantum physical properties of semiconductor nanodevices such as Quantum-Confined-Stark-Effect electro-absorption modulators (EAM) and Avalanche Photodetectors (APD).

Your responsibilities

▪ Software development for Germanium-Silicon Quantum-Confined-Stark-Effect electro-absorption modulators (EAM) and Avalanche Photodetectors
▪ Simulation of Ge-Si QCSE EAMs and APDs
▪ Closely interacting with the consortium partners and travel to project meetings
▪ Managing EU projects and writing project reports
▪ Contributing to the development of our nextnano software
▪ Customer support

Your qualifications

▪ Master or PhD degree in Physics or Electrical Engineering with relevant experience in Theoretical Solid State Physics, Semiconductor Physics and Quantum Mechanics
▪ Programming Skills
▪ Excellent, open-minded, entrepreneurial and team-spirited
Consortium members

- imec, Leuven, Belgium (Coordinator)
- Mellanox Technologies Ltd, Yokneam, Israel
- Ericsson Telecommunicationi SpA, Pisa, Italy
- Applied Materials Belgium NV, Leuven, Belgium
- nextnano GmbH, Munich, Germany
- Aristotle University of Thessaloniki, Thessaloniki, Greece
- Luceda Photonics NV, Dendermonde, Belgium
- GLOBALFOUNDRIES Dresden Module One LLC & Co. KG, Dresden, Germany

nextnano GmbH develops software for the simulation of electronic and optoelectronic semiconductor nanodevices for research & development in academia and industry. It is a spin-off from the Walter Schottky Institute of the Technische Universität München and was founded in 2012. Our software is used by thousands of researchers in more than 35 countries. Our office is located in the AGENDIS Business Center Konrad at the historic site of Munich’s former airport “München-Riem” (Wappenhalle) in Messestadt Riem next to the exhibition center “Messe München”.

To find out more, please contact Dr. Stefan Birner, stefan.birner@nextnano.com, www.nextnano.com