Associate Professor in Physics and Nanoscience (M/F)

Since 1885, Junia has been involved in engineer education. It is one of the major French leader institution in engineer training, with more than 4,000 students enrolled in three schools, HEI, ISA and ISEN, 400 employees, a network of 27,000 alumni, campuses in Lille, Châteauroux, Nîmes, Rabat (Morocco), and two partner schools ISEN Brest and ISEN Toulon. While Junia main activities are training, research and valorisation/expertise for the economic world, the institution is recognized for its know-how in innovation and its transdisciplinary approaches.

Junia is recruiting an Associate Professor in Physics for its ISEN school based in Lille (Institut Supérieur de l'Électronique et du Numérique). ISEN trains scientific students to become engineers in new information technologies and digital, with strong skills in micro- and nanotechnology, acoustics, electronics, robotics and computer science. It prepares tomorrow's engineering and science professionals to shoulder growing responsibilities and pursue emerging opportunities, thanks to a human-sized teaching, permanent contacts among the teaching staff, a digital campus and internationally recognized laboratories, shared with the CNRS and the university of Lille.

Your mission:

Teaching part:

About 50% of your assignment will be dedicated to teaching activities (courses, tutorials, practical work, project supervision, etc.) and educational activities. You will contribute to physics teaching for bachelor students and to general and specialty lectures of the master cycle. You will support the teaching teams of ISEN Lille in the implementation of innovative teaching methods. Finally, you will lead the construction of new lectures combining physics and quantum information. A large part of the training will be provided in French.

Research part:

The Physics and Nanoscience team carries out research activities on themes with strong potential for innovation and technological breakthroughs in the fields of materials, nanotechnologies and instrumentation (https://www.iemn.fr/la-recherche/les-groupes/physique). Depending on your expertise and your wishes, you will strengthen one of the following 4 themes:

- Growth by molecular beam epitaxy of hybrid III-V / 2Ds heterostructures
- Picosecond acoustics at small scales
- Nanostructures and optics
- Correlated materials for neuromorphic applications

Your mission will consist of proposing research projects and seeking the related fundings in connection with the research strategy of the group. The activity also covers the monitoring of progress and the technical realization of research projects as well as the coordination of Master and PhD students. Your research activities will give rise to national and international scientific production and will fall within the framework of national or international research programs (ANR, Equipex, EU Horizon Europe, etc.) and/or industrial research contracts. You will benefit from the

scientific and technological infrastructures of the Institute of Electronics, Microelectronics and Nanotechnologies (IEMN-CNRS UMR 8520), of which Junia is one of the trustees.

Your profile :

- You hold a PhD in Physics, Engineering Sciences or equivalent.
- You are passionate about teaching and have a real experience in pedagogy.
- You have the ability to get quickly and efficiently integrated into an existing team.
- You have postdoctoral experience abroad, have a good command of writing articles and research projects in English and are able to teach in English and French.
- You are dynamic, organized and show a strong sense of autonomy.

The position is to be filled on a full-time permanent basis.

Wage to be defined according to profile and experience.

For any further information, please contact: emmanuel.dubois@junia.com, head of the Electronics-Physics-Acoustics Department, bruno.grandidier@junia.com, head of the Physics team, or pascale.diener@junia.com, deputy of the Physics team.

Please send CV + cover letter to recrutement.hautsdefrance@yncrea.fr

Please also include: a short research plan (2 pages maximum) highlighting your profile and its adequacy with the team's activities + an updated list of your publications + the contact details of two references + a list of your teaching activities.