IHP GmbH - Leibniz-Institut für innovative Mikroelektronik

Das IHP ist ein Institut der Leibniz-Gemeinschaft und betreibt Forschung und Entwicklung zu siliziumbasierten Systemen, Höchstfrequenz-Schaltungen und -Technologien einschließlich neuer Materialien. Es erarbeitet innovative Lösungen für Anwendungsbereiche wie die drahtlose und Breitbandkommunikation, Sicherheit, Medizintechnik, Industrie 4.0, Mobilität und Raumfahrt. Das IHP beschäftigt ca. 330 Mitarbeiterinnen und Mitarbeiter. Es verfügt über eine Pilotlinie für technologische Entwicklungen und die Präparation von Hochgeschwindigkeits-Schaltkreisen mit 0,13/0,25 µm-BiCMOS-Technologien, die sich in einem 1000 m² großen Reinraum der Klasse 1 befindet.

PhD Position (m/f/d) for Plasmonic Sensor Development

Job-ID: 0073/26 | Department: Material Research | Salary: as per tariff (E13TV-L) | Working Time: 40h/week | Limitation: initially two years with option of extension | Starting Date: 01.01.2027

City: Frankfurt (Oder); Starting date (earliest): 01/01/27; Remuneration: TV-L

Tasks

The position:
As a PhD student and a member of the Adaptive Materials research group within the "Materials Research" department, you will contribute to the development of plasmonic sensor systems. Your responsibilities will include the characterization and modelling of CMOS compatible plasmonic sensing devices and their integration into systems. You will join an international team of scientists, including highly experienced researchers and several PhD students, who are looking forward to welcoming you and working with you. We value diversity of perspective highly and are pleased to have a gender-balanced team.

Your project:
The project's ambition is to transfer knowledge into industry. A strong interaction with the project leader, the laboratory leaders and the partners of the project consortium is foreseen.

Requirements

Your qualifications:
You hold a Master's degree in matter physics, semiconductor devices, materials science, microelectronics or a related field. You have previous experience in optical characterization of plasmonic structures and devices. You are also experienced in data analysis. You have a background in semiconductor materials characterization.
We need you to be a strong team player, able to effectively plan and execute your own work, and to work in an organized manner with other creative minds. You will be ideally suited for this position if you have experimental, analytical and problem-solving skills, very strong communication skills, the ability to quickly learn how to use the latest

technical equipment including various software, and most importantly, if you are an independent thinker.
As IHP is an international research center, it is necessary that you are fluent in English. German language skills are welcome. The improvement of German language skills is expected and strongly encouraged, e.g. through in-house language courses and intensive courses.

What we offer

Our Offer:
Conduct research in a challenging, multinational environment giving you excellent career opportunities. You will have the chance to establish international reputation at the edge of top-notch technologies. It is important to us to support the individual career developments (e.g. conferences, advanced trainings) as well as the personal needs of our employees by offering flexible working hours and the possibility to work off-site. The compatibility of work and family is highly valued. More information about our scientific excellence and the working environment at IHP can be found on our website.
IHP is TOTAL E-QUALITY-certified for equal opportunities for women and men at work and actively pursues the equality of all gender and all groups of people. We promote the professional development of women and strongly encourage them to apply. Disabled applicants, qualified according to the above criteria, will be given preference over other candidates with equivalent relevant qualifications.

Further advantages:
30 days holiday | special annual payment | Company pension scheme (VBL) | Flexible working hours, also part-time (no core working hours) | Possibility to work up to 40 % independent of location according to company agreement | A wide range of further training opportunities in-house or within the framework of business trips | Discounted company ticket with monthly allowance of € 15 for various fare zones | Good transport connections, free parking at the institute | Structured induction and actively supported integration into the institute (welcome workshop, intercultural workshop, joint leisure activities)

Application

Contact person: Dr. Christian Wenger

By internet: https://www.ihp-microelectronics.com/career/vacancies/online-application-form?job=0073/26#c977

More information at https://stellenticket.de/205607/TUB/
Offer visible until 07/08/26