



## Engineer/physicist (m/f/d) for FIB-REM analytics

Job ID: 7079/23 | Department: D-T | Salary: as per tariff (TV-L) | Working hours: 40h/week (with part-time option) | Limitation: initially 2 years; with option to extend | Starting date: as soon as possible

IHP is an institute of the Leibniz Association and conducts research and development of silicon-based systems and ultra high-frequency circuits and technologies including new materials. It develops innovative solutions for application areas such as wireless and broadband communication, security, medical technology, industry 4.0, automotive industry, and aerospace. IHP employs approximately 380 people. It operates a pilot line for technological developments and the preparation of high-speed circuits with 0.13/0.25  $\mu\text{m}$ -SiGe-BiCMOS technologies, located in a 1500 m<sup>2</sup> cleanroom that meets the highest industrial nanotechnology requirements.

### The position:

As a member of the research group Material Analysis & Metrology within the department Technology you will contribute to Analysis of Si wafers using a dual-beam system consisting of a fine-focused ion beam (FIB) and a scanning electron microscope (SEM). Your tasks will include:

- Preparation of FIB cross-sections
- Preparation of lamella for transmission electron spectroscopy (TEM) analysis
- Energy dispersive X-ray spectroscopy analysis (EDX)
- Circuit modification
- Nanopatterning
- Research planning and evaluation of results together with IHP scientists and external partners in the field of materials research or semiconductor technologies
- Documentation of measurement and analysis results in reports and presentations
- Participation to the elaboration of scientific publications
- Benchmarking on current analysis methods
- Procurement of equipment and spare parts

### Your qualifications:

You hold a degree in physics or microelectronics with background in semiconductors, physics or electrical engineering. You are already experienced in working with FIB-SEM systems and also have professional experience in the field of physical analysis of wafers. You have knowledge of working with high vacuum systems, structure and function of integrated circuits. Knowledge of processes for the production of semiconductor components is an advantage. Additionally you have skillful communication with internal and external partners.



We are looking for a team member with the ability to quickly learn how to operate the latest technical equipment including various software. Experience in electrical characterization is an advantage.

You are also a strong team player. We are looking for a team member, who is able to structure his or her own work and to bring a well-organized and systematic way of working into the cooperation with creative minds. You are an ideal match for this position, when you have experimental, analytical and problem-solving skills, very strong communicative skills and the ability to quickly learn how to operate the latest technical equipment including various software. It is necessary that you confidently handle the English language. Knowledge of the German language is welcome.

#### **Our Offer:**

Do 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. An orientation guide will help you to quickly integrate into the institute and to familiarize yourself with the field.

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 | Parent-child room as a possibility to work with a child in case of childcare bottlenecks | 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 | Canteen with breakfast and lunch | On-site health services | Company family and care guides | Free, confidential counselling by an external service provider in a wide variety of challenging private or professional situations, for example on how to reconcile work and family life or in psychosocial emergencies | Structured induction and actively supported integration into the institute (welcome workshop, intercultural workshop, joint leisure activities)

#### **Your application:**

Have we sparked your interest? Then we look forward to receiving your application via our [online application form](#).

For further information regarding the position please contact Dr. Ioan Costina:  
[career@ihp-microelectronics.com](mailto:career@ihp-microelectronics.com).



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