



## Research Associate (m/f/d) in the field of Reactive Ion Etching

Job-ID: 70810/23 | Department: Technology | Salary: as per tariff TV-L | Working time: 40h/week (part-time work option) | Limitation: initially 2 years with option of extension for three more years | Earliest Starting Date: November 15, 2023

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 Process and Device Research within the department Technology you will contribute to research on Reactive Ion Etching. Your tasks will include the development of recipes for etching of different layers like dielectrics, semiconductors and metals for different applications e.g. device layers, barrier materials, etch stop layers and liner layers.

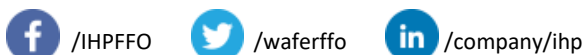
You will get an opportunity to work in an international team of 20 researchers, including senior scientists as well as several PhD students. Flat hierarchies and mutual support are important to us. We see diversity of perspectives as a great advantage for our team. We strive for a balanced gender mix in our team.

The tasks will be process engineering and operational support for the dry etching sub-team. Further development and stabilization of existing technologies with regard to dry chemical etching processes is demanded. Planning and implementation of measures to ensure plant availability is also a very important part of the work. Further tasks are development of dry etching processes for internal and external customers, integration of processes within the framework of research projects and supervision of project-related lots as well as commissioning of new dry etching systems in cooperation with process engineers from the system manufacturers.

### Your qualifications:

You hold a Master's degree in Microelectronics, Material Sciences, Chemistry or a comparable study area. You are already experienced in working in a clean room environment. We are looking for a team member with hands-on experience in semiconductor fabrication processes and with a background in analyzing the semiconductor layers using various analytics such as SEM, XRR, XRD, XPS, Ellipsometry and optical microscope. 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. Marco Lisker:  
[career@ihp-microelectronics.com](mailto:career@ihp-microelectronics.com).

