



Research associate for Open PDK Development (m/f/d) – Developer for Open Source Process Design Kits for SiGe-BiCMOS technologie

Job-ID: 7011/23 | 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 | Entry 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 350 people. It operates a pilot line for technological developments and the preparation of high-speed circuits with 0.13/0.25 μm -SiGe-BiCMOS technologies, located in a 1500 m² cleanroom that meets the highest industrial nanotechnology requirements.

The position:

As a member of the group Research & Prototyping Service you will develop Process Design Kit for IHP's BiCMOS technologies and new future technology modules with special focus on open source PDK development. Your detailed tasks will include programming of pCells and their integration into our verification process.

Devices descriptions, user guides and test cases are important aspects of your work, too. Finally managing our PDK repositories on Github with external contributions and adaption of existing tools like OpenRAM is part of work. Implementation of new devices and investigations of new design tools and flows will give this position room interesting development opportunities.

Your profile:

You hold a Master's degree in computer science with background in semiconductors, physics or electrical engineering. Knowledge in semiconductor devices and programming are of advantage. Your specialized knowledge preferably covers ASIC design environment like Cadence Virtuoso, Mentor/Siemens Tanner or KeySight ADS, OpenROAD/OpenLane, Linux and scripting languages (e.g. Python, Perl or TCL). You are well organized and always keep the overview even with many parallel projects. Thanks to your skillful communication you are a binding and reliable contact person for our partners. You are also a strong team player and you confidently handle the German and English language.

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. The consolidating of German language skills is expected and highly encouraged, for example in in-house language courses and intensive courses.

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.

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. René Scholz:
career@ihp-microelectronics.com.

