

### Fully funded PhD-Research Position on development of probing system for evaluation of RF devices

A fully funded research position (full-time, 40 hours/week) at the PhD-student level is offered in the group for Advanced Mechatronic Systems at the Automation and Control Institute (ACIN) of the Vienna University of Technology.

**Project goal:** This project aims at the development of an automated, scanning probe based metrology system for characterization and testing of RF semiconductor products. State of the art probing systems have limited spatial resolution due to large contact pads of conventional ground-signal-ground probes and cannot measure signals within the active area of RF devices. To address this shortcoming a flexible and versatile probing system for contactless measurements up to 90 GHz using conductive atomic force microscopy (AFM) cantilevers, which facilitates precision down to the nanometer scale is developed. The developed probing system is evaluated in close collaboration with a world leading manufacturer of semiconductor products.

The starting date is planned as soon as possible, depending on the availability and preference of the successful candidate.

**Requirements:** We are looking for candidates holding an MSc degree in Electrical Engineering, RF/Microwave Engineering, Physics, or equivalent, preferably with a strong background in at least one area of RF engineering, mechatronics, scientific instrumentation, precision engineering, measurement systems, system engineering, or modeling and control engineering.

Good fundamentals, excellent grades, and interest in mathematics and physics are prerequisites. Motivation to pursue novel research in close collaboration with well-reputed international industry partners and research universities is essential. Thus, good communicational skills, fluency in English or German, and a goal-oriented work attitude as member of a dynamic international research team are expected.

**Conditions of employment:** The appointment will be for a period of up to four years. As an employee of the TU Vienna you will receive a competitive salary as well as an excellent secondary benefits package, including a flexible work week, health insurance, social security, and additional company retirement benefits. Salary and benefits are in accordance with the Collective Labor Agreement for Austrian universities. The annual gross salary of a research assistant (PhD student) in the first year starts at **€ 40.103**, and grows to **€ 47.544** in the 4<sup>th</sup> year of the appointment. We offer the opportunity to perform scientifically challenging research in a multi-disciplinary research environment, with a group of international researchers and strong collaboration with industrial, governmental, and university research laboratories. Further career growth in all teaching, research, and industrial applications is provided.

**How to apply:** To apply for this position, please email your application in pdf-format to [schitter@acin.tuwien.ac.at](mailto:schitter@acin.tuwien.ac.at) including a

- a cover letter with a statement that gives your motivation for this position
- a full CV, and your grades
- an abstract of your MSc thesis and a list of your publications (if any), and
- the names and contact information of two professional references.

The position will remain open until filled, but an early date for application is preferred and encouraged. For more information about the ACIN department and Vienna University of Technology, please visit our website <https://www.acin.tuwien.ac.at/en/intelligente-mechatronische-systeme-ams> and <http://www.tuwien.ac.at>.