



Master Thesis: Electrical characterization of test structures of next generation SiC MOSFETs

Job description

We are looking for motivated and committed students (f/m/div)* who are willing to learn new things and work in an innovative company acting on a global scale. At KAI GmbH, you will perform your thesis project in an industrial research environment, guided and supported by experienced researchers in such diverse areas as hard- and software design, simulation, modelling and semiconductor technology. We work in close cooperation with universities and research facilities supporting your academic education, whereas our industrial partner Infineon offers interesting opportunities for a prospective career path in the semiconductor industry.

In your new role you will work on:

- Advanced **electrical characterization**
- Next generation of **4H-SiC trench MOSFETs**
- **Test structures** to access semiconductor/dielectric properties
- SiC/dielectric **interface defect characterization**
- Characterization of **dielectrics** on 4H-SiC
- **Tunneling currents, charge trapping**, point defect charging and discharging

Further Information

Type of employment: Temporary / Full-time (flexible working hours from Monday to Friday between 6 a.m. and 7 p.m.)

Duration: min. 6 months

This thesis has to be written in cooperation with an university.

Profile

You successfully meet the requirements, if you are a motivated and committed student from the field of **Physics, Electrical Engineering** or similar. You are best equipped for this task if you additionally offer

- Interest in **semiconductor physics** or **solid state electronics**
- A passion for working in an **international environment**
- A **self-motivated & proactive working style**

At a glance

Location: **Villach (Austria)**
Job ID: **360253**
Start date: **as soon as possible**
Entry level: **0-1 year**
Type: **Full time**
Contract: **Temporary**

Apply to this position online by following the URL and entering the Job ID in our job search. Alternatively, you can also scan the QR code with your smartphone:

Job ID: **360253**
www.infineon.com/jobs



Contact

Nico Steinhauser
Talent Attraction Manager



This position is subject to the collective agreement for workers and employees in the electrical and electronics industry (full-time), employment group D for master students (<https://www.feei.at/wp-content/uploads/2022/05/minimum-salaries-white-collar-workers-2022.pdf>).

Please attach the following documents (German or English) to your application:

- Motivation letter
- CV
- Certificate of matriculation at a university
- Transcript of records
- Highest completed educational certificate (Matura certificate for Bachelor students, Bachelor certificate for Master students)
- Reference letter (optional)

Benefits

- **Villach:** Möglichkeit für Coaching, Mentoring & Netzwerken; Trainingsangebot & strukturierte Entwicklungsplanung; Möglichkeit zur internationalen Entsendung; Verschiedene Karrierepfade: Project Management, Technical Ladder, Management & Individual Contributor; Flexible Arbeitszeit: Vertrauensgleitzeit; Möglichkeit zum Home Office; Offenheit für Teilzeit (auch in der Elternzeit); Sabbatical; Kindergarten am Standort Villach & Klagenfurt; Sozialberatung & Betriebsarzt; Gesundheits- & Vorsorgeprogramme; Kantine; Versicherungsangebot zu attraktiven Konditionen; Lohnfortzahlung im Krankheitsfall; Arbeitgeberfinanzierte betriebliche Altersvorsorge; Offenheit für flexiblen Übergang in die Altersrente; Erfolgsbonus; Barrierefreiheit am gesamten Standort

Why Us

Part of your life. Part of tomorrow.

Infineon is a world leader in semiconductor solutions that make life easier, safer, and greener. Our solutions for efficient energy management, smart mobility, and secure, seamless communications link the real and the digital world.

The **KAI Competence Center for Automotive and Industrial Electronics** was founded in 2006 and is located in the Villach Technology Park. The focus of our research is the reliability of power semiconductors in automotive and industrial applications.

** The term gender in the sense of the General Equal Treatment Act (GETA) or other national legislation refers to the biological assignment to a gender group. At Infineon we are proud to embrace (gender) diversity, including female, male and diverse.*

Infineon Hub - Connect. Create. Challenge.

The iHub at TU Wien represents an inspiring tech platform, networking area and event location, connecting Infineon Austria with tech experts, science specialists and young professionals.

Check out our upcoming events:

[Infineon iHub](#)

