

The Carinthia University of Applied Sciences sets high academic standards in an excellent environment in Southern Austria where education, culture and technology are optimally combined. We ensure modern and application oriented degree programs in the fields of Engineering, Management, Health Science and Social Work at superbly equipped FH-sites, with excellent teaching and research staff complemented by part-time lecturers from industry and international guest lecturers. Further Information can be found on our homepage: www.fh-kaernten.at/en.

Silicon Austria Labs (SAL) and the **Carinthian University of Applied Science (CUAS)** are cooperating to offer a new joint position within their branch of Engineering & IT.

Degree Program Director and Research Principal for "Power Electronic Systems and Circuits" (m/f/d)

As a Degree Program Director at CUAS and jointly as a Principal on Power Electronics at SAL you will strengthen the emerging field of Power Electronics in Carinthia, Austria.

We are looking for a highly qualified academic professional to represent our research and educational area of Power Electronics. While this strongly growing area is already represented in our existing Master courses, we need your experience and ambition to launch a dedicated Industrial Power Electronics Master curriculum at our Carinthia University of Applied Sciences within the next two years. In addition, you will lead and initiate research projects in Power Electronics at the Silicon Austria Labs (SAL) which is located in close vicinity to the university.

Your tasks:

- Degree Program Director Industrial Power Electronics
 - o Organization and execution of education on master level in the field of power electronics
 - Teaching of 6 hours per week in the field of power electronic components, systems and circuits
 - Responsibility and Participation in organizational and administrative tasks
 - o Definition and supervision of Master theses
- Principal scientist at SAL, Division Power Electronics (depending on qualification)
 - o Setting up, defining and leading of research projects together with various industrial and scientific partners
 - o Active contribution to Division strategy together with the Division Head and peers
 - o Supervision of research teams incl. Master- and PhD-students
 - o May be combined with the function of a management position as Head of Research Unit in Villach (depending on qualification)

Your profile:

- Relevant doctoral degree in Electrical Engineering, preferably with focus on Power Electronics
- Experience in acquisition and management of cooperative research & funding projects
- Several years of practical experience in one or more of following fields:
 - o Design, implementation and validation of advanced power electronic circuit topologies
 - Modeling and simulation (electrical, magnetic, thermal, EMC, ...) of power electronic devices, circuits and systems
 - o Design of discrete & integrated power electronic circuits and devices
 - o Multiphysics characterization of power semiconductor devices (especially wide-bandgap) and passive components focus on electrical and thermal domain performance
 - o Aging and reliability aspects for power electronic devices, circuits, and components; development of appropriate tools for lifetime investigations and in situ management





- Nonlinear, coupled dynamic modeling and computer simulation of power electronic circuits, passive components, and semiconductor devices; model-experiment correlation, especially for electrical and thermal domains
- o Gate driving of Power semiconductors with a focus on emerging active techniques
- Established network in the relevant scientific community and electronics/semiconductor industry
- High scientific output and track record (publications, research projects) in the field of power electronics
- Analytical and structured thinking and acting, creativity in solution finding
- Adaptability and flexibility
- Didactical skills and enthusiasm in teaching
- Excellent command of English (B2/C1) spoken and written
- Basic command of (or willingness to learn) German (B2 spoken and written)

Our offer:

Extent of employment: unlimited full-time position (40 hours per week) 60% CUAS, 40% SAL

Start: winter semester 2020

Location: Campus Villach, Europastrasse 4, 9524 Villach-St. Magdalen

Minimum Salary: EUR 88.000,- (gross, annual salary, fulltime; to be negotiated depending on your

qualifications and professional experience)

Application deadline: 30.08.2020

You can find an impression of working and living in Villach/Austria at:

https://www.welcome2villach.at/

If you are interested in this position, please submit your <u>full application via our website</u>: <u>www.fh-kaernten.at/jobs</u>.

Requested documents:

- letter of motivation
- curriculum vitae
- list of publications and projects
- certificates
- proofs of practical experience

Note: Hearing will be organized as online-Meeting using Microsoft Teams

We look forward to receiving your application!

