

What we are looking for?

We are looking for perspective and ambitious candidates with Dr. Degree (PhD) in the field of power electronics & power converters. The candidate should be able to demonstrate:

- An evidence of research capability, with a specific focus on advanced power converter topologies, applications, power semiconductors, energy storage devices and power converters control,
- Very good analytical skills & methods,
- Experience with simulation and design tools such as Plexim, PSIM, FEM tools, Altium Designer and MATLAB,
- Experience in power converters design, debugging & testing is required,
- Experience in analysis and design of MF & HF magnetics (inductors and transformers) is desired, and
- Experience in scientific writing and evidence of peer-reviewed publications is required.
- **Social Competence:** Teamwork skills; ability to work independently; problem-solving skills; communication skills

The Position Mission

The position mission is split between these major activities:

- Independent conduction of courses and administration of examinations (8 semester hours) **65%**
- Independent research **25%**
- Supervision of students including supervision of bachelor theses **5%**
- Collaboration in research, teaching, and administrative tasks **2.5%**
- Participation in organizational and administrative tasks as well as evaluation measures **2.5%**

Research project(s) are organized according to the following tasks:

- Literature & patents survey,
- Proposal of a novel solution(s),
- Theoretical analysis of the solution(s) proposed,
- High level hardware design and simulation using simulation tools such as Plexim, PSIM, Maxwell & FEM Tools,
- High level controls design and simulation using simulation tools such as Plexim, PSIM & Matlab,
- A proof of the concept prototype manufacturing and testing, and
- Patents, IEEE Journals and Conference publications.

What we are offering?

- A challenging job in a dynamic and ambitious university and a stimulating internationally renowned research environment,
- Exciting research projects with direct transfer from academia to industry R&D,
- Collaboration with worldwide recognized industrial and academic institutions and partners,
- Full time temporary appointment for 4 years with possibility to extend the appointment to permanent, and
- Gross salary of approximately 65,8 k€ (14x4.700€) plus additional project-based bonus.
-

The Location

The main working location is facility of Innsbruck Power Electronics Laboratory (the i-PEL), Institute of Mechatronics, University of Innsbruck, Innsbruck, Austria. For some projects founded by 3rd party partners, periodic traveling to the partner facility in France, Italy and Austria may be required.

Contact:

Univ. - Prof. Dr. Petar J. Grbović

e-mail: petar.grbovic@uibk.ac.at

phone: +43 512 507 62830

cell phone: +43 664 12 50 951

i-pel/ Leistungselektronik, Insitut für
Mechatronik

Technikerstr. 13, 6020 Innsbruck

Office, Mag. Anna Gabriele Salchner

e-Mail: i-pel@uibk.ac.at

phone: +43 512 507-62831

i-pel/ Leistungselektronik, Insitut für
Mechatronik

Technikerstr. 13, 6020 Innsbruck

