

Professor (with special responsibilities) in Analogue and Power IC Design

DTU Electrical Engineering at Technical University of Denmark invites applications for a position as Professor (with special responsibilities) in Analog and Power IC design.

You will be associated with our Electronics group (ELE) with 35 enthusiastic staff members responsible for analogue, power and mixed-mode integrated circuit (IC) design, switch-mode audio power amplifiers, as well as power electronics research including advanced high efficiency high power density switching mode power supplies and very high frequency (VHF) power supplies.

You will have a leading role for building up an internationally recognised research activity within analogue, power and mixed-mode integrated circuits supporting the continuously decreasing size, weight and cost of all types of electronic circuitry enabling an increase of applications and features in many different areas.

The vision is to have Power-Supply-in-Package (PSIP) and Power-Supply-on-Chip (PwrSoC) at 10-100 times the power ratings compared to today's state-of-the-art.

Responsibilities and tasks

You will participate in both fundamental and advanced level research-based education of students in cooperation with the scientific staff of the ELE group, and you must contribute actively to the theoretical and experimental research and innovation in our group and in related areas including publishing results in international recognized journals.

For this position, we expect you to play a leading role in research, education and innovation within analogue, power and mixed-mode integrated circuits. Also, we expect you to play a leading role in creating networks and joint projects between key scientific staff from the various engineering fields involving analogue, power and mixed-mode integrated circuits.

In addition, you should initiate a network of companies involved in analogue, power and mixed-mode integrated circuits with the purpose of establishing joint projects between the university and companies both domestic and international.

You will be an integrated part of our Electronics Group, and we expect you to contribute actively to the internal collaboration with other groups in the department as well as with groups from other departments.

The professor is expected to participate in teaching at the BSc, MSc and PhD levels. For international candidates, DTU can provide Danish language courses enabling the candidates to teach in Danish within 2-3 years.

Qualifications

We will favour a candidate who:

- has scientific production at international level, research potential, and ability to lead and develop a research team
- has the ability to promote and utilize research results
- has experience with innovation activities
- has the ability to teach at all university levels
- can document formal didactic training and have experience in development of courses and preferably also educational programs.

- has an all-round experience basis, including international experience and experience with international research collaborations
- has a large research network, including active contacts to fabs and foundries
- has a track record in attracting funding to the research area
- has visions within the research area
- is experienced in supervising PhD students
- is open-minded and team-work oriented to strive for common ambitious goals
- has a solid knowledge about and experience with analysis and synthesis of all kinds of analogue, power and mixed-mode integrated circuits as well as with various packaging techniques and challenges

Moreover, the candidate who is highly self-motivated, enthusiastic, and has demonstrated the ability to handle many tasks simultaneously will be preferred.

You will be working in our modern and newly renovated premises with state-of-the-art electronics research laboratories and student facilities.

The working atmosphere is informal, international and interdisciplinary and we believe that our goals can be reached through collaboration.

Assessment

In the assessment of the candidates, consideration will be given to:

- Documented experience and quality of teaching and curriculum development
- Research impact and experience, funding track record, and research vision
- Societal impact
- Documented innovation activities, including commercialization and collaboration with industry
- International impact and experience
- Leadership and collaboration
- Communication skills

Consideration will also be given to:

- Documentation of personal IC design, tape-outs, and electronics laboratory experience
- Documented record of research at an international level within analogue, power and/or mixed-mode integrated circuits

We offer

DTU is a leading technical university globally recognized for the excellence of its research, education, innovation and scientific advice. We offer a rewarding and challenging job in an international environment. We strive for academic excellence in an environment characterized by collegial respect and academic freedom tempered by responsibility.

Salary and appointment terms

The appointment will be based on the collective agreement with the Danish Confederation of Professional Associations. The allowance will be agreed upon with the relevant union.

The position is available for a 5-year period and may be extended for up to 3 additional years. At the end of the period, the employee in question will transfer to a position as associate professor at the university. More information can be found here: [Career paths at DTU](#).

Further information

Further information may be obtained from Head of Department, Kristian Stubkjaer, tel.: +45 4525 3654 and Head of the Electronics Group, Professor Michael A.E. Andersen, tel.: +45 4525 3601

You can read more about DTU Electrical Engineering on www.elektro.dtu.dk and the Electronics group at www.ele.elektro.dtu.dk.

Application procedure

Please submit your online application no later than **XXX 2018 (local time)**. Apply online at www.career.dtu.dk.

Applications must be submitted as **one PDF file** containing all materials to be given consideration. To apply, please open the link 'Apply online', fill out the online application form, and attach **all your materials in English in one PDF file**. The file must include:

- Application (cover letter) addressed to the President
- CV
- A vision for future research
- Teaching and research statement, with a focus on the "Assessment" bullet points listed above
- Documentation of previous teaching and research, as related to the "Assessment" bullet points listed above
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <http://orcid.org/>)
- Diploma (MSc/PhD)

Applications and enclosures received after the deadline will not be considered.

All interested candidates irrespective of age, gender, disability, race, religion or ethnic background are encouraged to apply.