Tenure track or tenured Professor of Energy Conversion and Storage in School of Engineering
Aalto is a university where research, art and education are promoted hand in hand. We are committed to high-quality research with significant impact on the international scientific community, industry and business, as well as the society at large. Aalto’s unique profile stimulates collaborations between disciplines and facilitates new innovations.

Aalto University has six schools with nearly 11,000 students and more than 4000 employees, of which close to 400 are professors. Our campuses are located in Espoo and Helsinki, Finland.

Aalto is an international community: more than 30% of our academic personnel have an international background. Excellence in research is combined with multidisciplinary activities, engaging both students and the local innovation ecosystem.

Aalto University was founded in 2010 as three leading Finnish universities, Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki, were merged.
The main task of the School of Engineering is to renew technologies related to the technical industry and the built environment through scientific research, technological innovation and inspiring education. Our objective is to create new knowledge, information and solutions to serve the goals of sustainable development.

**Research connecting with the society**

Our research topics are highly relevant to the surrounding society, connecting theory with practice. Collaborative projects with the technological industry and the surrounding society have been a trademark for decades. Our research focus areas are Arctic Technology, Mechanics and Materials, Multidisciplinary Energy Technologies, Sustainable Built Environment, and Systems Design and Production. Our unique research facilities, e.g. Design Factory, Aalto Ice Tank, ADDLAB (Aalto Digital Design Laboratory) and The school has advanced research environment for energy technology with three laboratory halls and spaces. In addition, Industrial Internet Campus provide excellent infrastructure for researchers and students. Other significant parts of the infrastructure include laboratories for water engineering, materials and manufacturing engineering, transportation engineering, geoengineering and construction materials. We also have full-scale test halls for mechanics and structural engineering.

**Educating problem solvers and innovators**

Our MSc programmes in eight disciplines reflect both the long-term research excellence of the school and the future needs of society. We seek to educate problem-solvers who have a firm grasp of fundamental principles, and who are able to innovate and drive renewal as part of multidisciplinary teams. We promote entrepreneurship and innovation, and are a home of several start-ups.

As a result of the high level of stakeholder involvement, most of our MSc graduates are employed in leadership and expert positions immediately at graduation.

More info at eng.aalto.fi
About our Department

Founded in 2016, the Department of Mechanical Engineering combines expertise in its field previously found within the Department of Applied Mechanics, the Department of Engineering Design and Production, and the Department of Energy Technology.

The Department conducts research in engineering related to mechanics and energy technology. The research in energy technology is organised under two thematic research groups: 1) Energy efficiency and systems, 2) Thermodynamics and combustion technology.

The Department’s main research areas besides energy technology are engineering design, engineering materials and digital production, marine technology and arctic technology. The Department provides education in bachelor, master’s and doctoral programmes.

Currently, the department has 30 professors together with lecturers, post-doctoral researchers, doctoral students, and technical staff. In total, the number of personnel is about 250.

The Thermodynamics and Combustion Research Group

The research group specializes in topics where computational and experimental research of the individual professors’ teams support one another. Fluid mechanics, thermodynamics, heat and mass transfer, chemistry, applied mathematics, and computer science do form the scientific basis for our research and education. The applications of our research cover fluid flows, reacting flows, heat and mass transfer on multiple length and time scales, and bio-energy conversion. We work on reacting multiphase flow problems in engines and recovery boilers, we work on renewable fuels and we work on mineral carbonization of CO2. We carry on research on the challenging chemical and physical phenomena affecting energy conversion and storage with technology in focus.

The research group has a solid funding situation and full support from the industry. The Group’s research topics are right in the core of the Aalto University strategy.

More info at ene.aalto.fi
Description and main tasks

We are seeking talented individuals who are interested in an excellent opportunity to pursue a successful scientific career. The position is placed in the Department of Mechanical Engineering in the group of Thermodynamics and Combustion Technology and it can be filled at any level of Aalto Tenure Track system (including tenured positions).

We wish the new professor to further strengthen the research and education in energy conversion and storage technologies. Future research areas for this position could be for example, but not limited to: thermal energy, thermal materials, heat and mass transfer, power to gas/fuel and gas/fuel to power applications or waste heat recovery.

What we expect

Applicants are expected to have a doctoral degree in the field of energy conversion and storage technologies, or a related discipline. Experience in leading a research group, and success in competitive research funding will be considered as an advantage. The applicants will be reviewed on the basis of their excellence in research, teaching and academic leadership and activity in scientific community.

A person at any level of the academic tenure track system in Aalto University is expected to perform world-class research, to teach, supervise and otherwise advance academic education, to be an active member of the international scientific community, and to exhibit academic leadership. Career advances on the tenure track are based on scheduled performance assessments, which take into account the candidate’s merits in all these areas.

How to apply

Apply and get more information here

For the application, please include your:

- Curriculum Vitae
- List of publications (with the five (5) most significant publications highlighted)
- Research statement describing past research and plans for future research at Aalto.
- Teaching portfolio
- Names, positions, affiliations and e-mail addresses of five senior research leaders available for providing recommendation letters
- Any other relevant evidence of qualifications

Application deadline

January 14th, 2018

For further questions, you may contact

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HEAD OF DEPARTMENT JOUNI PARTANEN
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Aalto University follows the salary system of Finnish universities, but applicants may also provide salary requirements.
Living in Finland

Finland has a high-class education system. We value equality, cooperation, freedom of speech and free press.

Finland is a great environment for innovation and entrepreneurship: low level of hierarchy, investments in R&D, a strong innovation culture and a high number of patents per capita are just some of the characteristics of our society.

Gender equality, open society and low levels of corruption make Finland a very attractive country for researchers, innovators, and professionals worldwide.

Cleanliness, close relationship with nature, high level of social security and services and original and versatile cultural life attract people from all over the world to join our Nordic community.

Helsinki is one of Europe’s leading capital cities and a vivid center of scholarship. As a living and working environment, Finland is consistently ranked highly in quality-of-life and competitiveness studies. According to World Happiness Report 2016, people living in Finland are one of the happiest in the world.

Welcome!

More info at finland.fi
Aalto University –
a community of
game changers
aalto.fi