The Department of Electronics and Nanoengineering at Aalto University is looking for an excellent

POSTDOC / RESEARCH FELLOW IN WIRELESS POWER TRANSFER
to join our multidisciplinary team for research of novel approaches to wireless power transfer. The planned program in wireless power transfer and handling will develop and broadly extend the on-going research of the School of Electrical Engineering in this field. The research will develop both theoretical aspects and industrial applications of wireless power transfer technology.

This position will offer multidisciplinary cooperation with several professors at the department, especially Sergei Tretyakov (theoretical electromagnetics and metamaterials), Jorma Kyyra (power electronics), Keijo Nikoskinen (electromagnetics and numerical methods), Katsuyuki Haneda (RF measurements and modeling), Zachary Taylor (terahertz techniques), Konstantin Simovski (thermophovoltaics, solar cells), Kari Halonen (microwave power harvesting), and Ville Viikari (wireless sensors). The department has new experimental facilities from radio to terahertz and near infrared, as well as powerful computer clusters.

The work responsibilities include:
• Conduct excellent research, propose own research ideas and to be an active member of the team
• Develop and investigate new principles and methods for wireless power transfer applications
• Develop laboratory prototypes and conduct experimental studies
• Contribute to writing scientific publications and project documentation
• Prepare research proposals and apply for research funding
• Guide Masters and doctoral students
• Take part in project management duties
• Teaching responsibilities will be decided according to your interests and experience.

Research group
The research will be conducted in the group of the Department of Electronics and Nanoengineering Theoretical and Applied Electromagnetics of Complex Media jointly with the Power Electronics research group at the Department of Electrical Engineering and Automation.

Professor Sergei Tretyakov leads the Theoretical and Applied Electromagnetics of Complex Media group, which works on electromagnetic theory, analytical modelling, theory and design of composite electromagnetic materials, including metamaterials, electromagnetic computations and measurements. Information about the group can be found at http://meta.aalto.fi/.

Professor Jorma Kyyra leads the Power Electronics research group, and the research and innovation efforts on industrial and power electronics are taking place at three complementary levels: algorithms, methods, and applications. Information about the group can be found at https://www.aalto.fi/en/department-of-electrical-engineering-and-automation/power-electronics.
The selected new postdoctoral researcher is expected to create a good collaboration with the academics and researchers in the departments based on his/her own research interests.

**Required and expected experience and skills**

- PhD in Electrical Engineering or Physics specializing in Wireless Power Transfer, Electromagnetics, or Power Electronics
- A proven track record of scientific publications in top-tier journals
- Excellent command of English
- Solid theoretical background in advanced electromagnetics and/or advanced power electronics
- Experience in hardware prototyping and using laboratory test equipment

In addition, preference will be given to applicants who have

- Participated in international research collaborations
- Proven experience in writing research proposals
- Experience in wireless power transfer technologies, both theoretical and practical aspects.

**How to apply**

Please submit your application through our recruiting system (https://www.aalto.fi/en/open-positions/postdoc-research-fellow-in-wireless-power-transfer) and include the following documents in English:

- Application letter
- Curriculum Vitae
- Course transcripts of Doctoral degree with grades and certificate of the Doctoral degree
- List of publications with the most significant publications highlighted
- Research statement describing past research and plans for future research
- References

The application period closes on 03 August 2020, but we will start reviewing candidates immediately upon the receiving of the applications. Applications will be considered until the position is filled.

**Salary and contract terms**

The position will be initially filled for 1 year, with a possible extension depending on research funding. The expected starting salary for a Postdoctoral Researcher is 3500-3800 €/month and for a Research Fellow approximately 4000€/month, both depending on experience and qualifications. As an employer, Aalto University provides excellent learning and development opportunities as well as extensive occupational health care services, commuter ticket benefit and versatile exercise services by Unisport. We would prefer your start during the autumn of 2020, yet this can also be negotiated.
Postdoc / Research Fellow in Wireless Power Transfer
Aalto University School of Electrical Engineering

Direct Link: https://www.AcademicKeys.com/r?job=144538
Downloaded On: Jul. 16, 2020 7:51am
Posted Jul. 13, 2020, set to expire Aug. 3, 2020
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More information
If you wish to hear more about the position, please contact Dr Prasad Jayathurathnage or Professor Sergei Tretyakov [email firstname.lastname@aalto.fi].

About Finland
Finland is a great place for living with or without family - it is a safe, politically stable and well organized Nordic society. Finland is consistently ranked high in quality of life and was just listed as the happiest country in the world: https://worldhappiness.report/ed/2020/social-environments-for-world-happiness/. For more information about living in Finland: https://www.aalto.fi/services/about-finland.

EEO/AA Policy
Aalto University is a community of bold thinkers where science and art meet technology and business. We are committed to identifying and solving grand societal challenges and building an innovative future. Aalto has six schools with nearly 11 000 students and a staff of more than 4000, of which 400 are professors. Our main campus is located in the Helsinki metropolitan area, Finland. Diversity is part of who we are, and we actively work to ensure our community’s diversity and inclusiveness in the future as well. This is why we warmly encourage qualified candidates from all backgrounds to join our community.

Contact Information
Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact
Professor Sergei Tretiakov
Department of Electronics and Nanoengineering
Aalto University School of Electrical Engineering
Maarintie 8, Espoo
Helsinki
Finland

Contact E-mail
firstname.lastname@aalto.fi