2 Postdoctoral Researchers in Experimental Quantum Photonics and Condensed Matter Physics
Aalto University

Job Title	2 Postdoctoral Researchers in Experimental Quantum Photonics and Condensed Matter Physics
Department	T411 Dept. Electronics and Nanoeng
Institution	Aalto University , , Finland
Date Posted	Oct. 31, 2024
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Electrical and/or Electronics
Job Website	https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/XMLNAME-2-Postdoctoral-Researchers-in-Experimental-Quantum-Photonics-and-Condensed-Matter-Physics_R41310
Apply By Email	

Job Description

Aalto University is where science and art meet technology and business. We shape a sustainable future by making research breakthroughs in and across our disciplines, sparking the game changers of tomorrow and creating novel solutions to major global challenges. Our community is made up of 13 000 students, 400 professors and close to 4 500 other faculty and staff working on our dynamic campus in Espoo, Greater Helsinki, Finland. Diversity is part of who we are, and we actively work to ensure our community’s diversity and inclusiveness. This is why we warmly encourage qualified candidates from all backgrounds to join our community.

The Department of Electronics and Nanoengineering of Aalto University School of Electrical Engineering is looking for a highly motivated and talented

2 Postdoctoral Researchers in Experimental Quantum Photonics and Condensed Matter Physics
Aalto University

2 Postdoctoral Researchers in Experimental Quantum Photonics and Condensed Matter Physics to join the research work.

Job description
Your goal as a Postdoctoral Researcher is to develop integrated quantum devices or other solid state devices based on various nanomaterials, such as one-dimensional materials (e.g. carbon nanotubes, nanowires) and two-dimensional layered materials (e.g. transition metal dichalcogenides) and their heterostructures. You'll get to conduct high quality research independently and to work as an active member of the research groups by taking part in project management duties and guiding M.Sc. and Doctoral students. The project is part of the current programs of the group funded by ERC advanced grant, Academy of Finland, EU Quantum Flagship.

Research group
This research position will be supported by the [url=https://www.aalto.fi/en/department-of-electronics-and-nanoengineering/photonics]Photonics group at Aalto, which is led by [url=https://people.aalto.fi/zhipei.sun]Professor Zhipei Sun. The group mainly focuses on the study of physical properties of various nanomaterials (e.g. carbon nanotubes, nanowires, two-dimensional layered materials) for photonic and optoelectronic applications. The group is located on the university campus near Helsinki and offers a motivating and state-of-the-art research environment. The recent breakthroughs of the group include miniaturized spectrometers (Science 365, 1017(2019); Science 378, 296(2022)) and moire physics (Science 379, eadg0014(2023); Nature Materials 23,1179(2024)) Details of the publications of the research group can be found via: [url=https://scholar.google.com/citations?user=zyAEB5kAAAAJ&hl=en]https://scholar.google.com/cita

Requirements
- PhD degree in quantum photonics, condensed matter physics or related topics within the last 5 years is favorable for the position
- Excellent knowledge of quantum photonics, integrated photonics, or other low-temperature device experiments
- Experience in nanomaterial-based device fabrication is desirable and will be considered an asset.
- Proven track record in major scientific research
- Good command of English is necessary

Salary and contract terms
Postdoctoral Researcher position will be filled for 1-3 years. The expected starting salary is approximately 4000€/month, depending on experience and qualifications. Salary will increase according to responsibilities and performance over time. As an employer, Aalto University provides excellent learning and development opportunities as well as occupational health care services,

2 Postdoctoral Researchers in Experimental Quantum Photonics and Condensed Matter Physics
Aalto University

commuter ticket benefit and versatile exercise services by Unisport. Finland has a comprehensive social security system. The preferable starting time is before July, 2025 (or as soon as possible) but can be also negotiable.

Ready to apply?
All material should be submitted in English and a pdf-file. You can send in max. Five (5) documents up to 5M bit in size. Application material should include:??

- Application cover letter
- Course transcripts of Doctoral degree with grades
- Curriculum Vitae with references
- List of publications with the most significant publications highlighted
- Research plans for future research

The call is open until January 31, 2025 but we will start reviewing and interviewing candidates immediately. Applications will be considered until the position is filled.

Please note: Aalto University’s employees should apply for the position via our internal HR system Workday (Internal Jobs) by using their existing Workday user account (not via the external webpage for open positions). Aalto University’s students and visitors should apply as external candidates with personal (not aalto) email.

More information
For additional information, please contact Professor Zhipei Sun, firstname.lastname@aalto.fi. For additional information on recruitment process, please contact HR Partner Karoliina Walldén, e-mail [url=mailto:firstname.lastname@aalto.fi]firstname.lastname@aalto.fi.

About Finland
Aalto University is an international community, more than 40% of our academic faculty comes from outside 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 again as the happiest country in the world: [url=https://worldhappiness.report/news/finland-again-is-the-happiest-country-in-the-world/]http://worldhappiness.report/news/finland-again-is-the-happiest-country-in-the-world/. For more information about living in Finland: [url=https://www.aalto.fi/en/services/why-finland]https://www.aalto.fi/services/about-finland

More about Aalto University:
Aalto.fi
twitter.com/aaltouniversity

2 Postdoctoral Researchers in Experimental Quantum Photonics and Condensed Matter Physics
Aalto University

facebook.com/aaltouniversity
instagram.com/aaltouniversity

Contact Information

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

Contact

Finland