

Postdoc Position in Nanomagnetism and Plasmonics

The Nanomagnetism and Spintronics (NanoSpin) group at the Department of Applied Physics, Aalto University is looking for a highly motivated postdoc for experimental work at the boundary between magnetism and plasmonics. The project focuses on the exploitation of plasmon excitations in all-optical magnetic switching and the realization of field-controlled lasing in magnetoplasmonic systems with the aim of developing topological photonic nanostructures. Your main responsibility is to develop new concepts, fabricate samples, perform (magneto)-optical measurements and advance the measurement setups. For the experiments, a state-of-the-art infrastructure for nanofabrication and optical characterization is available.

REQUIREMENTS

We are looking for outstanding candidates with a strong background in magnetism, plasmonics or a related field. The candidate should hold a Ph.D. degree in physics or equivalent and have documented experience in optical measurements and data analysis. Experience in electron-beam lithography, magnetic characterization and/or theoretical/numerical work in support of the experiments are considered as other assets.

The ability to collaborate and interact with other researcher and research communities are important. You should have good communication skills, good analytical and experimental skills and good ability to work independently toward the goals of the project.

SALARY AND WORKING TIME

The salary ranges from 3500€ to 3900€ per month, depending of previous experience. Following the standard practice in the Department of Applied Physics, the contract will initially be made for 2 years.

PLACE AND INFRASTRUCTURE

As a postdoc, you will join the NanoSpin research group at Aalto University (<https://www.aalto.fi/department-of-applied-physics/nanomagnetism-and-spintronics-nanospin>). The group focuses on cutting-edge research on electric-field controlled magnetism, magnonics, and magneto-plasmonics in hybrid nanoscale structures. The NanoSpin laboratory is equipped with instrumentation for nanomaterial fabrication and advanced electronic, magnetic and magneto-optical characterization. Besides, you will have full access to the OtaNano research infrastructure for nano- and microtechnologies, comprising advanced equipment for nanofabrication and microscopy (<https://www.aalto.fi/otanano>). As a postdoc in the

NanoSpin group, you will be part of a vibrant and multidisciplinary research community. The project is funded by the Academy of Finland and involves national and international collaborations.

Aalto University has six schools with nearly 11 000 students and 400 professors. It is the largest university in Finland focusing on education, research and technology, science, business, and arts. The NanoSpin group is located on the Otaniemi campus in Espoo (10 km from the city center of Helsinki), one of the largest high-tech hubs in Northern Europe.

HOW TO APPLY

Candidates should send the following documents (all in English) as a single pdf-file.

- Application
- CV
- List of publications
- Highest degree certificate
- Contact information of three references

Apply through the link: <http://www.aalto.fi/en/about/careers/jobs/view/1891/>
THIS SHOULD BE RENEWED!

The deadline for applications is 31 May 2019, but the position will remain open until filled. For questions, please contact Prof. Sebastiaan van Dijken (see contact information below). Aalto University reserves the right for justified reasons to leave the position open, to extend the application period, reopen the application process, and to consider candidates who have not submitted applications during the application period.

ABOUT FINLAND

As a living and work environment, Finland is consistently ranked highly in quality-of-life and competitiveness studies. It is the happiest place in the world according to a 2018 World Happiness Report. Finland is the most stable, freest and safest country in the world in 2018. Helsinki is the third best city in the world to live in according to a 2016 report by Metropolis magazine. Finland has also been ranked 10th in the Global Competitiveness Index 2017-2018 of the World Economic Forum. And Finns drink the most coffee per capita in the world; by the way, coffee is free at our institute! For sources see

https://www.stat.fi/ajk/satavuotiassuomi/suomimaailmankarjessa_en.html

Aalto University offers support for moving of international staff to Finland. Some useful information is available at:

http://www.aalto.fi/en/about/careers/international_staff/

ADDITIONAL INFORMATION

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