

Postdoc position at Aalto University

Wed, 2011-08-24 08:36 - [Pertti Hakonen](#) [1] **At:** Aalto University, Finland
Deadline: 27 November, 2011

Location

Low Temperature Laboratory, Aalto University Aalto 00076 Finland
60° 8' 59.7012" N, 24° 38' 20.3784" E

NANO group (http://l.tl.tkk.fi/wiki/LT/Nano_Group [2]) of the Low Temperature Laboratory of the Aalto University is looking for postdoc to work on Spin Transport and Correlations in graphene. This work belongs to a European project (<http://l.tl.tkk.fi/ents> [3]) involving six leading research groups in coherent nanoelectronics. Low Temperature Laboratory is coordinating the project.

The postdoctoral research scientist will be responsible for the cross correlation measurements on entangled spins of two electrons injected into graphene as a Cooper pair from a superconducting contact electrode. For these challenging experiments, we are looking for an experimentalist who has strong interest in low-temperature nanophysics. We expect the candidates to have a proven track record in quantum nanophysics. Additional background in graphene, spintronics, microwave technology, or superconductivity will be appreciated. The research will be carried out at Aalto University which has state of the art facilities for nanofabrication and characterization (<http://www.micronova.fi> [4]).

Besides the work on entangled pairs in graphene, the candidate will be involved in Electromechanical Resonators of Graphene in the GHz regime where the coupling of mechanical and electronic degrees of freedom will be studied. The postdoctoral research scientist will take part in the development of graphene NEMS resonators and measurements of their vibrational motion down to the quantum limit. For this work, we have up-to-date facilities for microwave frequency investigations in the circuit QED settings.

To apply, please send an e-mail containing your CV and a list of publications to Prof. Pertti Hakonen ([pertti \[dot\] hakonen \[at\] aalto \[dot\] fi](mailto:pertti.hakonen@aalto.fi)). Please, include the names of two references with phone numbers.

The salary starts around 3300 Euro/month, and it will increase with responsibilities depending on the performance of the candidate. The position will be filled for 24 months, with a possible extension for 12 months. Consideration of applications will begin immediately and will continue until the position is filled during fall 2011.

- [Postdoc](#) [5]

Source URL: <http://qurope.eu/db/jobs/postdoc-position-aalto-university>

Links:

- [1] <http://qurope.eu/users/nanopjh>
- [2] http://l.tl.tkk.fi/wiki/LT/Nano_Group
- [3] <http://l.tl.tkk.fi/ents>
- [4] <http://www.micronova.fi>
- [5] <http://qurope.eu/db/jobs/type/postdoc>