

13th October 2015

Staff or Senior Scientist position in cryo-transmission electron microscopy (cryo-TEM) available at OtaNano infrastructure at Aalto University

Nanomicroscopy Centre in Aalto University, which is a part of the OtaNano infrastructure (<http://otanano.aalto.fi/>), invites applications for a **Staff or Senior Scientist position in cryo-electron microscopy**. We seek candidates with a strong experience in cryo-electron microscopy and tomography techniques as well as excellent interpersonal and technical skills.

Nanomicroscopy Centre at the Department of Applied Physics offers state-of-the-art microscopy facilities with various high-resolution microscopy apparatus for soft-, hard-, and bio-material characterization - including four transmission electron microscopes: a double Cs-corrector TEM (JEOL JEM-2200FS), a liquid-helium cryo-TEM (JEOL JEM-3200FSC), a high-resolution TEM (JEOL JEM-2800), and a FEI Tecnai 12 TEM; in addition to two scanning electron microscopes; and scanning probe microscopes. More information available at <http://nmc.aalto.fi/>.

Job description: This is a full-time position with main responsibilities including:

- Manage the JEOL JEM-3200FSC cryo-electron microscope.
- Provide technical assistance to new microscope users and actively organize user training for three transmission electron microscopes (JEOL JEM-3200FSC, JEOL JEM-2800, and FEI Tecnai 12).
- Participate in organizing courses on electron microscopy and sample preparation techniques for researchers and students.
- Actively participate in developing cryo-EM methods, such as cryo-TEM tomography and STEM tomography.
- Carry out own research in an area relevant to electron microscopy or material sciences.

Qualification and experience: An optimal applicant has the following qualities:

- Appropriate PhD degree in physical/biological sciences/engineering or related discipline.
- Extensive experience in the operation of cryo-transmission electron microscopes including cryo-sample preparation.
- Experience in 3D cryo-electron tomography and automatic data acquisition software, such as SerialEM and Leginon.
- Experience in Linux/Unix-based operation systems and necessary programming skills to implement different reconstruction methods for electron tomography.
- Excellent interpersonal, communication and presentation skills and the ability to interact with staff and facility users at all levels.

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- Ability to work flexibly with occasional out-of-hours working both independently and as a part of a multidisciplinary team.
- Good teaching and pedagogical skills.
- Broad understanding of electron microscopes from both theoretical and technical sides.
- Experience with scanning electron microscopy and scanning probe microscopy is considered an asset.

Application should include (all documents in English):

- Letter of motivation (max. two pages)
- Curriculum vitae
- Educational certificates
- A statement of teaching experience and/or interest
- Letter of recommendation or contact details of two possible referees.

Please send your application as a single PDF file at earliest convenience by 20th December 2015 through the Aalto University recruitment system. Please apply through the link: <http://www.aalto.fi/en/about/careers/jobs/view/639/>

Staff Scientist position available at OtaNano infrastructure at Aalto University

Nanomicroscopy Centre in Aalto University, which is a part of the OtaNano infrastructure (<http://otnano.aalto.fi/>), invites applications for a **Staff Scientist** position. We seek candidates with strong technical skills, good understanding of electron microscopy and scanning probe microscopy techniques, as well as ability and aptitude for teaching.

Nanomicroscopy Centre offers state-of-the-art microscopy facilities with various high-resolution microscopy apparatus for soft-, hard-, and biomaterial characterization - including four transmission electron microscopes: a double Cs-corrector TEM (JEOL JEM-2200FS), a liquid-helium cryo-TEM (JEOL JEM-3200FSC), a high-resolution TEM (JEOL JEM-2800), and a FEI Tecnai 12 TEM; in addition to two scanning electron microscopes (JEOL JSM-7500FA, and Zeiss Sigma VP); and scanning probe microscopes. More information available at <http://nmc.aalto.fi/>.

Job description

This is a full-time position with main responsibilities including:

- Manage the infrastructure, microscopes, and other equipment at the Nanomicroscopy Centre.
- Provide technical assistance to new microscope users and actively organize user training for scanning electron microscopes, atomic force microscopes, and transmission electron microscopes (JEOL JEM-2800, FEI Tecnai 12).

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- Participate in organizing courses on electron microscopy and sample preparation techniques for researchers and students.
- Perform imaging for clients (researchers, industry, etc.).
- Actively participate in developing the infrastructure.

Qualification and experience

- Appropriate PhD degree in physical/biological sciences/engineering or related discipline.
- Experience in the operation of scanning electron microscopes, transmission electron microscopes, and atomic force microscopes.
- Excellent interpersonal, communication and presentation skills and the ability to interact with staff and facility users at all levels.
- Good teaching and pedagogical skills.
- Good understanding of electron microscopes from both theoretical and technical sides.
- Experience with the Linux operating system and programming skills, especially with Python and PHP, are considered an asset.

Application should include (all documents in English):

- Letter of motivation (max. two pages)
- Curriculum vitae
- Educational certificates
- A statement of teaching experience and/or interest
- Letter of recommendation or contact details of two possible referees.

Please send your application as a single PDF file at earliest convenience by 20th December 2015 through the Aalto University recruitment system.

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