

**Graduate / Post-Doctoral Positions**  
**National Institute for Nanotechnology / University of Alberta**  
**Nanomechanical Biosensors**

The Nanoelectromechanical Systems Laboratory of the Department of Electrical and Computer Engineering, University of Alberta, Canada, in partnership with the National Research Council National Institute for Nanotechnology (NINT) is expanding a new research program targeting the science and technology of nanoelectromechanical systems (NEMS) and biosensors, with a specific focus on the cantilever based bacterial sensors. We anticipate hiring three Ph. D level graduate students and two post-doctoral fellows for such projects within the year.

The ideal candidates will have experience in biochemistry and microbiology techniques such as dilutions; growth, maintenance, and identification of level 1 & 2 microorganisms; preparation of microbiological media, and staining. Additional experience in biosensors and/or micro/nanofabrication technologies would be viewed favorably. The successful applicants will be responsible for one or several of the following tasks:

- Develop and integrate surface derivitization chemistries for the immobilization of viruses and antibodies onto MEMS/NEMS devices;
- Characterize the performance of such resonators using optical methods, and demonstrate the NEMS-based assaying of the immobilized systems.

The researcher will also interact with a team of graduate students, post-docs, and research associates with a larger program covering several aspects of NEMS and biosensors. Funds are secured for a salary of \$36,000 per annum plus benefits for post-docs, \$19,000 /yr for PhDs students, and \$17 000 for M.Sc. students.

Start Date: anytime from February 1st, 2007. Initial one-year appointment will be offered with possible renewal for one additional year. For more information regarding post-doctoral benefits, see <http://gradfile.fgsro.ualberta.ca/postdoctoral/index.html>.

The National Institute for Nanotechnology (NINT) is an integrated, multi-disciplinary institution involving researchers in physics, chemistry, engineering, biology, informatics, pharmacy and medicine. Located on the University of Alberta campus, NINT's 15,000 square-metre building is one of the world's most technologically advanced research facility.

Please send a brief cover letter stating your earliest possible start date, a current CV to the attention of Dr. Stephane Evoy at [e-mail address below](#). Review of applications will begin on Jan 23rd, 2007.

Dr. Stephane Evoy  
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