

### **MSc or PhD position in the area of laser-induced optical nanostructures**

The Physics Department of the Royal Military College of Canada (RMCC) in Kingston, Ontario invites applications for graduate studies at the M.Sc. or Ph.D. level in the field of optics and photonics, particularly on the study of laser-induced optical nanostructures in photomechanical materials, in the laboratory of Prof. Sabat. The thesis work will allow the student to be trained on optical and photonics research equipment. The candidate will use lasers to inscribe optical nanostructures such as linear and nonlinear diffraction gratings on layers of photomechanical thin films. The candidate will be taught to make samples using specialized nanofabrication equipment such as spin-coaters, sputter-coaters and physical vapour deposition machines. They will take images of the fabricated nanostructures using an atomic force microscope. Metallic layers will be deposited on top of the nanostructures and thorough studies will be conducted on surface plasmon resonance. Eventually, these nanostructures will be used in biosensors and to increase the efficiency of organic thin-film solar cells. More details on the research can be found at <http://www.sabatresearchgroup.ca>

The successful candidate must have, or will shortly obtain, a B.Sc. or M.Sc. degree in Physics or another relevant field.

The competition will be open until the position has been filled. Financial support in the form of stipends will be given to the student accepted for this position.

In accordance with the Public Service Employment Act, preference will be given to Canadian citizens and permanent residents of Canada. Candidates are required to state their citizenship in their application.

Candidates with foreign educational credentials are required to provide proof of Canadian equivalency. You may consult the [Canadian Information Centre for International Credentials](#) for further information. International students must have minimum TOEFL scores as described at this link: <http://www.rmcc-cmrc.ca/en/registrars-office/admission-graduate-studies>

RMCC is the only federal university in Canada. All undergraduate students are military officers in training, while graduate students can either be civilian or military. Civilian graduate students don't have any association with the military. Professors at RMCC are predominantly civilian and have academic research programs funded by various organizations such as NSERC. RMCC is a coeducational and bilingual institution, and this position is offered equally to women and men.

Interested applicants should send their CVs to:

Dr. Ribal Georges Sabat  
Associate Professor,  
Department of Physics,  
Royal Military College of Canada  
PO Box 17000, Station Forces  
Kingston, Ontario CANADA  
K7K 7B4  
Tel: 613 541 6000 x 6721  
Email: [sabat@rmc.ca](mailto:sabat@rmc.ca)