

Subject: Funded Ph.D. position on polarimetric SAR images for fuel moisture mapping

Funded Ph.D. position for working on the use of polarimetric SAR images for fuel moisture mapping

I am offering a 3-year scholarship for a Ph.D. project focussing on polarimetric radar imagery for fuel moisture mapping. The goal of the project is to develop advanced methods to further enhance radar systems through exploiting polarimetric radar data. In particular, the calibration of a physics-based model will be done to map the drought code of the Canadian Fire Weather Index from polarimetric radar images. The model follows the method of Jagdhuber et al. 2011. (*Proc. 5th Int. Workshop PollnSAR 2011, Frascati, Italy*). The model will be calibrated with data acquired over Canadian and South African natural grasslands as well as over Alaska boreal forests.

The Ph.D. student will be co-directed by Prof. Brigitte Leblon (University of New Brunswick, Canada), Prof. Joseph Buckley (Royal Military College, Canada), Dr. Thomas Jagdhuber (DLR, Germany), Dr. Laura Bourgeau-Chavez (Michigan Tech Research Institute, USA) and Dr. Renaud Mathieu (CSIR, South Africa). The main laboratory will at UNB, but travels to the other laboratories will also occur.

Eligible Candidates:

- Applicants should have successfully completed a M.Sc. degree and have a strong background in geomatics, strong interest in computer coding, with interest in fire sciences.
- It is critical the applicant has some ability to program computer codes to facilitate data analysis, model development and implementation, as well as has good writing and oral skills.
- Prior research experience as documented with publications will be an asset
- Preference will be given to students from NATO countries because the candidate will be invited to travel to DLR (Germany) and MTRI (USA).

Interested applicants should email to Prof. Brigitte Leblon (bleblon@unb.ca) **before March 15th 2016** as a single pdf file a CV, a copy of academic transcripts (including TOEFL score if non-English speaking applicants), list of publications and the names/contact information for three references. Uncompleted applications will not be considered. We thank all the applicants, but only the short-listed candidates will be contacted.

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