

**Memorial University, Department of Mathematics and Statistics
Postdoctoral Research Position in Numerical Analysis, Scientific Computing
or Computational and Applied Geophysics**

Applications are invited for a postdoctoral research position within the Computational and Applied Geophysics Group (CAGG) and the Memorial University of Newfoundland Centre for Numerical Analysis and Scientific Computing, within the Department of Mathematics and Statistics. The successful candidate will work under the supervision of Dr. Ronald Haynes and other CAGG faculty (as appropriate). The research focus will be the development of novel optimization approaches to find the location of wells to best locate and characterize micro-seismic events. Duties will include the development of an appropriate objective function whose maxima correspond to the best location for monitoring wells. The postdoc will be responsible for the investigation and implementation of both gradient-based and derivative-free optimization methodologies to solve the problem. Optimization approaches designed to take advantage of available high performance computing resources will be desirable. The project is in collaboration with both industrial partners and colleagues in the Department of Earth Sciences; as such, the successful candidate will also be expected to interact on a regular basis with other CAGG faculty as well as a second postdoc supported in the Department of Earth Sciences (see <http://www.esd.mun.ca/~farq/cagg.html>). A desired, but flexible, start date of September 1, 2015 is expected.

The position is available for up to two years, with annual renewal subject to funding and performance. The minimum annual salary will be in accordance with MUN-LUMUN Collective Agreement on Behalf of Postdoctoral Fellows, and will be commensurate with qualifications and experience. A PhD and relevant experience in applied mathematics (or a related field) is expected, with experience with optimization and scientific computing preferred. Previous interdisciplinary project experience, particularly in the areas of geophysical imaging and wave propagation, is a plus. Interested applicants should send a cover letter, detailed CV, and names and email addresses of three references directly to Dr. Haynes (rhaynes@mun.ca). Review of applications will begin on June 15, 2015, and continue until the position is filled.

Memorial University is one of the two largest universities in Atlantic Canada. As the province's only university, Memorial plays an integral role in the educational and cultural life of Newfoundland and Labrador. Offering diverse undergraduate and graduate programs to almost 18,000 students, Memorial provides a distinctive and stimulating environment for learning in St. John's, a very safe, friendly city with great historic charm, a vibrant cultural life, and easy access to a wide range of outdoor activities. The city of St John's is also home to a dynamic local petroleum industry, with which the successful candidate will have ample opportunity to interact.

Memorial University is committed to employment equity and encourages applications from qualified women and men, visible minorities, aboriginal people and persons with disabilities. All qualified candidates are encouraged to apply; however Canadian citizens and permanent residents will be given priority.