

POST DOCTORAL FELLOW POSITION AVAILABLE

The Department of Civil Engineering at McMaster University invites applications for the Post Doctoral Fellow position.

Project description:

The project is related to the analysis of aging effects in reinforced concrete structures within nuclear facilities and the assessment of the corresponding safety-related margins. It involves three main aspects, viz. formulation of constitutive relations for the description of reinforced concrete suffering from chemical/physical degradation, implementation of these relations in a finite element code and extensive numerical applications pertaining to assessment of integrity of various structural elements of a nuclear generating station and examination of different refurbishing strategies.

The main aspects of the age-related degradation examined within this project will include the continuing alkali-aggregate reaction in concrete and the corrosion of the steel reinforcement. Both meso- and macroscale approaches will be developed.

Starting date: asap

Salary: \$35,000 annually (including vacation pay) plus benefits

Duration of the appointment: 1 year with a possibility of renewal

Qualifications Required:

The candidate is expected to have a sound knowledge of fundamentals of plasticity (including the basic background in modeling of chemo-mechanical interaction) and non-linear numerical techniques.

No teaching will be required.

Applicants must provide the following information:

Curriculum vitae, a statement concerning practical experience and research interests, and a list of at least three referees.

DATE OF POSTING January 17, 2012

DEADLINE FOR APPLICATIONS: January 31, 2012

SUBMIT YOUR APPLICATION TO: Prof. S. Pietruszczak, email: pietrusz@mcmaster.ca, tel. (905) 525-9140 ext. 24007, Department of Civil Engineering, McMaster University, Hamilton, Ontario L8S 4L7, Canada

Union local and bargaining unit: CUPE Local 3906 (Unit 3)

McMaster University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates including women, members of visible minorities, Aboriginal persons, members of sexual minorities and persons with disabilities.

cc: Human Resources Services
CUPE Local 3906
SGS