The Reactor Physics Methods group at AECL has an open position for a Postdoctoral Fellow. Our group is involved in the following general areas:

- 1. Lattice physics transport
- 2. Full-core neutronics analysis
- 3. Nuclear data sensitivity analysis

The ideal candidate will have:

- 1. A PhD from a recognized university in one of the following areas: Reactor Physics, Transport Theory, Physics, Mathematics.
- 2. A very strong mathematics background in one or several of the following general areas:
 - a. Integral and/or integro-differential equations;
 - b. Boundary value problems;
 - c. The calculus of variations;
 - d. Matrix and vector analysis;
 - e. Special functions.
- 3. A strong background in numerical analysis methods covering the one or several of the following topics:
 - a. Variation formulations of boundary-value problems;
 - b. Finite difference and/or finite element methods;
 - c. Direct and/or iterative methods for solving linear systems of equations;
 - d. Numerical integration of special functions;
- 4. A strong technical computing background in Fortran 95 (or later) or C/C++. Experience in scripting languages would be an asset.
- 5. Experience in the following Reactor physics techniques is desirable:
 - a. Multi-group approximations;
 - b. Neutron transport methods.

About the position

- It is based at Chalk River Laboratories, Ontario, Canada.
- Candidates must be legally eligible to work in Canada.
- The appointment is for two years, with the possibility of extending to a third year.
- Salaries are competitive.

Application process

Candidates should apply to the Postdoctoral Fellowship program *using the online application process*:

- 1. Visit <u>http://www.aecl.ca</u>
- 2. Select "English" as your language preference (as of the time of this email, the posting is listed only in English).
- 3. Click on "Join our Team"
- 4. Click on "opportunities" in the sentence "We have opportunities for engineers, ..." under the picture.
- 5. Click on "current job opportunities" in the sentence "View all current job opportunities"
- 6. The posting is "Postdoctoral Fellowship Program", dated 3 January 2012 under category "Post Doctoral Program".

Or you can make use of the direct link below:

http://www.recruitingsite.com/csbsites/aecl/en/JobDescription.asp?JobNumber=656428

In the interest of ensuring your dossier reaches the right people, please add the following to your cover letter: "This application is directed to the attention of the Computational Reactor Physics branch."