



**Deep River Science Academy**  
*“Your gateway to a career in science and engineering”*

**Canadian Nuclear Society / Société Nucléaire Canadienne**

*“Supporting nuclear science and technology for over 25 years”  
“plus de 25 ans de promotion de la science et de la technologie nucléaires”*

## **“Critical Thinking in Science”**

*.... we could do enhanced geothermal in the GTA from about 15 kilometres depth, more cheaply than nuclear  
– Letter writer to the Toronto Star, July 11<sup>th</sup> 2009*

Headlines, letters and other reports such as this seem to appear in various news sources, almost daily. Do they make sense? Many of these reports may also imply a request for funding from limited resources of the various funding agencies. We, as members of various scientific and engineering disciplines should be able to examine such reports and make a solid technical judgment of the merits of such ideas. It is especially important that new members of the various scientific disciplines begin to develop the skills to make such assessments.

The speaker, Dr. Bill Diamond, has had a varied and interesting career in research. Bill parlayed his B.Sc in Applied Physics (Waterloo, 1969) and Ph.D in Nuclear Physics (Toronto, 1974) into a successful career as an accelerator physicist. After a short stint with AECL as an NSERC postdoctoral fellow, he started his career as a researcher in private industry with Schlumberger-Doll (Massachusetts), then moved on to the Nevis Cyclotron Laboratories (New York) and a position as senior Accelerator Physicist at the high energy electron accelerator CEBAF (Virginia) before returning to TASCC, Chalk River’s own superconducting cyclotron, in 1989. During his career he made important contributions to ion source and electron gun development for accelerators, neutron sources for oil and gas exploration, and was the originator of the photo-fission method for producing radioactive ion beams at TASCC. Since 1998 he has been a Senior Researcher at the Fluid Sealing Technology Branch, involved predominantly in the creation of robots for CANDU irradiated fuel handling and in research for the Gen. IV reactor concept. Currently, he is working on the potential use of photo-neutrons for Mo99 production. Besides his research activities, Bill has been active throughout his career on various industrial and radiation safety committees.



**Bill Diamond**  
Senior Researcher  
**Fluid Sealing Technology Branch**

Talk : 6:30 pm, Thursday July 30, 2009

Bennett / Mackenzie Room, J.L. Gray Centre  
*(Entry via rear security entrance)*

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