



## Canadian Nuclear Society / Société Nucléaire Canadienne

Chalk River Branch, c/o Dr. Blair P. Bromley, AECL-Chalk River Laboratories, Chalk River, ON K0J 1J0

<http://www.cns-snc.ca/branches/ChalkRiver/> e-mail: [webmaster@cns-snc.ca](mailto:webmaster@cns-snc.ca)

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

### **Russian Nuclear Power Program (Past, Present and Future)**

The Chalk River Branch of the Canadian Nuclear Society is pleased to welcome Dr. Igor Piore, Senior Scientist, AECL - Chalk River Laboratories, who will speak on the Russian Nuclear Power Program.

Russia is the largest country in the world by territory. Russia's population is about 140 million people. Currently, 31 nuclear power reactors are in operation in Russia including 15 PWRs (“VVERs”), 15 light-water cooled, graphite-moderated boiling reactors (“RBMKs”) and 1 sodium-cooled fast breeder reactor (LMFBR). The total operating capacity of these reactors is about 20,800 MW<sub>e</sub>, which puts Russia in 4<sup>th</sup> place after the USA (104,000 MW<sub>e</sub>), France (63,400 MW<sub>e</sub>) and Japan (45,200 MW<sub>e</sub>). The Russian nuclear program was started during the Second World War and was directed primarily towards military purposes. However, the peaceful application of nuclear energy emerged in the 1950's with the commissioning of the first Russian nuclear power plant in Obninsk (near Moscow) and the construction of a nuclear-powered polar icebreaker. A general overview of the Russian nuclear power industry will be presented with a basic description of the current fleet of power reactors. The history and the future of the Russian nuclear program will also be discussed.

Dr. Piore is a Senior Scientist at AECL - Chalk River Laboratories (CRL). Prior to joining CRL in 2000, he held various scientific and management positions with the Institute of Engineering Thermal Physics of the National Academy of Sciences in Kiev (Ukraine) and participated in research activities related to the nuclear program. Dr. Piore is a member of the ANS and the ASME and is author/coauthor of several technical monographs and more than 100 publications.

**Igor Piore, Ph.D., Doctor of Technical Sciences  
Senior Scientist  
AECL - Chalk River Laboratories**

**7:30 PM  
Thursday, January 26, 2006**

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

Refreshments will be served – ALL ARE WELCOME!

*Further information: Dr Blair P. Bromley at 584-8811 Ext. 3676, or 584-1518*