



## Deep River Science Academy

### Summer Lecture Series

Co-sponsored by  
Canadian Nuclear Society  
Chalk River Branch



### Missing Links in Scientific Knowledge: Historical, Philosophical, and Sociological Aspects of Science

The Deep River Science Academy and the Chalk River Branch of the Canadian Nuclear Society are pleased to welcome Dr. Richard Cassidy, who will speak on the Missing Links in Scientific Knowledge - Historical, Philosophical, and Sociological Aspects of Science.

Most scientists would claim that they have a good understanding of the nature of science - its mechanisms, logic, goals and significance. We often justify this stance by reference to our extensive and broad-based science education, and by our experience working as a scientist, which, while usually narrow in focus, is more practical. However, our postsecondary science education rarely provides us with historical, philosophical, or sociological perspectives, other than side-boxes in textbooks that offer glimpses of famous scientists or important applications of scientific developments/theories. Dr. Cassidy observes that science is harming both itself and society by its failure to promote knowledge in these broader aspects of science. In this presentation, Dr. Cassidy will attempt to show how most scientists misconstrue the nature of science, and why this is important if scientists are to effectively interact with our increasingly complex society. To do this, he will look at some aspects of the historical development of science and important views on the nature of science, and use some well-known scientists to illustrate these points. In addition, he will briefly look at some modern developments in science-societal interactions to illustrate why it is vital that science education engage and encourage students to apply broad-based critical thinking skills to an examination of their own profession.

Dr. Cassidy earned his B.Sc. degree from University of Kings College, Halifax, NS, M.Sc. degree from Dalhousie University, Halifax, NS, and Ph.D. from McMaster University, Hamilton, ON. He worked as a Postdoctoral Fellow and Research Associate at Dalhousie University before joining AECL, Chalk River, and working as a Senior Research Officer. He then went on sabbatical to the Max-Planck-Institut für Chemie, Mainz, Germany, and joined the University of Saskatchewan, Saskatoon. He is currently Professor Emeritus, Department of Chemistry, University of Saskatchewan, Saskatoon. Dr. Cassidy has authored over 100 publications in the open literature and internal industrial reports in the nuclear industry, given over 30 invited presentations and seven short courses on liquid chromatography and capillary electrophoresis, and is the co-editor of two books on ion chromatography.

**Dr. Richard Cassidy**

Thursday, 2004 July 22, starting at 6:30 p.m.

J.L. Gray Engineering Centre -- Bennett/Mackenzie Room,  
(Please come to the rear entrance of the building)

Refreshments will be served – ALL WELCOME!

<http://www.cns-snc.ca/branches/ChalkRiver/>  
<http://www.drssa.ca>

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