

**Canadian participants in the
UK-Canada Workshop on Nuclear Skills**

6-7 March, 2006

Toronto, Ontario

(participants listed in alphabetical order)



Professor George Bereznoi, Dean, School of Energy Systems and Nuclear Science, University of Ontario Institute of Technology

Dr. George Bereznoi is Professor and Dean of the School of Energy Systems and Nuclear Science at the University of Ontario Institute of Technology in Oshawa.

Between 1995 and 2001 Dr. Bereznoi was Atomic Energy of Canada Limited's Chair Professor in Nuclear Engineering at Chulalongkorn University in Bangkok, Thailand. He was responsible for the planning and delivery of a human resources development project that included the design of university curricula, and conducting educational and professional development courses in the field of nuclear power. He has taught courses in the nuclear programs at universities in China, Vietnam and Indonesia, and held workshops on the use of simulators in education for the International Atomic Energy Agency.

Prior to the Thailand project, Professor Bereznoi had worked for 25 years in Ontario Hydro's nuclear division, responsible for full scope training simulators and the use of computers in training.

Dr. Bereznoi is a professional engineer, with a Ph.D. degree in electrical engineering from McMaster University. His research interests are computer control of nuclear power plants, real time simulation, and educational technology. He is a member of the Board of Directors of the University Network of Excellence in Nuclear Engineering, and the Canadian Nuclear Association.

Steve Bushby, Natural Resources Canada

Steve obtained his Ph.D. in Chemistry (Surface Science) from the University of Western Ontario. Following two years of post-doctoral fellowships, he joined AECL's Chalk River Laboratories in 1993. At CRL he held various technical and management positions, working on a range of topics associated with the corrosion and deformation behaviour of in-reactor materials.

In the late 90's, he was the program manager for AECL's CANDU X program, which produced much of the background for Canada's current involvement in Generation IV. During this time he also co-developed the conceptual design for what is now the ACR (Advanced CANDU Reactor), which AECL is marketing domestically and abroad.

For the last three years he has been seconded to NRCAN to establish a National Program to enable Canada's participation in the Generation IV International Forum (GIF).



Jim Crochetiere, Director of Technical Resources, Atomic Energy of Canada Limited

Jim has been with AECL for 27 years and has performed a wide variety of roles related to the design and ongoing support of CANDU reactors. These roles include being designer on Bruce B, engineering manager for AECL's services work for the Ontario CANDU's, manager project support services and account manager for Pickering roles.

In his current position as Director of Technical Resources Jim has overall responsibility for management of Sheridan Park technical resources. This includes responsibility for ensuring that there is the right quantity and mix of technical skills, that succession planning and career development plans are in place and leading recruiting and technical training.



Professor Bill Garland, McMaster University

William J. Garland specializes in reactor physics and thermalhydraulics at McMaster. From 1975 to 1983, he worked in the Canadian Nuclear Industry specializing in CANDU heat transport system analysis and design. The major effort from early 1980 to mid 1983 was in heat transport system stability investigations. This included pre and post test analysis, coordination of AECL's process team, test planning, and liaison.

Presently, he is Professor of Nuclear Engineering in the Department of Engineering Physics at McMaster University conducting analysis and research of the MNR nuclear reactor systems. While on research leave at Harwell Nuclear Labs in England, Bill conducted knowledge engineering for heat exchanger selection and developed a heat exchanger selection computer code which is now a commercial product distributed through the international company HTFS. In addition, computerized water property functions developed at McMaster are in use in about 13 countries by over 120 users in 51 institutions and major engineering firms. He served as Department Chair from 1988 to 1994 and was Director of MNR from 1994 to 1995 leading up to the decision to revitalize reactor operations. Subsequent to that he took a lead role in MNR safety analysis and operational support analysis. Since 2000, he has been Academic Director for CANTEACH and since 2004 he has been the Secretary / Treasurer and Program Director for UNENE.

Pierre Guimond, Director, Regulatory Affairs, Canadian Nuclear Association



Pierre Guimond has been Director Regulatory Affairs at the Canadian Nuclear Association since September 2003. Concurrently, he is the Director, Federal Government Liaison for Ontario Power Generation Inc. (OPG). OPG's share of the Ontario electricity market is approximately 70%. The company operates nuclear, hydro-electric, fossil-fuelled and alternative energy facilities with a net in-service capacity of about 22,000 megawatts of electricity.

Prior to joining OPG in November 1999, Pierre Guimond was the Senior Advisor on Government Relations for the Canadian Electricity Association (CEA). Since February 1995, he had responsibility for the climate change file and helped develop the electricity industry's strategies to deal with GHG emissions. He served as an advisor from the electricity industry on the Canadian delegation to the international negotiations leading to the Kyoto Protocol and to subsequent negotiations at the Conferences of the Parties under the United Nations Framework Convention on Climate Change.

He joined CEA in November 1991 from the federal department of Consumer and Corporate Affairs where he managed the department's Grants and Contributions Program for consumer organizations. Prior to joining the Public Service of Canada in 1984, he worked on Parliament Hill as Executive Assistant and political advisor to a number of federal cabinet ministers including the Minister of Veterans Affairs, the Minister of Public Works and Housing, and the Minister of State (Finance). He was also the Executive Assistant to the Speaker of the House of Commons. He holds an Honours B.A. in Political Science from Carleton University.

Sylvana Guindon, Director, Nuclear Energy Division, Natural Resources Canada

Ms. Guindon is Director of the Nuclear Energy Division, Natural Resources Canada and has extensive experience in the nuclear and energy policy fields. In addition to extensive experience in the federal government she experience in the nuclear industry, having held management positions with Atomic Energy of Canada Limited and Ontario Hydro prior to joining the department.

She chairs the Committee on Technical and Economic Studies of the Nuclear Energy Agency and also sits on the Bureau of the Steering Committee of the Agency. She has several publications on the comparative economics of nuclear energy and other publications on nuclear energy policy issues.

Ms. Guindon holds undergraduate degrees in Economics from the University of Western Ontario and the University of Aix-Marseille, France and two Masters' Degrees in Business and Public Policy from Queens University, Kingston, Ontario.



Duncan Hawthorne, President and CEO, Bruce Power

Duncan Hawthorne is President and Chief Executive Officer of Bruce Power, the largest independent power generator in Ontario.

With close to 30 years in the power generation business, Duncan began his career as a craft apprentice in the Scottish electricity industry and advanced to hold senior positions in power companies in the United Kingdom, United States and Canada. As the executive lead during the acquisition of several power plants in North America, Duncan was responsible for the acquisition of the Bruce nuclear facility and the formation of Bruce Power.

Duncan is an active advocate for the nuclear industry and is the current Chair of the Canadian Nuclear Association and Chairman of the prestigious Board of Governors of the World Association of Nuclear Operators – Atlanta Centre. Duncan's leadership has been recognised by his peers through a series of awards such as the Ontario Electricity Association Leader of the Year and the Ian McCrae award for leadership in the Canadian nuclear industry. He has also been honoured by the Association of Power Producers of Ontario with their 2004 Hedley Palmer Award for outstanding contributions to Ontario's electricity generation industry and by the Energy Council of Canada as their 2005 Canadian Energy Person of the Year.

Duncan is a chartered engineer with an honours degree in control engineering and an MBA from Strathclyde University in Scotland. He is a fellow of both the Institution of Electrical Engineers and the Institution of Mechanical Engineers.

Professor Rick Holt, Queen's University



Professor Rick Holt holds an NSERC Industrial Research Chair in nuclear materials in the Department of Mechanical and Materials Engineering at Queen's University where his research group of 14 studies the properties of reactor core materials with emphasis on zirconium alloys.

Prior to his appointment to Queen's in 2002, Rick worked in the Canadian nuclear industry for 34 years, most recently at AECL's Chalk River Laboratories as Director of Fuel Channels Division where he led the fuel channels program from 1997 to 2002, and as Manager of Reactor Materials Research Branch, responsible for the radiation damage and deformation programs from 1990 to 1997.

He has had strong ties with the nuclear industry in the UK, having in the past collaborated with researchers in the UKAEA at Risley and at Harwell. He currently collaborates with researchers at the University of Manchester, the Open University and Rutherford Appleton Laboratories.

Rick has a Bachelor of Applied Science Degree in Metallurgy and Materials Science from the University of Toronto. He is a member of the University Network of Excellence in Nuclear Engineering and a Professional Engineer, and a technical advisor to the CANDU Owners Group.



Jerry Hopwood, General Manager, Pre-Project Planning, Atomic Energy of Canada Limited

Mr. Hopwood studied Applied Physics at St. Edmund Hall, Oxford University. He was awarded his B.A. in 1972 and his M.A. in 1975 by the University. Recruited by AECL in 1975, Mr. Hopwood's first specialty was in Nuclear Safety and Licensing. In this role he worked with the Ontario Hydro fleet of units and for the CANDU 6 designs constructed in New Brunswick and Québec. From 1983-85, he served as AECL's on-site team-leader during the initial operation of Point Lepreau. Returning to Sheridan Park, Mr. Hopwood became Manager of Safety Systems Design for new CANDUs and in 1988 was awarded the Sheridan Park Medal for Technical Achievement.

In March 1992, Mr. Hopwood was appointed Technical Director, South Korea and he and his family relocated to Seoul. During his Korean assignment, the Wolsung 3 and 4 contract was signed. Returning from Korea in 1995, he was appointed Director of CANDU 6 programs. He was a member of the negotiating team for AECL's successful bid for the Qinshan CANDU 6 project. Before accepting his current position, Mr. Hopwood served as Director, ACR Business Development and prior to that appointment he was the Director of Advanced Reactor Technology Development, leading the definition of AECL's Advanced CANDU Reactor design.

Jerry Hopwood was appointed General Manager, Pre-Project Planning in 2004.



André Isabelle, Director, Environment and Natural Resources Division, Natural Science and Engineering Research Canada (NSERC), Research Partnerships Programs Directorate

André Isabelle is currently a Director in the Research Partnerships Directorate of Science and Engineering Research Canada (NSERC). NSERC, which is the federal funding agency for university research in science and engineering, invests in people, discovery and innovation. Through its Research Partnerships and Industrial Scholarships programs, NSERC builds on its role of supporting excellent research and training to stimulate increased R&D by the private sector and the transfer of new knowledge and technology to users that can generate economic and social benefits for Canada.

From 1998 to 2001, André was Director of Strategic Projects and Networks at NSERC as well as being responsible for the Networks of Centres of Excellence program. From 1984 to 1998, he held various Program Officer positions administering Scholarship, Fellowship and Discovery grant programs at NSERC. André studied biology at the University of Ottawa and received his B.Sc. in 1983 and his M.Sc. in 1988.



Professor Jean Koclas, École Polytechnique de Montréal

Jean Koclas obtained his BS degree with Honors in Physics from McGill University in 1975. He obtained his MS degree in Nuclear Engineering from École Polytechnique de Montréal in 1977. He obtained his PhD degree in Nuclear Engineering from the Massachusetts Institute of Technology in 1980.

He was a research scientist with AECL in 1980-1981, and a safety analyst for Hydro-Québec from 1982 to 1992. He joined the Nuclear Engineering Institute faculty as a professor at École Polytechnique de Montréal in 1992. He became director of the Nuclear Engineering Institute in 2001, and holds the Hydro-Québec chair of Nuclear Engineering.



Professor John Luxat, McMaster University

John Luxat is the NSERC/UNENE Industrial Research Chair in Nuclear Safety Analysis in the Department of Engineering Physics at McMaster University in Hamilton, Ontario. Before joining McMaster he was Vice President, Technical Methods, at Nuclear Safety Solutions Ltd. in Toronto. Prior to that he was Manager of Nuclear Safety Technology at Ontario Power Generation.

Dr. Luxat has over 34 years of experience in the nuclear industry, the majority of which was with Ontario Hydro and its successor company, Ontario Power Generation.

He has participated in nuclear safety, nuclear technology and R&D projects, both within Canada and internationally and has represented Canada in the activities of international organizations, such as IAEA and the Nuclear Energy Agency of the OECD.

He is a licensed Professional Engineer in Ontario and a member of the Canadian Nuclear Society and the American Nuclear Society. He is currently the President of the Canadian Nuclear Society.



Professor R. Mohan Mathur, President, University Network of Excellence in Nuclear Engineering

Prof. R. Mohan Mathur is the founding CEO and President, University Network of Excellence in Nuclear Engineering (UNENE), Canada. UNENE is an alliance of the nuclear industry and prominent Canadian universities dedicated to enlarging the pool of highly qualified professionals for the nuclear industry and to augmenting university-based research through the creation of Senior Industrial Research Chairs and providing Collaborative Research and Development grants to other professors. UNENE sponsored research activities are supported by NSERC.

Prior to taking up his current assignment, Prof. Mathur was Vice President, Nuclear Training Support and Services Division, Ontario Power Generation. (1999-2002). In that position he worked with Ontario Community Colleges to establish new programs and specializations of interest to nuclear industry. UNENE is an example of similar relationships with Canadian universities.

Professor Mathur has thirty years university experience in Canada (1969-99). He was Dean, Faculty of Engineering Science, The University of Western Ontario for 12 years (1987-99) and before that, Head, Department of Electrical and Computer Engineering (1980-87) at the University of Manitoba.

Prof. Mathur served on the Board of Directors, Ontario Hydro from 1990 to 99 and was its vice-Chair for 5 years. Currently, he serves on the Board of Directors of London Hydro and London Regional Development Board.

Prof. Mathur has published widely, received many awards and has been a consultant to many industries worldwide. He represents Canada on the World Nuclear University.

Professor Roger Newman, University of Toronto



Roger C. Newman is Professor in the Department of Chemical Engineering and Applied Chemistry in the University of Toronto. He holds an NSERC Senior Industrial Research Chair in association with UNENE, the University Network of Excellence in Nuclear Engineering. He moved to Canada in 2004 after spending 20 years in the Corrosion and Protection Centre, UMIST (University of Manchester Institute of Science and Technology). Prior to that, he was a researcher at Brookhaven National Laboratory in the USA. He received his MA and PhD degrees in Natural Sciences and Materials Science at the University of Cambridge, and holds the DSc degree of the University of Manchester.

Roger Newman's main research interest is the aqueous corrosion and protection of alloys. He has received a number of awards from the major international societies that are active in corrosion research, including the U.R. Evans Award of the Institute of Corrosion, the W.R. Whitney Award of NACE International, the Helmuth Fischer Medal of DECHEMA, and the H.H. Uhlig Award of the Corrosion Division of the Electrochemical Society. He has a keen interest in positive aspects of corrosion and electrochemical technology, including the synthesis of novel nanomaterials by electrochemical dissolution and deposition.



Syed Rizvi, Manager, Staffing and Training, Ontario Power Generation

Syed Rizvi holds a Graduate Degree in Electrical Engineering from Loyola University, California and a Graduate Degree in Education Administration from Lakehead University, Thunderbay, Ontario.

Syed has been with Ontario Power Generation for nearly 25 years in various progressive positions, including Commissioning Engineer at the Pickering Nuclear Plant, Training Officer, Director of Training and Manager of Skills Broadening.

Prior to OPG, for 6 years Syed was a Professor and Chairman of the Electrical Engineering Department at Confederation College of Applied Arts & Technology, Thunderbay, Ontario. He also led DeVry Institute of Technology in Toronto, Ontario, to a fully certified technical institute and brought their home study program to be the largest in the world. After graduation he held jobs in consulting engineering.

Presently Syed is the Manager of Engineering Staffing & Training at OPG.

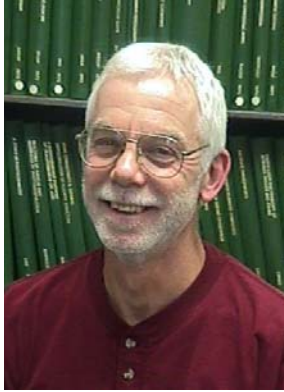


Sean Russell, Technical Advisor, Nuclear Waste Management Organisation

Sean Russell is a Technical Advisor with the Nuclear Waste Management Organization (NWMO). He has over twenty years experience in the assessment of radioactive waste management facilities and health physics-related activities at Ontario Power Generation Inc. (OPG) (formerly Ontario Hydro).

Sean has been involved in the Canadian programs for the management of used fuel and low and intermediate-level radioactive waste since the 1980s. His expertise includes development of mathematical models and computer codes to assess the safety from nuclear facilities, and managing the Canadian research and development program for a deep geological repository for radioactive waste. Over the past several years, Sean has been providing technical support to the development of conceptual designs and cost estimates for various approaches for long-term management of nuclear fuel waste.

Recently, Sean has represented the NWMO in an extensive series of public engagement and dialogue sessions on approaches for long-term management of Canada's used nuclear fuel and he was one of the principal authors of the NWMO's 2005 Final Study and recommendation to the Government of Canada, *Choosing a Way Forward The Future Management of Canada's Used Nuclear Fuel*.



Professor David Shoesmith, Industrial Research Chair in Nuclear Fuel Disposal Chemistry, University of Western Ontario

David Shoesmith is a Professor in the Department of Chemistry and specializes in research on the electrochemistry of materials and corrosion science. He has held this appointment since June 1, 1998. He presently holds the Natural Sciences and Engineering Research Council and Ontario Power Generation (NSERC/OPG) Industrial Research Chair in Nuclear Fuel Disposal Chemistry (since November, 2000).

Previously, he worked for Atomic Energy of Canada Ltd for 25 years, achieving the rank of principal scientist. Since 1980 he has been an active researcher in the Canadian Nuclear Waste Disposal Program, and is an international expert on waste container/waste package issues. He is an elected fellow of the International Association of Corrosion Engineers (NACE International) (1996) and the Canadian Society for Chemistry (1985). He has won awards from the Electrochemical Society (Lash Miller), the Canadian Society for Chemistry (Manitoba Chemist of the Year), The Canadian Institute of Mining and Metallurgy (Cohen Award), Atomic Energy of Canada (Discovery Award), and a University of Western Ontario Distinguished Professorship. He has written 170 refereed publications and approximately 110 technical and commercial reports.

Current research literests include: nuclear waste disposal studies on fuel, containers and cladding; modelling of corrosion processes in consolidated media (soil, concrete, etc); localized corrosion of metals and alloys; hydrogen in metals; properties of thin films on materials; neutron reflectometry.



Brent Williams, Canadian National Representative, North American Young Generation in Nuclear

Brent Williams is the Canadian National Representative for the North American Young Generation in Nuclear (NA-YGN), an organization that is proactively dealing with issues facing newer employees in the nuclear industry including knowledge transfer and public education. Brent received his Bachelor's Degree in Mechanical Engineering from the University of Western Ontario in 2002, and is the currently the Responsible System Engineer for the Bruce B Training Simulator at Bruce Power.