

of the CSA Human Resources and Compensation Committee), Canadian Green Chemistry & Engineering Network, International Science and Technology Partnership Canada (chair of China Committee) and CentrePort Canada Inc. Fung is a strategic advisor of Cycle Capital Management Inc. (currently the largest clean technology venture fund in Canada), an Investment Champion for the Canadian Department of Foreign Affairs and International Trade and a member of the Gateway Performance Table of Transport Canada. He was awarded the 2009 Canadian Asian of the Year (business and public service category) by Asia Network Canada and the 2012 Queen's Diamond Jubilee Medal by the Governor General of Canada.

During his terms as Vice President and, subsequently, President of the CSCHE in 2006-8, Fung visited and met with the students and faculties of 20 chemical engineering departments across Canada.



**Bruce Lennox, MCIC  
Vice-Chair 2013-2014**  
McGill University

Bruce Lennox is a physical organic chemist whose research activities focus on nanomaterials, sensors, and interfacial chemistry. He obtained his BSc, MSc, and PhD degrees from the University of Toronto. He began his academic career at McGill in 1987 after a Post Doctoral Fellowship at Imperial College in London, UK. In addition to traditional courses, Lennox has also been involved in the development of new courses that cut across the traditional sub-disciplines of chemistry. Courses in advanced materials, nanoscience, and biological chemistry have resulted from this "horizontal" perspective of presenting advances and adventures in chemistry. His ongoing research involves the study of nanoparticles and ultrathin organic films. This research has led to a number of successful collaborations with physicists, engineers, pharmacologists, and neuroscientists. He was appointed Tomlinson Professor of Chemistry in 2004 and has served as Chair of McGill's Department of Chemistry since 2001. He has worked with colleagues to create research clusters in self assembled materials, green chemistry, nanochemistry, and neuroengineering. He has also been active in university research administration, and served on both NSERC and NRC grant selection committees and the scientific advisory boards of NanoQuebec and the NSERC NanoInnovation Platform. He currently serves as Chair of the NSERC Discovery Grant Chemistry Evaluation Group and as Director of the NSERC CREATE in Neuroengineering. He served as President of the Canadian Society for Chemistry in 2009-2010. Lennox was elected as a Fellow of the Royal Society of Chemistry in 2010 and the Royal Society of Canada in 2012.

### Statement of Policy

I am honoured to stand as a candidate for CIC Vice-Chair for 2013-2014. My recent term as President of the Canadian Society for Chemistry revealed to me the exciting leadership opportunity that the Chemical Institute of Canada can have in shaping the future of Canadian science and technology. The three constituent societies provide the CIC with a window on the entire range of scientific discovery, innovation, and service in Canada, in a fashion that is quite unique amongst Canadian scientific societies in its breadth and depth. Chemists, chemical engineers and chemical technologists are at the centre of what is often stated to be of importance to Canadians - the desire to experience a high quality of life while contributing to the development of a sustainable society.

My experience and knowledge of the scientific community in Canada, particularly that of the pure and applied chemistry communities in Canada, will allow me to work to strengthen the CIC. My priorities for the coming year are four-fold:

- 1) At the heart of a strong society is a strong membership base. Increasing the membership in the CIC constituent societies is very important. Young professionals in industry, government, and the academic community in particular must be made aware of the benefits of membership – ranging from the immediate (e.g. publications, services, and world-class scientific meetings) to the future (policy-shaping and representation in national and international forums). The CIC is very much a member-oriented organization that speaks to those at all career stages and employment situations.
- 2) I believe that the CIC must continue to foster strong connections to other professional societies, both in Canada and abroad. The rate of integration of science and technology across disciplinary and national boundaries is ever-increasing. The CIC needs to be at the table when new trends and policies are being identified and implemented.

- 3) The role that any science and technology will play in Canada's future is quietly being shaped by a number of expert panel assessment reports commissioned by federal and provincial government ministries. This methodology is relatively new in the Canadian context. Many of the recent reports have a significant chemical sciences component, or potentially impact the practice of chemical sciences and engineering in Canada. I therefore believe that it is important the CIC and its members are made aware of these reports and if possible, be involved in all stages of their development and/or implementation. A scan of some recent report titles reveal that a great deal of policy benchmarking with chemical implications is being developed at a very rapid pace. Report titles include Informing Research Choices: Indicators and Judgment (2012), The State of Science and Technology in Canada (2012), Integrating Emerging Technologies into Chemical Safety Assessment (2012), Better Research for Better Business (2009), and Small is Different: A Science Perspective on the Regulatory Challenges of the Nanoscale (2008). Soon to be released reports include Socio-economic Impacts of Innovation Investments, The State of Industrial Research and Development in Canada, Harnessing Science and Technology to Understand the Environmental Impacts of Shale Gas Extraction, and Understanding the Potential Impacts of Energy Technologies on the Oil Sands Development. It is noteworthy that two recent CIC Chairs, Hadi Mahabadi and David Dolphin, currently serve on the expert panels associated with two of these reports.
- 4) The CIC and its constituent societies have played an important part of the public's understanding of chemistry and its many forms. I will continue to encourage CIC participation in outreach activities and partnerships with teachers and the media in bringing quality and stimulating information to schools and the public at large.

These broad priorities of course can only be tackled by working as part of a team. My term serving the CSC highlighted for me the importance of working with the member community, the Boards of the constituent societies, and the CIC Board of Directors.



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# Canadian Society for Chemistry (CSC)

## Board of Directors Nominations

The nominating Committee appointed under the terms of CSC By-law Article X nominations and elections has proposed the candidates listed below for election to the Board of Directors in 2013-2014. Members are reminded of the provision of By-law Article X, Section 3 (e) which states: "Further nominations for any officer position may be made in writing by any ten or more Voting Members of the corporation: each nomination must be accompanied by the candidate's written agreement to serve if elected, a curriculum vitae and a recent photograph. The deadline for receipt of additional nominations is Thursday, February 28, 2013. If any elections are required, ballots will be mailed in April. Those elected, whether by ballot or acclamation, will take office immediately following the annual general meeting of the Society on Tuesday, May 28, 2013 in Québec, Que.

Le Comité des candidatures, nommé en vertu des dispositions du règlement X de la Société canadienne de chimie (SCC), propose la candidature des personnes listées ci-dessous aux postes de membres du conseil pour 2013-2014. Il est rappelé aux membres que le Article X règlement 3(e) précise ce qui suit : « Des candidatures additionnelles pour les postes d'administrateurs peuvent être soumises par écrit par au moins dix membres votants de la Société. » Chaque candidature doit être accompagnée du consentement écrit et signé par le candidat, qui s'engage à remplir la charge s'il est élu, d'un curriculum vitae, ainsi que d'une photographie récente. Les membres auront jusqu'au jeudi 28 février 2013 pour faire parvenir de nouvelles candidatures. Advenant qu'un scrutin soit nécessaire, les bulletins seront postés en avril. Les personnes élues par scrutin ou par acclamation entreront en fonction immédiatement après l'assemblée générale annuelle de la Société qui aura lieu le mardi, 28 mai 2013, à Québec, Qué.



**Lorenzo Ferrari, MCIC  
President  
2013-2014**  
LANXESS, Inc.

Lorenzo Ferrari has been with LANXESS Inc. (formerly Bayer) since 2000 and is currently the Manager of Material Research-Innovation Partnerships for Butyl Rubber Global Research and Development in London, Ontario. He is primarily responsible for leading the global R&D Network of collaborations and cooperations with academic and institutional partners. Ferrari obtained his BSc in 1991 and MSc in 1995 in chemistry at McMaster University, where he continued to complete his MBA in 2000 in the management of innovation & technology program.

Ferrari has held various positions of increasing leadership responsibility within the chemical industry including roles in New Product R&D, Business Development and Sales at LANXESS Inc., Dow Chemical, Standard Products and Louisiana Pacific.

He is an executive member of the Macromolecular Science and Engineering Division (MSED) of the Chemical Institute of Canada (CIC), as well as a member of the R&D Network committee of the CIAC (Chemistry Industry Association of Canada).

Ferrari holds eight granted patents, is a winner of the 2004 Fall ACS Rubber Division Best Paper Award and is a die-hard NFL Pittsburgh Steelers fan.



**Youla S. Tsantrizos, MCIC**  
**Vice-President**  
**2013-2014**  
McGill University

Youla S. Tsantrizos obtained her PhD in Organic Chemistry in 1990 from McGill University and then pursued Post-Doctoral studies at Brown University from 1990 to 1991. In 1991, she joined the Department of Chemistry and Biochemistry at Concordia University at the level of Assistant Professor, where she earned tenure and was promoted to Associate Professor in 1996. In 1997, during a sabbatical leave from Concordia University, she was a visiting scientist at Boehringer Ingelheim (Canada) Ltd. when she was asked to join the Department of Chemistry at the level of Senior Research Scientist.

During her 10 year career at Boehringer Ingelheim, she held a number of leadership roles in medicinal chemistry and participated in activities that moved a number of antiviral agents through the different stages of the drug discovery process, including lead optimization, pre-clinical and clinical development. In recognition of her contributions to R&D in pharmaceutical research, she received the 2000 International R&D Boehringer Ingelheim Award and was promoted to Group Leader/Distinguished Scientist.

In 2009, she joined the Department of Chemistry at McGill University at the level of Associate Professor and was promoted to Full Professor in 2011. In addition, she is an Associate Member of the Biochemistry Department at McGill University, a mentor of the CIHR-sponsored Drug Development Training Program at McGill University, and a member of the Groupe de Recherche Axé sur la Structure des Protéines (GRASP) and the NSERC-sponsored Training Program in Bionanomachines. Her current academic activities in Drug Discovery focus on cancer, neurodegenerative diseases and antiviral agents. She has published 46 papers in peer-reviewed journals and is the inventor/co-inventor of close to 30 patents. Recently, she received the Fessenden Professorship Award in Science Innovation, from the Faculty of Science of McGill University and the Queen Elizabeth II Diamond Jubilee Medal, from the Governor General of Canada for services and contribution to Canada.

## Statement of Policy

Over the last two decades, the Canadian Society for Chemistry (CSC) has made great progress in its operational efficiency, the services it provides to its members and in raising the international profile of the Canadian chemistry community. However, this is no time to rest and be content with our past achievements. Our society, our colleagues and our students are faced with the harsh reality of a changing world economy, reduced funding for research and a fast drift of knowledge-based employment to other countries. A sense of pessimism (if not despair) is settling in about the future careers of our young Canadian chemists and the CSC must play a pivotal role in the future of chemistry. Our economy is also intimately entangled in the turbulence of the world economy and is more critical than ever that our discipline plays a key role in the development of science worldwide.

The world is heading for some major challenges in terms of access to resources and the environmental damage our activities are causing. The contributions that chemists can do to a more sustainable future could be a way to make chemistry more relevant to young people and the general public. Chemistry is at the foundation of scientific discoveries that contribute to socioeconomic benefits of science – from biomedical research to renewable resources and engineering – involves fundamental aspects of chemistry. It is our duty to go beyond the transfer of knowledge to students and younger chemists. Our society has to take on, in full force, the challenge of fostering excitement and instilling entrepreneurial spirit to the future generation of Canadian chemists. It is also our responsibility to demonstrate to our politicians how investments in chemistry (and science in general) can lead to building a world-class, knowledge-based economy for Canada. We need to foster innovations in chemistry and build a future where Canadian scientists can fulfill their creative potential while contributing to our country's economic growth.

The CSC must be proactive in its interactions with the government bodies involved in making strategic decisions about research funding for chemistry, funding for every aspect of basic science, and financial support for young entrepreneurs. I would be honoured to work with the Board of Directors and members of the CSC in driving forward the initiatives detailed above.



**Allan Rey, MCIC**  
**Director of Industrial**  
**Liaison**  
**2013-2016**  
Apotex Pharmachem

Allan Rey, currently a Senior Manager at Apotex Pharmachem Inc. in Brantford, Ontario, has been employed there since 1995. Prior to this, he worked at Bristol Myers Squibb (BMS) from 1992 to 1994, and Dow Chemical from 1983 to 1985. His work has centered on process chemistry and intellectual property in the pharmaceutical industry.

Rey was granted his PhD from the University of Ottawa in 1990 after which he did a 2-year post-doc at Queen's University. The predominant focus of his research in Ottawa and Kingston was asymmetric natural product synthesis (Bryostatin / pentacyclic indole alkaloids) and the development of useful synthetic methodologies. He obtained his HBSc from the University of Western Ontario in 1983.

Rey is an active member of the CSC and ACS, has participated in CSC conferences both as a speaker and attendee, and has contributed to *ACCN*, the *Canadian Chemical News*. Allan has promoted the pharmaceutical chemical industry to the wider chemical community, for instance by giving multiple 2-hour courses on pharmaceutical chemistry at the University of Guelph and acting as a judge at several Southwest Ontario Undergraduate Student Competitions. He was also an invited speaker at the 2008 Western Canadian Medicinal Chemistry Workshop (Opportunities in the Canadian Pharmaceutical Industry) and at the 2011 Canadian Chemistry Conference (Green Process Chemistry on a Commercial Scale by Solvent Optimization). Allan has over 30 scientific publications, patents and patent applications.

Rey looks forward to effectively responding to the challenges facing industry while enthusiastically promoting industrial chemistry within the CSC's membership.



**Graham Bodwell, MCIC**  
**Director of Subject**  
**Divisions 2013-2016**  
Memorial University

Graham Bodwell was born in Epsom, England and moved to Canada in 1971. He studied chemistry at the University of Victoria, where he obtained a BSc (Hons., Co-op) in Chemistry in 1984. His Honours and subsequent MSc research spawned a lifelong interest in cyclophane chemistry. Following the completion of his MSc in 1986, he moved to Braunschweig, West Germany, to conduct doctoral work, again in cyclophane chemistry. After earning his PhD (Dr. rer. nat., with distinction), Bodwell crossed the Channel to join the group of Stephen Davies at Oxford University, where he worked in the area of asymmetric synthesis. In 1992, he accepted an Assistant Professor position at Memorial University of Newfoundland. Bodwell was tenured and promoted to Associate Professor in 1997 and then promoted to Full Professor in 2001. His current research interests include cyclophanes, novel aromatic compounds, new organic materials, inverse electron demand Diels-Alder chemistry, synthetic methodology and the synthesis of natural products and their analogues. Bodwell was the 2005 recipient of the Merck-Frosst Centre for Therapeutic Research Award.



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# Chemical Institute of Canada (CIC)

## Board of Directors Nominations

The Nominating Committee, appointed under the terms of CIC By law Article X–Nominations and Elections, has proposed the candidates listed below for election to the Board of Directors in 2013-2014. Further nominations are solicited from the membership for the position of vice-chair. They must be submitted in writing, must have the written and signed consent of the nominee to serve if elected, and must be signed by no fewer than 25 members in good standing of the Institute (CIC By Law Article X, Section 3 (d)). The deadline for receipt of any additional nominations is Thursday, February 28, 2013. If any elections are required, ballots will be mailed in April. Those elected, whether by ballot or acclamation, will take office immediately following the annual general meeting of the Institute on Tuesday, May 28, 2013 in Québec, Que.

En vertu de l'article X, du règlement de l'ICC, le Comité des candidatures propose la candidature des personnes ci-dessous aux postes d'administrateur pour 2013-2014. Les membres sont invités à soumettre d'autres candidatures pour le poste de vice-président. Celles-ci doivent être présentées par écrit, être accompagnées du consentement écrit et signé par le candidat à remplir la charge s'il est élu, et doivent être signées par au moins 25 membres en règle de l'Institut (article X, section 3 (d) du règlement de l'ICC). La date limite pour soumettre d'autres candidatures est jeudi 28 février 2013. Advenant qu'un scrutin soit nécessaire, les bulletins seront postés en avril. Les personnes élues par scrutin ou par acclamation entrent en fonction après l'assemblée générale annuelle de l'Institut, qui aura lieu mardi, le 28 mai 2013, à Québec, Qué.



**David Fung, MCIC**  
**Chair 2013-2014**  
ACDEG Group

David Fung is the Chairman and CEO of the ACDEG Group of companies. He has business partnerships in North America, Europe and Asia. He obtained his Bachelor, Masters and Doctorate degrees in chemical engineering from McGill University in Montréal, Que. and completed the senior business executive program at Queen's University in Kingston, Ont. He is a member of the Association of Professional Engineers and Geoscientists of British Columbia and received his professional designations of Audit Committee Certified and Human Resources and Compensation Committee Certified from the Directors College of Canada.

His operating experience includes deploying unit trains, terminals, marine vessels and trucking fleets to become the world's largest distributor of merchant sulphuric acid. He managed the research laboratory of one of the largest chemical companies in Canada. Subsequently, he became the president of a global engineering and proprietary equipment company with five divisions on four continents and chemical plant projects on six continents.

Fung is currently co-chair of the Members of the Canada Foundation for Innovation, vice-chair of the Canada China Business Council and the Chemical Institute of Canada, member of the Strategy for Partnership and Innovation Committee of Natural Sciences and Engineering Research Council of Canada and past president of the Canadian Society for Chemical Engineering. He is also a member of the national boards of directors of Canadian the Manufacturers & Exporters (past chair of the national board and current chair of the National Policy Committee), Canadian Standards Association Group (chair