

# SAVOIR-FAIRE KNOV-HOV

Congrès annuel 2013 de la SCGC

CSCE 2013 Annual Conference



Honours, Awards and Fellowships
Médailles, distinctions
honorifiques et fellowships

The Canadian Society for Civil Engineering La Société canadienne de génie civil

## **FOREWORD**

The Canadian Society for Civil Engineering has a long-standing tradition of recognizing members for their career achievements and for the excellence of their technical papers. This year, thirteen members are distinguished through their election as Fellows, eight are receiving awards for career achievements in their specialty areas of civil engineering, and the Society is granting its second Award for Governmental Leadership in Sustainable Infrastructure. Additionally, one graduate student will receive the Donald Jamieson Fellowship. As well, the authors of four technical papers will be receiving awards, one of which, the Sir Casimir Gzowski Medal, is Canada's oldest engineering award.

This booklet summarizes the career achievements of the recipients of the various honours, awards and fellowships, recognizes special contributions to the Canadian Society for Civil Engineering, and lists many of the past winners of awards. On behalf of the Board of Directors and all members of the Society, I extend my heartfelt congratulations to all award recipients.

Jim Kells, PhD, PEng, FCSCE

President

## **AVANT-PROPOS**

La Société canadienne de génie civil rend hommage une fois de plus à ses membres qui se sont distingués par l'ensemble de leur carrière ou par la qualité de leurs communications techniques. Cette année, treize membres ont été élus au rang de « Fellow », huit recevront des prix pour leur apport, tout au long de leur carrière, dans des domaines précis du génie civil et la société décernera pour la deuxième fois le Prix pour le leadership gouvernemental en infrastructure durable. Un étudiant de troisième cycle recevra la Bourse Donald Jamieson Fellowship. De plus, les auteurs de quatre communications recevront un prix. Un de ces prix, la médaille Sir Casimir Gzowski, est le prix le plus ancien décerné au Canada dans le domaine du génie.

Cette brochure résume les carrières de nos nouveaux « Fellows » et lauréats, souligne les contributions particulières à la Société canadienne de génie civil, et donne les noms de plusieurs anciens lauréats des divers prix. Au nom du conseil d'administration et de tous les membres de la société, j'offre mes félicitations les plus chaleureuses à tous les récipiendaires.

Jim Kells, PhD, PEng, FCSCE

Président

# PRIX DONALD R. STANLEY AWARD



## RYAN I. THOREN, JIM ATWATER AND PIERRE BERUBE

The Donald R. Stanley Award was established in 2006 in honour of the late Dr. Don Stanley, a leader in the transfer of research and technology into the practice of Environmental Engineering. In 1954, Dr. Stanley founded Stanley Associates Engineering, a one-person operation that has since grown into Stantec Inc., an international, multi-disciplinary organization with 80 locations worldwide. The CSCE wishes to acknowledge the generosity of Stantec Consulting Ltd. for the establishment of the initial endowment of the Don Stanley Award.

The 2013 Prix Donald R. Stanley Award is granted to Ryan I. Thoren, Jim Atwater and Pierre Berube for their paper "A model for analyzing water reuse and resource recovery potential in urban areas" Canadian Jounal of Civil Engineering, Vol. 39, pp1202-1209.



Abstract: Increasing population is putting pressure on urban water and wastewater infrastructure; more efficient use of this resource needs to be explored as the cost of upgrading water and sewer networks is daunting. Wastewater presents a significant source of water and heat and, if properly utilized, can reduce the pressure on existing infrastructure while reducing stress on the receiving environment. This paper presents an optimization model using geographic information systems to locate potential sources and sinks of reclaimed water within an urbanized area. Mathematical optimization then maximizes water reuse using a set of constraints on mass balance, water quality, and electricity used for pumping. Three variations of the model are applied to Vancouver, British Columbia. The first scenario identifies a number of potential industrial sources and sinks for direct cascading with a total potential water savings of 133,400m3/year. With the implementation of a theoretical satellite water reclamation facility (WRF) in scenario 2, water recycling potential is increased to a maximum of 613,800m3/year. The results from the third scenario show a savings of upwards of 1,000,000 m3/year using a satellite WRF to supply industrial, commercial, institutional and multifamily water users. This paper presents a model that can be transposed by simple modifications and applied to virtually any group of water users.



## PRIX STEPHEN G. REVAY AWARD





The Stephen G. Revay Award was established in 2005 in honour of the late Mr. Stephen G. Revay (1924-2004). President of the CSCE in 1989-1990, Mr. Revay made outstanding contributions to several heavy engineering projects in Canada before founding his firm, Revay and Associates, in 1970, in the area of project management and construction dispute resolution. The CSCE wishes to acknowledge the generosity of the City of Edmonton for funding this award. The Stephen G. Revay Award is presented for the best paper in the two-year period 2006-2007 in the areas of construction engineering, construction management or project management.



The Stephen G. Revay Award for 2012-2013 is granted to Ahmed Atef, Hesham Osman, and Osama Moselhi for their paper "Multiobjective genetic algorithm to allocate budgetary resources for condition assessment of water and sewer networks", Canadian Journal of Civil Engineering, Volume 39, pp. 978-992.



Abstract: Condition assessment is essential for implementation of efficient asset management programs for underground water and sewer networks. It, however, tends to be cumbersome, costly and error-prone compared to aboveground infrastructure such as roads and buildings. For sewers, CCTV is commonly used technology for condition assessment. For pressurized water pipelines, technologies such as electromagnetic, sonar, acoustic, infrared tend to be more costly and exhibit inherent technical limitations. Faced with constrained budgets, owners must balance the value of information obtained and the cost of obtaining such information. This paper describes computational platform for assisting managers of these underground assets in achieving this delicate balance. It introduces a new method for optimizing condition assessment policies by balancing the revealed value of information and the cost of obtaining such information. The developed method considers jointly each asset condition state and its expected level of accuracy in estimating the frequency of condition assessment. Inaccuracies due to condition assessment reliability are then evaluated using partially observable markov decision process. Subsequently the method utilizes single and multi-objective genetic algorithms to select the most cost-effective intervention plan considering the condition of assets, their respective required levels of service and budget constraints. The method takes into consideration direct and indirect costs of sudden infrastructure failure and related cost to expected reductions in level of service. A case study is presented using the water distribution network of the City of Hamilton, Canada to demonstrate the capabilities of the developed method.

#### Honourable Mention

The Honourable Mention is awarded to Christopher J. Willis and Jeffrey H. Rankin for their paper "Demonstrating a linkage between construction industry maturity and performance: a case study of Guyana and New Brunswick", Canadian Journal of Civil Engineering, Volume 39, pp. 565-578

# MÉDAILLE THOMAS C. KEEFER MEDAL







## FARSHID NAZARI, YEE-CHUNG JIN, AND AHMAD SHAKIBAEINIA

Thomas Coltrin Keefer (1821-1915), who is probably the best-known member of the Keefer dynasty, was a co-founder in 1887 of the CSCE and its first president. He is particularly remembered for his work in the construction of canals, nailways, and water supply systems (Ottawa, Hamilton, and Montreal). His best known publications are "Philosophy of Railroads" (1849) and "The Canals of Canada" (1850). During his career Thomas Keefer was also president of the A.S.C.E., of the Canadian Institute, and of the Royal Society of Canada. The Keefer Medal, established in 1942, is presented annually for the best paper in areas such as hydrotechnical and environmental engineering.

The 2011 Keefer Medal is awarded to Farshid Nazari, Yee-chung Jin, and Ahmad Shakibaeinia for their paper "Numerical analysis of jet and submerged hydraulic jump using moving particle semi-implicit method", Canadian Journal of Civil Engineering, Volume 39, pp. 495-505.

Abstract: Mesh-Free particle (Lagrangian) methods have been used in a wide variety of applications in fluids studies in recent decades. A big advantage of these methods is the ability to model the deformations and spray generation in boundaries and interfaces which are common problems with jets and jumps and may be difficult using Eulerian methods. Weakly compressible moving particle semi-implicit method (WC-MPS) has been developed and is used in this paper. Two of the most common hydraulic cases in the environment are simulated. The model is first validated for jet simulation and then applied to submerged hydraulic jumps. The flow regime, velocity distribution, and turbulence shear stresses at different distances from the jet inlet are investigated and compared with the analytical solution and experimental data. With this method, the inlet flow particles entering the domain can be tracked, as well as the development of vortices and recirculation in the corresponding turbulent flow fields. The comparison of MPS results with experimental data for submerged hydraulic jumps shows the using of WC-MPS reveals the flow characteristics especially in the critical circulating transition region of the jump. The model now can be expanded to simulate free jumps, including more rising and falling in the water surface, velocity profiles and pressure distributions.

#### Honourable Mention:

The Honourable Mention is award to Yan Yu and R. Kerry Rowe for their paper "Modelling leachate-induced clogging of porous media", Canadian Geotechnical Journal, Volume 49, pp. 877-890.

# MÉDAILLE CASIMIR GZOWSKI MEDAL



## E.T. BOWMAN, W.A. TAKE, K.L. RAIT, AND C. HANN

As superintendent of public works of the Province of Canada, Colonel Sir Casimir Stanislaus Gzowski (1813-1898) was responsible for improving waterways and canals and constructing roads, harbours and bridges. Later, he was involved in railroad construction and the design and construction of the international bridge at Fort Erie. A founder of the CSCE in 1887, he served as president from 1889 to 1891. Established by Sir Casimir in 1890, the Casimir Gzowski Medal is awarded annually for the best paper on a civil engineering subject.

The 2011 Casimir Gzowski Medal is awarded to E.T. Bowman, W.A. Take, K.L. Rait, and C. Hann for their paper "Physical models of rock avalanche spreading behaviour with dynamic fragmentation", Canadian Geotechnical Journal, Volume 49, pp. 460-476.



Abstract: The dynamic fragmentation of rock during avalanche motion has been postulated as a mechanism explaining the long runout of large rock avalanches or Sturzströme. This paper investigates whether test conditions that produce dynamic fragmentation can lead to greater runout or spreading of physical model rock avalanches. Model avalanche experiments were carried out under enhanced acceleration to generate breakage in coal, a fragmentable, brittle solid. Coal blocks were released from a stationary position on a slope to run out on a plane. The motion of the ensuing fragmenting debris was captured using a high speed camera placed above the horizontal plane. The average position of the front was tracked and the degree of fragmentation of the model avalanches was quantified. The paper presents results of the frontal velocity of the avalanches, corrected for centrifuge Coriolis effects. Comparison is made between the peak and impulsive front velocities, the final runout and the degree of fragmentation of the model avalanches. Strong relationships are found between runout normalised by the cube root of volume, impulse velocity and Hardin's relative breakage parameter, BR. Results are discussed in the light of the mechanics involved and are compared against field-scale events.



#### **Honourable Mention:**

The Honourable Mention is awarded to Kawsar Ahmed and Lisa Feldman for their paper "Evaluation of contact and noncontact lap splices in concrete block masonry construction", Canadian Journal of Civil Engineering, Volume 39, pp. 515-525.



# **BOURSE DONALD JAMIESON FELLOWSHIP**



#### **FEI TONG**

Donald Jamieson was a prominent civil engineer in British Columbia, who, until his untimely death in 1983, was the Chair of the 1984 Conference of the International Association of Bridge and Structural Engineers held in Vancouver. The Donald Jamieson Fellowship was established in his honour in 1987. The Fellowship is awarded annually to candidates pursuing full-time graduate studies in structural engineering at a Canadian University.

The recipient of the Donald Jamieson Fellowship for the 2013-2014 academic year is Fei Tong, a Ph.D. candidate in the Department of Civil Engineering at the University of Toronto.

Mr. Fei Tong received his B.Sc. (2000) and M.Sc. (2003) in structural engineering from the Department of Civil Engineering at Tsinghua University, China, under the supervision of Professor Xila Liu. He commenced his Ph.D. program in September, 2011, at the University of Toronto under the supervision of Professor Constantin Christopoulos. His research will be focused on high seismic performance systems which ensure that tall reinforced concrete buildings survive major earthquakes without significant residual deformation or structural deteriorations. Mr. Tong's other research interests include tall building design, structural dynamics and earthquake engineering.

After graduation Mr. Tong worked with Ove Arup & Partners in Beijing and Tokyo for five years and with Buro Happold Consulting Engineers in Dubai for almost two years. During this time he was substantially involved in the design of tall building and bridge structures located in China, Japan, Singapore, Taiwan, India, UAE, Thailand, Vietnam, and Korea. Some of the more noteworthy projects on which he worked include the new headquarters for the China Central Television, the China Steel Cooperation Headquarters, the Cocoon Tower in Tokyo, the Shenzhen Stock Exchange, the Singapore Scotts Tower and the Saadiyat Island Footbridge 8. To date Mr. Tong has worked closely with international architects including Office for Metropolitan Architecture (OMA), Foster+Partners, RMJM, Alsop, and Kenzo Tange Associates.

Mr. Tong has expertise in seismic design and passive energy dissipation technologies. During the period in Japan, he was specifically working on modeling, structural dynamic analysis and damper design for tall building structures where passive energy dissipation technologies were applied.

Mr. Tong who is currently a 2nd year Associate Member of the Canadian Society for Civil Engineering. He is an Associate Member of the American Society of Civil Engineers, and as a Graduate Member of the Institution of Structural Engineers in Great Britain has passed the Professional Review Interview for Chartered Membership. Fei Tong is also a Class 1 Registered Structural Engineer in China.

Currently his wife, Xin Chen, is completing her Ph.D. in the Department of History and Classics at the University of Alberta. Xin Chen received a Vanier Canada Graduate Scholarship for 2009-2011.

# EXCELLENCE IN INNOVATION IN CIVIL ENGINEERING AWARD / LE PRIX D'EXCELLENCE EN INNOVATION DANS LE DOMAINE DU GÉNIE CIVIL



Top Left to right:

Q.Islam, B.Tharmabala, C.Lam

Bottom Left to right:

I.Husain, R.Krisciunas, W.Young, D.Lai Established in 2008, this award recognizes excellence in innovation in civil engineering by an individual or a group of individuals practicing civil engineering in Canada, or a Canadian engineering firm, or a Canadian research organization. The CSCE wishes to acknowledge the generosity of Canam Canada for funding this award.

The Excellence in Innovation in Civil Engineering Award for the year 2013 is granted to Ministry of Transportation, Ontario for their summary of work entitled "Evolution of Prefabrication and Accelerated Bridge Construction".

# The Evolution of Prefabrication and Accelerated Bridge Construction at MTO

The Ministry of Transportation of Ontario (MTO) has recently adopted the use of prefabricated bridge technology as a mainstream approach to bridge construction and rehabilitation. The development of this innovative technology has been spurred on by the urgent need to rehabilitate an ageing bridge infrastructure in the face of soaring traffic volumes and ever-increasing economic and environmental impact of construction-related traffic congestion.

This recent prefabrication initiative began with an experimental test program in the MTO Structures Laboratory that was aimed at developing a workable prefabricated bridge system for use in Ontario. After extensive testing of scale models for long-term durability and strength, the ministry undertook the construction of its first fully prefabricated bridge at Moose Creek on Hwy 101 in 2004. The successful completion of this first project led the way to progressively more challenging projects, requiring innovative solutions to new ABC-related issues, such as the pioneering use of Ultra-High Performance Concrete in field-cast deck joints that is now helping transform ABC in North America.

Thus, bridge prefabrication which started at MTO with the precasting of individual bridge components has evolved to the replacement of a 40 m span bridge in only seven weeks utilising traditional construction equipment, with a full closure of the roadway. At the same time, the ministry has taken the development of ABC to a new level with the implementation of Rapid Bridge Replacement (RBR) solutions, in which entire bridge superstructures have been replaced overnight using sophisticated heavy-lift equipment. This innovative technology has been successfully used in the replacement of five bridges so far in Eastern and Central Ontario.

The evolution of ABC in MTO continues. Plans are afoot to replace a number of underpass structures over Hwy 401 in Western Ontario in less than two months using conventional construction equipment. Further use of RBR technology is being planned for bridge replacement along the heavily-travelled highway corridors of Southern Ontario. Northern Ontario, which has witnessed the implementation of the lion's share of MTO's prefabricated bridge construction to date with over twenty ABC projects, will continue to see more widespread use of the technology in the years to come. In short, it is anticipated that prefabricated bridge construction will grow and find wider usage by the ministry in the future as the technology continues to evolve to maximise the benefits that it can bring.

# GOVERNMENTAL LEADERSHIP IN SUSTAINABLE INFRA-STRUCTURE / LEADERSHIP GOUVERNEMENTAL EN INFRA-STRUCTURE DURABLE



Established in 2011, the primary objective of this award is to provide recognition to Canadian governmental organizations for true innovation and leadership in the development and guardianship of sustainable civil engineering infrastructure projects or systems. The overarching principle for selecting the recipient of the award is the leadership that the recipient has provided with respect to the integration of sustainability in the design and/or operation of civil engineering infrastructure. As such, there is an expectation that nominations highlight demonstrated excellence in advancing the state-of-the-art in building or maintaining public infrastructure with extraordinary commitment to sustainability.

The award for Governmental Leadership in Sustainable Infrastructure for the year 2013 is granted to La Ville de Québec for its project "St. Charles River Cleanup – Phase 2 and 3".

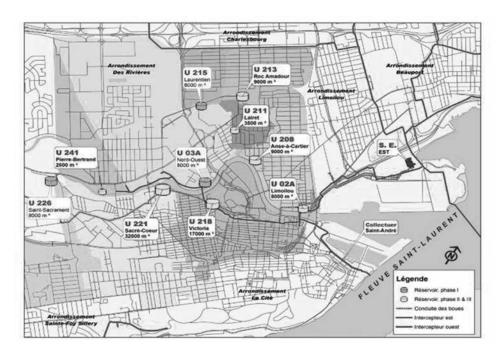
La rivière Saint-Charles est un cours d'eau situé au cœur du centre urbain de Québec dans les quartiers les plus anciens. Les objectifs de départ qui sont à l'origine de ce projet étaient de rendre l'accès à la rivière plus convivial, de préserver la qualité de l'environnement et l'amélioration de la qualité de vie des résidents. Avant la réalisation de ce projet, la rivière Saint-Charles, en raison de l'état de ses eaux, était pratiquement un égout à ciel ouvert. Lorsqu'il pleuvait abondamment, les précipitations engorgeaient le réseau d'égouts et surtout les usines de traitement d'eau. Chaque année, en saison estivale, des épisodes de précipitations abondantes provoquaient entre 50 et 60 déversements des trop-pleins du réseau d'égouts unitaire de la ville vers la rivière Saint-Charles.

Afin de minimiser les impacts des débordements, la solution la plus efficace et la moins coûteuse, après une analyse et une optimisation des divers scénarios possibles, comportait en la construction de sept réservoirs de rétention souterrains pour un volume supplémentaire d'emmagasinement de 85 000 m<sup>3</sup>.

Ces réservoirs ainsi qu'un certain nombre d'ouvrages de dérivation, sont entièrement contrôlés par un système de gestion en temps réel. En fonction de données prédictives analysées par le logiciel Csoft, des consignes sont analysées pour décider vers quel réservoir ce système doit acheminer la vague d'eau qui déferle dans le réseau. Si nécessaire, l'opérateur commande à distance l'ouverture et la fermeture des vannes placées à des endroits stratégiques, gérant ainsi le « trafic » des eaux pour optimiser l'emmagasinement.

En plus du contrôle des débordements, le projet consistait en la renaturalisation des berges de la rivière comportant la démolition des murs de béton dans la partie urbaine ainsi que la reconstruction de berges naturelles avec un habitat faunique.

Le projet d'une valeur de 110 M\$ s'est réalisé selon le budget et l'échéancier prévus et sa réussite est sans aucun doute attribuable à la grande collaboration de tous les intervenants et à la rigueur de toutes les personnes qui ont participé à ce projet d'envergure.





## **Fellows**



#### **AZITA AZARNEJAD**

Azita Azarnejad, P.Eng., graduated from Tehran University with her B.Sc.in Civil Engineering (1987) and her M.Sc. in Structural Engineering (1991). During her graduate studies and before moving to Canada in 1991, she worked on the design and analysis of arch dams. After graduating with her Ph.D. in Structural Engineering from the University of Alberta in 1996, Azita moved to Calgary and worked as a research assistant at the University of Calgary. She joined CH2M HILL Canada Limited in 1998.

Now the Bridge Operations Leader and Senior Structural Engineer in the firm's Calgary office, Azita has been involved in the analysis, design, evaluation, reha-

bilitation, and construction of more than 30 bridges over the past 15 years. Her experience in bridge design and rehabilitation projects includes prestressed, precast, and cast-in-place concrete, steel girders, and cable-stayed bridges.

Three of Azita's bridge projects have won the Consulting Engineers of Alberta (CEA) Award of Merit, and her cable-stayed bridge received the CEA Award of Excellence. Her structural design experience also includes tunnels, hydraulic structures, industrial buildings, and oil and gas support systems.

Azita has taught graduate courses as a sessional instructor at the University of Calgary, and is the author of more than 30 publications and presentations. A member of the Organizing Committee for the CSCE 2006 Annual Conference in Calgary, she is one of the Technical Committee Co-chairs for the Ninth International Conference on Short and Medium Span Bridges to be held in Calgary in 2014.



# PAUL-ANDRÉ CHIASSON

Paul Chiasson, P. Eng., Ph. D. is a graduate of the Université de Moncton where he obtained his bachelor of Civil Engineering. Paul then completed at the same university a M. A. Sc. and a Ph. D. at École Polytechnique de Montréal, both specialising in Geotechnical Engineering.

After a brief incursion at Transport Canada, Paul joined the Department of Civil Engineering of Université de Moncton as a professor of geotechnical engineering. He is an active player and leader in the development of his department, faculty and University. His research is also an important part of his career where his work has focused on probabilistic modeling of slope stability, hydraulic

conductivity of low permeability soils and roadway geotechnics (subsoil drainage and unsaturated shear strength). Author of numerous papers, Paul has had and continues to have, as he says, the privilege of directing graduate students.

Paul's leadership and professionalism were rapidly acknowledged by his peers. Early on in his career, he was appointed Head of Civil Engineering and was followed a few years later as Vice-Dean. He is now Dean of Engineering since 2005. Along with his teaching, research and administrative duties, Paul has served on numerous occasions the Canadian Society for Civil Engineering and the Canadian Geotechnical Society. For CGS, he is a former Vice-president for Communications, Regional Atlantic Director and Vice-president of the Geosynthetics Division. For CSCE, Paul was coordinator of the Construction Specialty Conference held during CSCE's Conference in Moncton. He has also presided and organised for CSCE and CGS many regional and national activities such as conferences, workshops and short courses.



#### **KEN CHUA**

Ken Chua received his Bachelor (1973) and Master (1975) of Science in Civil Engineering, both from the University of Washington. He is a professional engineer with over 35 years of experience in water and wastewater.

Mr. Chua worked for the City of Edmonton for 30 years in project implementation. Some of the major projects included a 20-year water supply master plan, a \$120 million 22-year Local Combined Sewer Relief project, and a \$146 million flood prevention project. He initiated some innovative construction features including sewer relining in 1982, combined sewer flow storage for peak flow attenuation in 1983 and the first microtunnelling in Western Canada in

1990. He directed the preparation of manuals, including Soft Ground Tunnel Design Manual, Hydraulic Drop Structure Design Manual and Erosion Sedimentation Control Guidelines and Field Manual.

Ken served as a reviewer to the Tunnelling and Underground Space Technology journal and a panel selection member to project and person of the year awards for Trenchless Technology magazine. He was elected to regional and national boards of North American Society for Trenchless Technology (NASTT). He is a founding member of the Northwest Chapter of NASTT and the Edmonton Chinese Engineering Society.

Ken is a well-recognized expert in trenchless technology. He has presented in numerous conferences nationally and has contributed a number of best practices to InfaGuide and Alberta's Standards and Guidelines for Municipal waterworks, Wastewater and Storm Drainage Systems. He has published over 40 papers and received numerous project excellence, leadership and service awards.



# **ALAN CLAYTON**

Alan Clayton is Emeritus Professor in Civil Engineering at the University of Manitoba. He received degrees in Civil Engineering from the University of Saskatchewan (B.Sc, in 1966 and M.Sc. in 1968). His professional interests have involved freight transportation, trucking, transportation safety, traffic and transportation information systems, and spatial data technologies. Through a 40-year professional career, Professor Clayton has worked as an academic (University of Manitoba and University of Regina), consultant (privately, Clayton Sparks and Associates Ltd), researcher (Canadian Transport Commission, British Road Research Laboratory, Swedish Transport Research Commission, U.S. Federal Highway Administration, Texas Transportation Institute), regulator (Chairman Saskatchewan Highway Traffic

Board), and engineer (Saskatchewan Highways). He has worked in the transportation field throughout Canada, in the United States, and abroad in Sweden, Ghana, Thailand, the United Kingdom, and Costa Rica.

Awards to Alan have included: Fellow, Institute of Transportation Engineers (2009): H. Robert Burton Distinguished Service Award of the Canadian Institute of Transportation Engineers (2008); Canadian Society of Civil Engineering Sandford Fleming Award (2006); Member Emeritus of the Transportation Research Board Committee on Motor Vehicle Size and Weight (2005); Wilbur Smith Distinguished Transportation Educator Award of the Institute of Transportation Engineers (2005); Lifetime Achievement Award from the Manitoba Public Insurance Corporation, in recognition of commitment and contribution to road safety (2000).

Professor Clayton has been particularly committed to furthering the professional development of students and their careers—both in research and practice. He loved his work in teaching. He spends spare time with his children and at his cottage at Westhawk Lake—a remote but beautiful spot on the Manitoba-Ontario border.

## **Fellows**



#### ROBERT DRIVER

Robert Driver is Professor and Associate Chair of the Department of Civil and Environmental Engineering at the University of Alberta, where he received his Ph.D. degree in 1996. He conducts applied engineering research principally in the areas of design and behaviour of steel and composite structures and systems subjected to extreme or unusual loads. He has published 112 technical papers in peer-reviewed journals and conference proceedings, while supervising the research of 49 Masters and Ph.D. students, and post-doctoral fellows.

Dr. Driver has 30 years of experience in the steel fabrication industry, structural engineering consulting, applied engineering research, and education, including

stints at the CISC (Toronto), Halsall Associates (Toronto), BP-TEC (Edmonton), CFER (Edmonton), and Lafayette College/ Lehigh University (Pennsylvania), as well as holding a Visiting Professorship awarded by the Southern African Institute of Steel Construction (Cape Town, Johannesburg, Durban). He chairs several technical committees for the development of CSA national standards, and is a Governor of the Steel Structures Education Foundation. He has also been the recipient of numerous awards for both research and teaching excellence. Among his recent awards for research are the 2011 Raymond C. Reese Research Prize and the 2007 J. James R. Croes Medal of the American Society of Civil Engineers, the 2009 H.A. Krentz Research Award, and the 2009 McCalla Research Professorship. Recent teaching awards include the 2011 Outstanding Teaching Award of the Pacific Northwest Section of the American Society for Engineering Education, the 2009 APEGA Excellence in Education Summit Award, and the 2007 Rutherford Award for Excellence in Undergraduate Teaching.

Dr. Driver co-chaired the Organising Committee for the 125th Anniversary Conference of the Canadian Society for Civil Engineering held in 2012.



# **GUY FÉLIO**

Guy Félio obtained a B.A.Sc. (Civil Engineering) from the University of Ottawa in 1978. He went on to do a Masters in Engineering (Geotechnical) at Carleton University and graduated in 1981. To pursue his specialisation in Geotechnical Engineering, he went to Texas A&M and did research on the behaviour of pile foundations for offshore platforms to obtain his PhD in 1985.

He started his career in 1984 as an academic teaching at the University of California - Los Angeles where he conducted research on in-situ testing of soils and on the performance of deep foundations under earthquake loading. In early 1990, the family decided to return to Ottawa where he spent two years as a

consultant before joining the National Research Council.

At NRC, Dr. Félio was responsible for the creation of the Urban Infrastructure Research Group, which in 1997 had a staff of 39 researchers. He was involved in the creation of the Waterloo Centre for the Advancement of Trenchless Technologies (CATT) and the Montreal based Centre of Expertise and Research for Infrastructure in Urban Areas (CERIU). He is credited with the defining, finding funds and launching InfraGuide, a project which, between 2001 and 2006 developed 55 best practices to help municipalities manage their infrastructure.

Dr. Félio has been an active participant in initiatives to advance the state-of-the-art and the state-of-practice in infrastructure across Canada, for example, the 2003-2013 Infrastructure Technology Road Map, and more recently the National Infrastructure Report Card – both national projects in which CSCE played a key role.



#### SIMON FOO

Simon Foo received his B.Sc. in 1979, M.Sc. in 1981 and Ph.D. in 1985 from the University of Ottawa's Department of Civil Engineering. After one year as a post-doctorate and sectional lecturer, he joined the Royal Military College of Canada in Kingston as a research associate in 1986. He has been working for Public Works and Government Services Canada (PWGSC), a federal department, since 1993. He is currently a senior engineer with PWGSC's Real Property Branch in the area of engineering risk management.

He has been heavily involved in technology development and transfer activities in the fields of seismic and blast engineering and sustainable construction prac-

tices. His extensive involvement with engineering societies and technical committees contributes to the advancement of engineering knowledge and practice through standards development, special sessions in conferences, technical seminars, and special publications in the Canadian Journal of Civil Engineering. He is the chair of CSCE's Innovation and IT Technical Committee, CSCE lead in Cooperative Body with ICE (UK) and ASCE (USA) on "Codes and Standards: Opportunities for common efforts", and an Associate Editor of the CJCE

In 2010, he received Canadian Standards Association's (CSA) Award of Merit in recognition of his 'extensive involvement and committed leadership in the development and advancement of Standards related to the engineering risk management of buildings'. In 2012, he was the co-recipient of the Real Property Institute of Canada award for "Best Practices – Environmental Sustainability, Group" for the advances in sustainable practices through the development of CSA Standards.



# **GREGORY LAWRENCE**

Dr. Gregory Lawrence obtained his Bachelor of Engineering degree in 1976 from the University of Western Australia. After working for two years as a Civil Engineer for the Public Works Department of Western Australia, he accepted a Hackett Overseas Studentship to study at the University of California, Berkeley. He received his MS in 1981 and PhD in 1985 specializing in Hydraulic Engineering. He was awarded the 1982 Hans Albert Einstein Memorial Prize and the 1985 Lorenz G. Straub award.

Dr. Lawrence joined the Department of Civil Engineering at the University of British Columbia in 1987 and is now a Professor and Canada Research Chair.

From 2001 until 2008 he served as an elected faculty representative on the Board of Governors of the University of British Columbia.

Dr. Lawrence has supervised more than 40 graduate students and published more than 200 papers and technical reports in his field of environmental fluid mechanics. His expertise has been sought after by more than 30 consulting companies and government agencies. He is well known for his work on instability and mixing in density stratified shear flows, two-layer hydraulics, and the physical limnology of reservoirs, lakes, tailings ponds and water filled mine pits. More recently, he has investigated the potential of in-stream tidal power, and is currently collaborating with cosmologists on the analogy between open channel hydraulics and the physics of black holes.

Greg is married to Victoria and together they have two beautiful daughters - Shannon and Renata.

#### **Fellows**



## **GUO XIN (ANDREW) LIU**

A professional engineer and Adjunct Professor, Dr. Liu received his B.Sc. in Highway and Bridge Engineering in 1982, and M.Sc. in Traffic Engineering in 1984 from Beijing University of Technology, China. After graduation, he worked in the same university as a lecturer for four years. He then moved to the United Kingdom to pursue further studies and received his Ph.D. degree in Highway Engineering from the University of Ulster in 1993. Dr. Liu and his wife immigrated to Canada in 1994 when he joined the University of Regina as an Assistant Professor and Department Highway's Research Professor in Transportation Engineering until 2001.

Dr. Liu has been working in various positions for Saskatchewan Ministry of Highways and Infrastructure since 2001, and currently is Director of Transportation Infrastructure. He has extensive experiences in transportation infrastructure policy, traffic loading and impact assessment, traffic safety study, and transportation data use analysis. He has made significant contributions to the Ministry's transportation infrastructure policy. Dr. Liu received the Ministry's Deputy Minister's Award for his work on provincial highway primary weight policy in 2006 and rural highway strategy in 2010 respectively.

He has supervised many undergraduate and graduate students, and delivered courses in universities and technical seminars. He has published more than sixty technical papers, completed many research reports, and reviewed many research proposals for NSERC.

Dr. Liu has contributed to CSCE's international activities as IAC's Liaison Officer for China. He has initiated and actively participated in several CSCE-China collaboration initiatives in transportation engineering area.



#### TAREK SAYED

Dr. Tarek Sayed is a Professor and a Distinguished University Scholar at the University of British Columbia (UBC). He graduated from Ain Shams University (Egypt) in 1988 and received his Ph.D. in Civil Engineering from UBC in 1995.

Dr. Sayed is internationally known for his transportation engineering research that is focused within two areas: 1) to improve road safety analysis and evaluation techniques, and 2) developing and evaluating Intelligent Transportation Systems (ITS) to increase the efficiency/safety of traffic. He has a number of prestigious awards including the appointment as a UBC Distinguished Uni-

versity Scholar, the ITE Wilbur Smith Distinguished Award, the Canadian Society of Civil Engineering Sandford Fleming Award, the Transportation Association of Canada (TAC) Merit Award, the TAC Gilchrist Medal and several best paper and teaching awards.

Dr. Sayed is the Editor of the Canadian Journal of Civil Engineering and the Director of the Bureau of Intelligent Transportation Systems and Freight Security (Engineering) at UBC. He served as a chair of both the Transportation and the computer application divisions of the Canadian Society of Civil Engineering. He has authored or coauthored about 250 journal/conference papers. He has completed numerous consulting projects in North America and internationally and has supervised 60 Master and Ph.D. students.

A professional engineer in BC, Dr. Sayed serves on several national and international committees including the US Transportation Research Board (TRB) safety analysis committee, the US TRB future directions for road safety subcommittee, the US TRB pedestrian committee and the Canadian national road safety committee.



#### DIETER STOLLE

Dr. Dieter Stolle, P.Eng., Professor of Civil Engineering at McMaster University obtained his B.Eng. (1977) in civil engineering from the McMaster University, where he also received his M.Eng. (1979) and PhD (1982) in geotechnical engineering. During his PhD studies he took a short leave of absence from McMaster to gain experience with Eastern Construction Company Ltd.

Dieter joined Lakehead University as assistant professor in 1982, only to return to McMaster in 1983. He was promoted to full professor in 1995 and served as the Chair of the Civil Engineering Department from 1998 to 2006.

Dr. Stolle is also a member of the Canadian Geotechnical Society and an associate member of the American Society of Civil Engineers. He was CSCE liaison for the students at McMaster (1983-1991) and served on selection committees for the Leipholtz (2000-02) and Casmir Gzowski (2008-2010) Medals, and was a member of organizing committees for various CSCE sponsored conferences. Dieter has participated in the CGS, being Chair of the Geotechnical Research Board (2008-10) and Vice-chair for the technical programme of the 55th Canadian Geotechnical Conference (2002), for which he received the A.G. Stermac Award in 2003.

Dieter has made contributions in engineering mechanics and numerical analysis, as well as in pavement engineering. He published over 50 papers in well-established journals and contributed to 60 conference publications, as well as being a keynote lecturer. He was on the Editorial Board of Computers and Geotechnics (1997-2005) and an Associate Editor for the Canadian Journal of Civil Engineering (2004-11).



# **DHARMA WIJEWICKREME**

Dr. Dharma Wijewickreme is a Professor of Civil Engineering at the University of British Columbia (UBC). He received his M.Sc. and Ph.D. in Civil Engineering from the University of British Columbia (UBC) in 1986 and 1990, respectively. He joined UBC in 2001 after serving the geotechnical consulting practice for about 11 years in the field of earthquake geotechnical engineering.

Wijewickreme's research at UBC mainly focuses on the earthquake liquefaction of silts and performance of buried pipelines subject to ground movements with funding from both government and industry. His research so far has led to over 150 technical publications, and he was recently rewarded with the NSERC Ac-

celerator Supplement Grant for the originality and innovation aspects of this research. Wijewickreme's research has provided direct input to the development of geotechnical seismic design guidelines for buildings in Vancouver and guidelines for the Canadian Foundation Engineering Manual. He has also established a new Advanced Soil Pipe Interaction Research (ASPIReTM) testing facility with funding from both local and international oil and gas industry companies to study the performance of buried pipelines subject to ground movements.

Wijewickreme has assumed various roles at the Canadian Geotechnical Society (CGS), including his service as the Chair of National Education Committee and the Regional Director of the British Columbia Region, along with his current position as the VP Finance. He serves on the editorial boards of the Canadian Geotechnical Journal and ASTM Geotechnical Testing Journal. He is a member of Canadian Society for Civil Engineering, American Society of Civil Engineers, and Earthquake Engineering Research Institute.

## **Fellows**



#### PETER L. WU

Peter Wu graduated with a BSc. from University of the Pacific, California in 1971, and has registered Professional Engineer status in British Columbia, Saskatchewan, Alberta and Ontario. After 7 years in consulting industries in Hong Kong, California, and Ontario, he joined Reinforced Earth Company Ltd. (RECO) as Senior Project Engineer. Since 1995 he has been President & CEO of RECO.

Peter held professional memberships in the American Concrete Institute, Canadian Geotechnical Society (CGS), Canadian Society for Civil Engineers, and North American Geosynthetics Society, and is a Fellow of the Engineering In-

stitute of Canada. Active in CGS, he started on the Executive in Southern Ontario in the early 80's, organized 2 national CGS conferences, Toronto in 1992 and Niagara Falls in 2002. He was Vice President, Finance 2 terms, chaired the CGS Membership Committee for 4 terms, and CGS President in 2007 and 2008. He also served 8 years as a trustee of the Canadian Foundation for Geotechnique (CFG).

He is a recipient of the CGS Service Award in 1995, 2000 and 2006, and received the Engineering Institute's John B. Stirling Medal in 2008. He was awarded the CGS Southern Ontario Medal in May 2012.

Peter authored many technical papers since 1982, published by the Road Transportation of Canada, CGS, CSCE, the International Soil Reinforcement Congresses in the U.K., Japan, and the GeoRail in Paris France. He has also guest lectured numerous times in various internal and international symposia, professional societies and major universities in Canada.

# PRIX W. GORDON PLEWES AWARD



#### **ERIC JAMIESON**

Created in 1992 as the CSCE History of Civil Engineering Award and renamed in 1996 in honour of the late W. Gordon Plewes, author of the CSCE History Program, this award is given annually to an individual who has made particularly noteworthy contributions to the study of the history of civil engineering in Canada or the history of civil engineering achievements by Canadians elsewhere.

The recipient of the W. Gordon Plewes Award for the year 2013 is Eric Jamieson for his book "Tragedy at Second Narrows"

At 3:40 in the afternoon of June 17, 1958, the falsework under span #5 of the new bridge spanning Vancouver harbour's second narrows collapsed, taking the lives of fourteen ironworkers, a painter, an operating engineer and two engineers. A few days later it also claimed the life of a rescue diver. Four men had also died prior to the collapse. Everyone connected with the bridge was reeling in shock. What had gone wrong? It would take a Royal Commission to uncover the painful truth. Although the two engineers had erred in their calculations, the collapse could not be attributed to that alone. Their mistakes were but "one factor in a complex series of inadvisable engineering practices, complacency with respect to falseworks, questionable steel quality, structurally imperfect beams and an unsafe (at some level) columnar formula that all conspired against the N4 falsework" to bring about Vancouver's worst industrial accident. The bridge was renamed the Ironworkers Memorial Second Narrows Crossing in 1994 to remember the men who died.

Eric Jamieson, a career banker, often wondered what the real cause of the collapse was and upon retirement in 2004 set out to discover the facts. He conducted over fifty interviews with survivors, engineers, and rescue and recovery personnel in addition to studying the technical bridge documents in an effort to determine for himself what went wrong on that fateful day. Jamieson has been a freelance writer for the past three decades, focussing mainly on history. This is his second book.

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## PRIX SANDFORD FLEMING AWARD



#### **CATHY LYNN BORBELY**

The Sandford Fleming Award was established in 1999 in honour of Sir Sandford Fleming (1827-1915), Canada's foremost railway surveyor and railway engineer of the 19th century. He was Chief Engineer of the Intercolonial Railway from Eastern Quebec to Southern New Brunswick and in 1871 he was appointed Chief Engineer of the proposed new Canadian Pacific Railway from Montreal to the Pacific Coast. His railway route from Winnipeg to Vancouver through the Yellowhead Pass is now used by the Canadian National Railway. The CSCE wishes to acknowledge the generosity of the Canadian National Railway for funding this award. The Sandford Fleming Award is presented annually to a member of the CSCE who has made particularly outstanding contributions to the development and practice of transportation engineering in Canada.

The recipient of the Sandford Fleming Award for 2013 is Cathy Lynn Borbely

Cathy Lynn Borbely received her Bachelor of Applied Science in Regional Systems Engineering from the University of Regina. Cathy Lynn began her career as a Research Project Engineer with the Ministry of Highways and Infrastructure where she continues to serve the people of Saskatchewan as Director of Strategic Business Planning.

Ms. Borbely is enjoying a varied career that has ranged from innovative research projects involving weigh in motion technology, managing one of Saskatchewan's first recycled asphalt paving contracts, developing practices for using geotextile fabric in road subgrade construction to implementing project management principles for delivery of corporate planning initiatives.

In June 2004, Cathy Lynn had the privilege of becoming CSCE's first female President in its 117 year history. She is an active member of the CSCE having served on its International Affairs Committee as well as the Board of Directors in the Honourary Treasurer and Senior Vice President positions. Her corporate perspective and business approach to planning have been invaluable to the Society. Cathy Lynn is a Fellow of CSCE as well as a Fellow of the Engineering Institute of Canada. In 2005, she received a Saskatchewan Centennial Medal for her leadership and mentorship to young girls and women seeking careers in engineering and science.

A registered professional with the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS), Ms. Borbely is actively involved in the community having served on various committees for APEGS, engineering conferences and school functions and has also been a fundraiser for not for profit organizations.

# MEDAILLE HORST LEIPHOLZ MEDAL



#### DHARMA WIJEWICKREME

Established in 1990 in honour of the late Professor Horst Leipholz, a leading civil engineer whose work made a major impact in the field of engineering mechanics, the Horst Leipholz Medal recognizes outstanding contributions to engineering mechanics research and practice in Canada.

The recipient of the Horst Leipholz Medal for 2013 is Dr. Dharma Wijewick-reme

Dr. Dharma Wijewickreme is a Professor of Civil Engineering at the University of British Columbia (UBC). He received his M.Sc. and Ph.D. in Civil Engineering from the University of British Columbia (UBC) in 1986 and 1990, respectively. He joined UBC in 2001 after serving the geotechnical consulting practice for about 11 years in the field of earthquake geotechnical engineering.

Wijewickreme's research at UBC mainly focuses on the earthquake liquefaction of silts and performance of buried pipelines subject to ground movements with funding from both government and industry. His research so far has led to over 150 technical publications, and he was recently rewarded with the NSERC Accelerator Supplement Grant for the originality and innovation aspects of this research. Wijewickreme's research has provided direct input to the development of geotechnical seismic design guidelines for buildings in Vancouver and guidelines for the Canadian Foundation Engineering Manual. He has also established a new Advanced Soil Pipe Interaction Research (ASPIReTM) testing facility with funding from both local and international oil and gas industry companies to study the performance of buried pipelines subject to ground movements.

Wijewickreme has assumed various roles at the Canadian Geotechnical Society (CGS), including his service as the Chair of National Education Committee and the Regional Director of the British Columbia Region, along with his current position as the VP Finance. He serves on the editorial boards of the Canadian Geotechnical Journal and ASTM Geotechnical Testing Journal. He is a member of Canadian Society for Civil Engineering, American Society of Civil Engineers, and Earthquake Engineering Research Institute.

# MÉDAILLE ALBERT E. BERRY MEDAL



#### PATRICK HETTIARACHI

The Albert E. Berry Medal was established in 1987 in honour of Dr. Albert E. Berry (1894-1984), an outstanding civil engineer who was one of Canada's first environmental pioneers. Following World War I, Dr. Berry joined the Department of Health of the Province of Ontario and rose to become the chief engineer of the sanitary engineering division. Subsequently, he was appointed the first general manager and chief engineer of the Ontario Water Resources Commission, the forerunner of today's Ministry of the Environment. His pioneering spirit, his dedication, and his expertise in the field were second to none. The award is granted to a civil engineer who has contributed significantly to the field of environmental engineering in Canada

The recipient of the Albert E. Berry Medal for 2013 is Dr. Patrick Hettiarachi. Dr. Patrick Hettiaratchi is a professor in the Department of Civil Engineering at the University of Calgary and has contributed to the practice of environmental engineering in Canada by conducting research, developing new technologies and training a large number of HQPs. He received his BSc from University of Moratuwa in Sri Lanka, MEng and PhD in Civil/Environmental Engineering from AIT in Thailand, and UofA in Edmonton, respectively.

Dr. Hettiaratchi has conducted research and development in water filtration, anaerobic digestion and composting of organic waste, fly ash utilization, bioremediation of flare pit sludges, methane emission control using biocaps and methanebiofilters and the development of landfill biocell technology, a revolutionary way of managing waste incorporating anaerobic and aerobic bioreactors with cell mining. He has received several national and international awards for his R&D work, including the 2006 Environmental Achievement Award from the City of Calgary, 2007 Emerald Award, 2008 Shell/ASTech Award, the 2009 Environment and Sustainability Award from APEGA and was a finalist for the 2009 Canadian Environmental Innovation Award from the Royal Canadian Geographical Society.

Dr. Hettiaratchi has published more than 140 refereed papers in journals and conference proceedings and has undertaken collaborative R&D projects with petroleum companies and industry associations, Municipal, Provincial and Federal organizations, municipalities and researchers in Mexico, Chile, Ecuador, India, Thailand and Sri Lanka. In addition, He has served as the Chair of Environmental Engineering Division of CSCE and Director of SWANA. He is also an active member of several other professional societies and editorial boards.

## PRIX E. WHITMAN WRIGHT AWARD



#### **GEORGE AKHRAS**

Established in 1985 in honour of Dr. E. Whitman Wright, founding Chairman of the CSCE Computer Applications Division, the award is granted to a civil engineer who has made a significant contribution to the advancement of Innovation and Information Technology Civil Engineering.

The recipient of the Whitman Wright Award for 2013 is Dr. George Akhras.

Dr. George Akhras is currently a Professor of Civil/Mechanical Engineering at the Royal Military College of Canada (RMC) and the Director of the Centre for Smart Materials & Structures. He is a Fellow of ASCE, CSCE and EIC. Dr. Akhras received his M.Sc. and PhD from Laval University in Structural Engineering and Computational Analysis. Member of many technical and professional associations, his interests include smart materials and structures, composites, computational engineering and numerical modelling.

After developing software used by the James Bay Corporation for the analysis of the underground cavities of the LG 2 and 4, he joined the Quebec DOT to be in charge of their computing section dealing with road and bridge design and other engineering works related to transportation.

At RMC, Prof. Akhras is in charge of teaching numerical methods and performing research on computational approaches: in the last 25 years, he concentrated on expanding and developing the Finite Strip Method as well as the Finite Layer Method which are variations of the Finite Element Method. All these innovative developments have been published widely.

Since 1997, he has been the founding President of Cansmart, the Canadian Smart Materials and Structures Group www.cansmart.com with the objective of promoting research, development and use of innovations dealing with smart materials and structures.

Since its inception in 2005, the Centre for Smart Materials and Structures (CSMS) www.smartmaterials.ca chaired by Dr. Akhras, has been very active in the design and production of sensors and actuators as well as active, adaptive and smart structures using emerging innovative materials in order to produce systems for practical applications.

From 2007 to 2011, George chaired the CSCE Innovation and IT Committee which was and continues to be one of the most active committee of CSCE.

# PRIX CAMILLE A. DAGENAIS AWARD



#### ANA DE SILVA

This award was established in 1981 in honour of Mr. Camille A. Dagenais, Past Chairman of the Board of SNC Group Inc., President of the Canadian Society for Civil Engineering in 1972-1973 and one of the most renowned hydrotechnical engineers in the country. The objective of the award is to give recognition to those civil engineers who have made outstanding contributions to the development and practice of hydrotechnical engineering in Canada.

The recipient of the Camille A. Dagenais Award for 2013 is Dr. Ana de Silva.

Dr. Ana Maria F. da Silva is a Professor of Civil Engineering at Queen's University.

She obtained her B.Sc. in Civil Engineering from the University of Oporto, Portugal, in 1985. She worked as a Research Officer for the Hydraulics Division of the National Laboratory of Civil Engineering (LNEC), Lisbon, Portugal, from 1985 to 1989. She then moved to Canada, where she obtained her M.Sc. from Queen's University in 1989 and her Ph.D. also from Queen's in 1995, specializing in River Engineering.

Following completion of her Ph.D., Dr. da Silva worked as a Research Engineer for the U.S. Army Corps of Engineers Waterways Experiment Station in Vicksburg, Mississippi, until 1997, when she joined the University of Windsor as an Assistant Professor. She joined Queen's University in 2000 as an Associate Professor and Queen's National Scholar. She was subsequently promoted to Full Professor in 2007. She is a Professional Engineer in both Canada and Portugal. Dr. da Silva has made outstanding contributions in the fields of fluvial hydraulics and large-scale river morphodynamics. Her innovative research efforts have led to a substantially improved understanding of the dynamics of a variety of fluvial phenomena, including bed forms, meandering and braiding, and have resulted in tools and guidelines for practical application in river engineering and management. She has also pioneered the use of thermodynamics to explain natural river geometry, and has contributed to a better understanding of the interactions between turbulence and river morphological features. In recognition of her distinguished research contributions, she was awarded the 2005 Arthur Thomas Ippen Award, by the International Association of Hydro-Environment Engineering and Research (IAHR). She has published over 100 journal and conference papers, and is a co-author of the well-known 2001 IAHR Monograph Fluvial Processes. Dr. da Silva has also distinguished herself as an educator, both at graduate and undergraduate levels, and is the recipient of three teaching awards at Queen's University.

Dr. da Silva has served as an Associate Editor of the Canadian Journal of Civil Engineering, as Chair of the IAHR Fluvial Hydraulics Committee, and as coopted Member of the IAHR Council. She presently serves as an Associate Editor of the ASCE Journal of Hydraulic Engineering and of the IRTCES International Journal of Sediment Transport, and as Past Chair of the IAHR Fluvial Hydraulics Committee. She currently is also a member of the Civil, Industrial and Systems Engineering Evaluation Group of the Natural Sciences and Engineering Research Council of Canada.

## PRIX A.B. SANDERSON AWARD



#### **KHALED SENNAH**

The A.B. Sanderson Award was established in 1977 in honour of Adrian Barclay (Sandy) Sanderson (1909-1994), a very distinguished structural engineer and University of British Columbia graduate from Vancouver. Among Mr. Sanderson's best known achievements were the 1954 design of the Mosquito Creek Bridge in North Vancouver, the superstructure of the MacDonald-Cartier Bridge over the Ottawa River, then the longest continuous box girder in North America, and his involvement in the Mount Kobau Astronomical Observatory. The A.B. Sanderson Award is presented to a member of the CSCE who has made particularly outstanding contributions to the development and practice of structural engineering in Canada.

The A.B. Sanderson Award for 2013 is granted to Dr. Khaled Sennah.

Dr. Khaled Sennah, Professor of Structural Engineering at Ryerson University, Fellow of CSCE, and Chair of CSCE Structures Division. He obtained his B.Sc. and M.Sc. degrees in civil engineering from Alexandria University of Egypt in 1985 and 1990, respectively, and his Ph.D. in structural engineering from University of Windsor in 1998. He joined Ryerson University as assistant professor in 1998, was promoted to full professor in 2008, served as the Associate chair for the undergraduate program from 2007 to 2011 and is currently the Chair of the Civil Engineering Department.

Dr. Sennah has 27 years of research, teaching and industrial experience in the area of structural engineering on which he has published more than 160 publications. His core area of expertise includes design, evaluation and rehabilitation of bridges. His research was recently recognized by receiving the 2002 state-of-the-art of Civil Engineering Award and the 1999 Arthur Wellington Prize from ASCE and the 1998 P. L. Pratley Award from CSCE for best journal papers in bridge engineering.

In collaboration with Ontario Ministry of Transportation, his research team conducted innovative research on the development of: (i) prefabricated bridge elements and connection technologies to accelerate bridge construction, (ii) crashworthy and cost-effective, GFRP-reinforced, bridge barrier for sustainable construction, (iii) precast bridge barriers to accelerate bridge replacement, (iv) non-destructive test methods to detect voids in ducts and break or extensive corrosion of presrtessing cables at the high points of post tensioned bridge decks without concrete and asphalt invasion, (v) reliable expression of limiting spans to accommodate temperature changes and truck load distribution in integral abutment bridges, and (vi) cost-effective and accelerated FRP repair strategy to bridge girders damaged by vehicle impact.

# PRIX JAMES A. VANCE AWARD



# TONY BÉGIN

Established in 1977 in honour of Dr. James A. Vance (1892-1981), this award is granted to a civil engineer and CSCE member whose dedicated service has furthered the advancement of the Society. Dr. Vance joined the Canadian Society of Civil Engineers as a student in 1914 and, throughout his life, gave unstintingly of his time, resources and talent to the Society and its successor, the Engineering Institute of Canada. Mr. Vance served the Society and the EIC in numerous capacities, including as President of the latter in 1950

The recipient of the James A. Vance Award for 2013 is Tony Bégin for his outstanding contributions towards the advancement of the Society.

Diplômé de l'Université de Sherbrooke en génie civil en 1993, il a ensuite poursuivi ses études pour l'obtention d'une maîtrise en génie civil en 1995 à la même institution. Il se joint en parallèle à l'équipe d'ingénierie de conception d'assemblage de CANAM à l'usine de St-Gédéon de Beauce. La vérification de calcul d'assemblage pour le projet de charpente de l'édifice de l'OACI à Montréal constitue son premier mandat. La programmation de logiciel pour l'automatisation de calcul d'assemblage au sein de la division Réseau Acier Plus, un réseau d'affaires de plus de 120 fabricants d'acier en Amérique du Nord occupent ses premières années de service à titre directeur de l'ingénierie logiciel jusqu'en 2001.

Il accepte par la suite le poste d'ingénieur responsable du développement des affaires chez CANAM auprès des firmes de génie conseils au Canada et en Nouvelle-Angleterre jusqu'en 2004. Il s'occupe ensuite de l'implantation des comptes nationaux chez CANAM auprès des grandes chaînes de magasins tel que Wal-Mart, Home Depot, Canadian Tire, Best Buy, RioCan, Rona, Sobeys, Loblaw etc. à titre de Directeur développement des affaires au Canada. En 2006, il ajoute à ses fonctions la direction des ventes de poutrelles et tablier métallique pour le Québec et les Maritimes. Son cheminement professionnel et sa mobilité l'amène à développer et maintenir un important réseau de contacts au sein de l'industrie de la construction à travers le Canada. Il occupe aujourd'hui le poste de directeur développement commercial pour offrir l'ensemble des produits et services de CANAM à des propriétaires et développeurs immobiliers selon une approche collaborative nommé BuildMaster.

Vice-Président région de Québec au sein du conseil d'administration de la Société canadienne de génie civil (SCGC), il a occupe ce poste depuis 2006. Il a également été Président du comité organisateur du 37e congrès annuel de la SCGC en 2008, sous le thème 'Partenariat pour l'innovation', qui a attiré plus de 500 participants à Québec.

Il partage sa vie avec sa conjointe Caroline Poulin et ses 3 enfants Hubert, Justine et Phillip âgés respectivement 13 ans, 11 ans et 7 ans. Il demeure dans sa région natale en Beauce. Il est impliqué au sein du conseil d'administration de l'association de hockey mineur de Beauce-Centre en plus d'être entraineur pour ses 2 garçons. Il aime bien s'entourer d'amis pour pratiquer régulièrement ses sports et activités préférés, soit le hockey, le golf et le camping.

# CERTIFICATES OF APPRECIATION CERTIFICATS D'APPRÉCIATION

In recognition of their many contributions En reconnaissance de leurs nombreuses contributions

# Retiring Officers and Committee Members / Officiers et membres de comités finissant leur terme

Lloyd Waugh

Chair, Honours and Fellowships Committee (2009-2013)

Brad Smid

Western Region Vice-President (2009-2013)

Lisa Feldman

NLT Coordinator (2008-2013)

Eva Cheung

Conference Coordinator (2011-2013)

Lvnn Cowe Falls

Chair, Student Affairs Committee (2011 – 2013)

Amie Therrien

Chair, Young Professionals Committee (2012 - 2013)

Mohammed Attalla

Chair, Construction Division (2009 – 2013)

Medhat Shehata

Chair, Engineering Mechanics and Materials Division (2009 – 2013)

# Conference Organizers / Organizateurs de congrès

Jean-Pierre Pilon - Chair, CSCE 2013 Annual Conference

Claude Bédard - Technical Program Chair, CSCE 2013 Annual Conference

Constantine Katsanis - Technical Program Co-Chair, CSCE 2013 Annual Conference

Catherine Mulligan - Chair, CSCE 2013 General Conference

Ioan Nistor - National Chair, 4th Coastal, Estuary and Offshore Engineering Specialty Conference

Musandji Fuamba - Local Chair, 4th Coastal, Estuary and Offshore Engineering Specialty Conference

Ghyslaine McClure and Dimitrios Lignos

Local Co-Chairs, 3rd Disaster Prevention and Mitigation Specialty Conference

Medhat Shehata - National Chair, 3rd Engineering and Mechanics Specialty Conference

# CERTIFICATES OF APPRECIATION CERTIFICATS D'APPRÉCIATION

Benoit Courcelles and Najib Bouaanani Local Co-Chairs, 3rd Engineering and Mechanics Specialty Conference

Mohamed Attalla - National Chair, 4th Construction Engineering Specialty Conference

Adel Francis - Local Chair, 4th Construction Engineering Specialty Conference

Michael Bender - Chair, 21st CSCE Hydrotechnical Specialty Conference

Kerry Mazurek - Technical Program Chair, 21st CSCE Hydrotechnical Specialty Conference.

## National Lecture Tour / Tournée nationale des conférences

Guy Félio National Lecture Tour Presenter (2012)

## Special recognition for service to CSCE

Louise Newman (1992 – 2011)

Retired, CSCE Manager of Communications and Coordinator of Honours and Fellowship Committee

# PRESIDENT'S AWARD FOR THE BEST STUDENT CHAPTER PRIX DU PRÉSIDENT POUR LE MEILLEUR CHAPITRE ÉTUDIANT

1982-83	McGill University
1983-84	Lakehead University
1984-85	Université Laval
1985-86	University of Toronto
1986-87	Lakehead University
1987-88	University of Calgary
1988-89	University of Calgary & Université Laval
1989-90	Université de Sherbrooke
1990-91	McGill University
1991-92	École Polytechnique
1992-93	Université de Sherbrooke
1993-94	University of Toronto
1994-95	University of Western Ontario
1995-96	Université de Sherbrooke
1996-97	Lakehead University
1997-98	University of New Brunswick
1998-99	University of New Brunswick
1999-00	University of Western Ontario
2000-01	École de technologie supérieure
2001-02	University of New Brunswick
2002-03	Université Laval
2003-04	Université Laval
2004-05	Université Laval
2005-06	Université Laval
2006-07	Université Laval
2007-08	Université Laval
2009-10	University of Western Ontario
2010-11	British Columbia Institute of Technology
2011-12	University of Western Ontario

ABD EL HALIM, A.O.	Ottawa, ON	1998
ABOURIZK, Simaan	Calgary, AB	2010
ADAM, George	Calgary, AB	1982
ADAMS, Barry	Toronto, ON	2004
AHUJA, Hira N.	Mississauga, ON	1983
AINLEY, P. William	Collingwood, ON	1986
AINSLIE, Stan	Calgary, AB	2002
AKHRAS, Georges	Kingston, ON	1997
ALEONG, Geoffrey L.	Whitby, ON	2000
ALLEN, C. Michael	Ottawa, ON	1995
ALLEN, David E.	Ottawa, ON	1993
AL-MANASEER, Akthem	San Jose, CA	2001
ANDERSON, Donald L.	Vancouver, BC	1988
ANDRES, Reginald	Ottawa, ON	2007
ARCHER, Georges	Westmount, QC	1986
ARMITT, Ernest	Winnipeg, MB	2004
ATKINSON, Charles H.	Niagara Falls, ON	1983
ATTALLA, Mohamed	North York, ON	2010
AUBERTIN, Michel	Montreal, QC	1999
BABSTOCK, Reginald A.	St. John's, NL	2000
BADDOUR, Raouf A.	London, ON	2000
BAETZ, Brian W.	Hamilton, ON	2005
BAGNALL, Keith E.	Calgary, AB	1997
BAIRD, William F.	Ottawa, ON	2001
BAKER, John	Edmonton, AB	2005
BAKHT, Baidar	Downsview, ON	1985
BALAKRISHNAN, Bala	Edmonton, AB	2011
BALLIVY, Gérard	Sherbrooke, QC	1997
BANTHIA, Nemkumar	Vancouver, BC	2006
BARBOUR, S. Lee	Saskatoon, SK	2002
BARBOUR, Steve	St. John's, NL	2009
BARTLETT, F. Michael	London, ON	2006
BARTLETT, Kenneth O.	Fredericton, NB	1988
BARUTCISKI, Théodore	Montréal, QC	1990
BASARABA, Leonard G.	Vancouver, BC	2003
BASKIN, Kevin	Victoria, BC	2007
BASSI, Kris G.	Etobicoke, ON	1999
BATE, John	London, ON	1991
BEAULIEU, Denis	Ste-Foy, QC	1993
BÉDARD, Claude	Montréal, QC	2006
BÉLIVEAU, Jean-Guy	Burlington, VT	2000
BELTAOS, Spyros	Burlington, ON	1989
BENMOKRANE, Brahim	Sherbrooke, QC	2004
BEWTRA, J.K.	Windsor, ON	2001
BICKLEY, John A.	Toronto, ON	1996
BING-WO, Reginald	Regina, SK	1983
BISCHOF, Max	North Vancouver, BC	2002
BISWAS, Nihar	Windsor, ON	2002
BLACKWELL, Walter	Toronto, ON	2007
BLAIS, Réjean	St. Jean Chrysostome, QC	1997
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BLISS, E. John	Fredericton, NB	1984
BOIVIN, Richard	LaSalle, QC	1987
BORBELY, Cathy Lynn	Regina, SK	2005
BOOY, C.	St. Adolphe, MB	1985
BOWERS, H. Keith	Saskatoon, SK	1982
BOZOZUK, Michael	Ottawa, ON	1997
BRADDOCK, Richard W.	Willowdale, ON	1982
BRAY, Dale I.	Fredericton, NB	1991
BREMNER, Theodore W.	Fredericton, NB	1994
BRENNER, Konrad A.	Hamilton, ON	1986
BROADHURST, Denis	Calgary, AB	2008
BROWN, Thomas Girvan	Cochrane, AB	1999
BRUNO, Mario	Toronto, ON	2003
BUCKLAND, Peter G.	North Vancouver, BC	1982
BURATTO, Dino A.	Windsor, ON	1999
BURNETT, Eric F.P.	State College, PA	1986
BURNS, P. Daniel	Calgary, AB	1994
BURRELL, Brian C.	Fredericton, NB	1999
BUYDENS, Gerry	Victoria, BC	2001
CAMPBELL, Charles A.	East Bay, NS	1986
CAMPBELL, Colin H.	Calgary, AB	1996
CAMPBELL, T. Ivan	Kingston, ON	1989
CANE, Donald B.	Pickering, ON	2000
CARLIN, Glen P.	Montréal, QC	2003
CASOLI, George	Richmond, BC	2009
CAZALY, Laurence George	Point Shares, Bermuda	1990
CERONI, Eugenio	Novi Ligure, Italy	2011
CESARIO, Giuliano	Toronto, ON	2005
CHAN, Evan Kit Yu	Hong Kong	2011
CHAN, T.H. Tod	Don Mills, ON	1994
CHEN, Chi Tsen	Halifax, NS	1995
CHENG, Jung-June Roger	Edmonton, AB	2004
CHERRY, Sheldon	Vancouver, BC	2004
		1993
CHEVARIE Ion Mourice	Hong Kong Moncton, NB	2010
CHRISTIAN John		
CHRISTIAN, John	Fredericton, NB	1995
CLIFTON, Wayne A.	Regina, SK	1994
CLIMENHAGA, John Jay	Toronto, ON	2003
COLUNE M: 1 1 P	Corner Brook, NL	2006
COLLINS, Michael P.	Oakville, ON	1988
COLLINS, Robert A.	Toronto, ON	1986
COMEAU, Michel P.	Halifax, NS	2002
COOK, Geoff R.	Toronto, ON	1982
COOPER, William P.	Oakville, ON	1986
CORMIER, Guy	Sarsfield, ON	2006
COUTURE, Armand	Laval des Rapides, QC	1982
COUTURIER, François	Mont Royal, QC	1999
COWE FALLS, Lynne	Calgary, AB	2010
CRAMM, David C.	Ancaster, ON	1985
CRAWFORD, Henry S.	Calgary, AB	2005

CRYSLER, Ralph E.	Oakville, ON	1986
CUNNINGHAM, Al	Moncton, NB	2009
DAGENAIS, Camille A.	Montréal, QC	1982
DANYLUK, Darrel John	Calgary, AB	2002
DAUPHINAIS, Ernest	Falardeau, QC	1992
DAVAR, Kersi S.	Fredericton, NB	1993
DAVIES, Llewelyn B.	Richmond, BC	1984
DEMERCHANT, Daryl	Fredericton, NB	2009
DENHAM, Richard	Ottawa, ON	2000
DE VALL, Ronald H.	Vancouver, BC	1998
DILGER, Walter H.	Calgary, AB	1988
DISHER, Jerry W.	Hamilton, ON	1982
DOERING, Jay	Winnipeg, MB	2005
DORTON, Roger A.	Willowdale, ON	1982
DOZZI, S. Peter	Calgary, AB	1985
DROSTE, Ronald	Ottawa, ON	2011
DRYSDALE, Robert G.	Hamilton, ON	1991
DUFOUR, Marcel	St-Lambert, QC	1986
DUNASZEGI, Laszlo	Calgary, AB	2007
DUNFIELD, Malcolm	Riverview, NB	1999
DUSSAULT, Rémy G.	St-Laurent, QC	1985
EASA, Said M.	Toronto, ON	1995
EDAMURA, Hank	Thornhill, ON	2004
EL-BADRY, Mamdouh	Calgary, AB	2005
ELEKTOROWICZ, Maria	Montréal, QC	2003
EL-JABI, Nassir	Moncton, NB	1997
ELLIOTT, Cyril R.	St. John's, NL	1989
ELLIS, John S.	Kingston, ON	1985
ER, K.C.	Edmonton, AB	2010
ERKI, Marie-Anne	Kingston, ON	2004
FALLIS, Ken J.	Winnipeg, MB	1985
FARAGO, Bert	Don Mills, ON	1987
FAZIO, Paul	Montréal, QC	1984
FELDKAMP, H.F. (Henry)	Saskatoon, SK	1997
FERNANDO, Siri	Edmonton, AB	2009
FILER, William A.	Ancaster, ON	1984
FILION, Yves	Montréal, QC	2007
FINE, Manny A.	Hamilton, ON	1982
FISHER, W. Bryce	Halifax, NS	1996
FLETCHER, Jim	Halifax, NS	2001
FOLLETT, Gary J.	St. John's, NL	2000
FOSCHI, Ricardo O.	Vancouver, BC	1996
FOWLER, Charles A.E.	Halifax, NS	1993
FOWLER, John R.	Ottawa, ON	1998
FRANCIS, Ralph M.	Fredericton, NB	1992
FRENETTE, Marcel	Cap Santé, QC	1982
FURNEAUX, R. John	Waverly, NS	2002
GAMSA, Simon	Montréal, QC	1993
GARLAND, James	Whitby, ON	2009
GATES, William H.	Halifax, NS	1988
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CELID D14	M(-1, OC	2002
GEHR, Ronald	Montréal, QC	2002
GHALI, Amin	Calgary, AB Boucherville, QC	1986
GIGNAC, Pierre GILKIE, Ronald C.	Halifax, NS	2010 1991
GILMOR, Michael I.	Unionville, ON	1992
GORDON, James L.	Pointe-Claire, QC	1989
GOSSELIN, Guy	Ottawa, ON	2007
GREEN, Roger	Waterloo, ON	1985
GREENFIELD, David	Burlington, ON	2001
GREENOUGH, Geoffrey*	Moncton, NB	1993
GRIMBLE, Louis	Edmonton, AB	2001
GUILLAUD, Christian	Montréal, QC	1991
HAAS, Ralph C.	Waterloo, ON	1994
HAMEL, Laurent	Québec, QC	1982
HAN, Yingcai	Calgary, AB	2008
HANUSCHAK, William	- ·	1999
HARRIS, Philip J.	Winnipeg, MB	1983
HARRISON, R. Peter	Burlington, ON Falmouth, NS	1984
HART, Peter R.	Toronto, ON	1982
HARWOOD, Appleton (Tony)	Dartmouth, NS	1992
**	Vancouver, BC	
HAY, Duncan	Waterloo, ON	1989
HAYCOCK, Don H.	Moncton, NB	2006
HÉBERT, Gilles		2005
HEIDEBRECHT, Arthur C.	Dundas, ON	1984
HEINKE, Gary W.	Cobble Hill, BC	1984
HEISLER, Timothy	Saskatoon, SK	2001
HENRY, J. Glynn F.	Don Mills, ON	1994
HETTIARATCHI, Patrick	Calgary, AB	2011
HIBBARD, William R.	Edmonton, AB	1996
HICKS, Faye	Edmonton, AB	2003
HITCHCOCK, Barry	Scarborough, ON	1990
HODGES, Kenneth W.	London, ON	2000
HOLDEN, John D.	Calgary, AB	1996
HOLMAN, W.C.	St-Catharines, ON	1989
HOSAIN, Mel U.	Saskatoon, SK	1985
HOUDE, Jules	Montréal, QC	1986
HRUDEY, Terry Michael	Edmonton, AB	1999
HUMAR, Jag Mohan	Ottawa, ON	1987
HUTCHINSON, Bruce G.	Waterloo, ON	1992
INNES, J. David	Fredericton, NB	1997
IRCHA, Michael C.	Fredericton, NB	1993
IRWIN, Peter A.	Guelph, ON	2000
IRWIN, W. Wayne	London, ON	1995
ISAACSON, Michael	Vancouver, BC	1995
ISABELLE, Henri	St. Lambert, QC	1987
ISHERWOOD, Brian	Mississauga, ON	1999
ISMAIL, Sayed	Fredericton, NB	2001
ISYUMOV, Nicholas	London, ON	1996
JAEGER, Leslie G.	Halifax, NS	1983
JAMES, Peter	London, ON	1986

JAMES, William	Guelph, ON	1985
JAY, John	Halifax, NS	1997
JIN, Gordon	St. John's, NL	2003
JOFRIET, Jan C.	Guelph, ON	1992
JOHNSON, Claude D.	Thunder Bay, ON	1985
JONES, Martin C.	Oakville, ON	1984
JORDAAN, Ian J.	St. John's, NL	1990
JULL, David E.	Toronto, ON	1998
JURIMAE, Jaak	Toronto, ON	2002
KATOPODIS, Christos	Winnipeg, MN	2012
KEARNEY, James H.	Toronto, ON	1987
KEENAN, Paul T.	Agincourt, ON	1997
KELLERHALS, Rolf	Heriot Bay, BC	1984
KELLS, James A.	Saskatoon, SK	2003
KENNEDY, D.J. Laurie	Edmonton, AB	1982
KENNEDY, John B.	Windsor, ON	1988
KERNAHAN, John	Niagara Falls, ON	1998
KERR, Dennis	Dundas, ON	1995
KHAN, Ata M.	Ottawa, ON	1996
KHOUDAY, Amin	Mont Royal, QC	1995
KIERANS, Tom	St. John's, NL	2001
KING, Peter	London, ON	2001
KNOLL, Franz	Laval, QC	1994
KOCH, Verlin	Calgary, AB	2009
KOROL, Robert M.	Hamilton, ON	1987
KRENTZ, Hugh A.	Willowdale, ON	1984
KRIVIAK, Gary	Edmonton, AB	2011
KROMAN, Jadwiga	Calgary, AB	2004
KULLMAN, Rick	Saskatoon, SK	2004
KWAN, Helen Po Jen	Hong Kong	2012
LABOSSIÈRE, Pierre	Sherbrooke, QC	2006
LACHEMI, Mohamed	Toronto, ON	2010
LADANYI, Branko	Montréal, QC	1983
LAM, Clifford	St. Catharines, ON	2011
LAMARRE, Bernard	Montréal, QC	1983
LANGAN, Peter	Toronto, ON	2007
LANGLOIS, Emile	Sillery, QC	1991
LANGLEY, Wilbert	Lower Sackville, NS	1990
LANTAGNE, Georges	Québec, QC	1995
LANTEIGNE, Ann	Yellowknife, NT	2008
LANYI, Richard	Edmonton, AB	2004
LAU, David T.	Ottawa, ON	2003
LAUGHTON, Peter J.	Willowdale, ON	1997
LAVIGUEUR, Gilles	Verdun, QC	1984
LAVIGUEUR, J. Bernard	Ville Lorraine, QC	1985
LEBLANC, Sylvain	Dieppe, NB	2011
LECKIE, David	London, ON	2008
LECLERC, André	Québec, QC	1992
LECLERC, Anne-Marie	Québec, QC	2007
LEFLER, James C.	Woodstock, ON	1996
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LÉGER, Pierre	Mantráal OC	2008
LEGER, FIGHE LESTER, W. Barry	Montréal, QC Calgary, AB	1997
LEXIER, Easton I.	Winnipeg, MB	1990
LONGWORTH, Jack*	Edmonton, AB	1985
LOOV, Robert	Calgary, AB	1988
LOWE, Paul	White Rock, BC	2009
LUKEY, Albert	Regina, SK	1984
LUPIEN, Claude	Sherbrooke, QC	1991
LYE, Leonard	St. John's, NL	2002
MACDONNELL, Ralston E.	Halifax, NS	2000
MACGREGOR, James G.	Halfmoon Bay, BC	1983
MACHIBRODA, Paul	Saskatoon, SK	1995
MACKENZIE, Alistair	Burlington, ON	1998
MACKENZIE, Kenneth	St. Catharines, ON	1992
MACKLIN, Harold L.	Cobourg, ON	1982
MACLAREN, James W.	Sarnia, ON	1984
MADSEN, Borg	North Vancouver, BC	1989
MAILLARD, Pierre-Louis	Montréal, QC	1997
MAK, Garry	Saskatoon, SK	2000
MAMET, Jean-Claude	St. Lambert, QC	1996
MARCIL, J.R. Maurice	Ste-Dorothée, QC	1989
MARSH, Cedric*	Westmount, QC	1997
MARSHALL, Donald G.	Oakville, ON	1999
MARTIN, Robert M.	St. Catharines, ON	1998
MARTINI, Orlando V.	Etobicoke, ON	1994
MARTONI, Ciro	Montréal, QC	1997
MARZOUK, Hesham	St. John's, NL	1998
MASSICOTTE, Bruno	Montreal, QC	2005
MASSIÉRA, Michel	Moncton, NB	1990
MAURENBRECHER, A.H. Paul	Ottawa, ON	2000
MAVINIC, Donald S.	Vancouver BC	1994
MCBEAN, Edward	Guelph, ON	2010
MCCABE, Brenda	Toronto, ON	2007
MCCALLA, John H.	Nepean, ON	1994
MCCAVOUR, Thomas C.	Etobicoke, ON	1990
MCCLURE, Ghyslaine	Montréal, QC	2008
MCCORQUODALE, J. Alexander	Windsor, ON	1989
MCDONALD, Rodger	Regina, SK	2004
MCDONNELL, Robert	Antigonish, NS	1988
MCFARLANE, Howard W.	Fredericton, NB	1982
MCGINNIS, Lloyd R.	Winnipeg, MB	1985
MCGRATH, Richard	Ottawa, ON	2009
MCKAY, Robert L.	Surrey, BC	2002
MCKAY, William G.	Winnipeg, MB	1991
MCKEVITT, William	Vancouver, BC	2001
MCLEAN, Steve	St. John's, NL	2007
MCMANUS, R.N.	Edmonton, AB	1983
MCNALLY, Patrick J.	Burlington, ON	1983
METTEN, Andrew	Vancouver, BC	2002
MILBURN, Robert C.	Yellowknife, NT	1998
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MINDESS, Sidney	Vancouver, BC	2003
MIRZA, Bashir	Karachi, PAKISTAN	1989
MIRZA, Cameran	Willowdale, ON	1985
MIRZA, M. Saeed	Montréal, QC	1982
MIRZA, Sher Ali	Thunder Bay, ON	1992
MISENER, Donald K.	St. Catharines, ON	1993
MITCHELL, Denis	Pointe-Claire, QC	1992
MOIR, Frank C.	Toronto, ON	1993
MONTGOMERY, James	Edmonton, AB	2005
MONTY, Guy	Outremont, QC	1983
MORANTZ, Norman	Montréal, QC	2001
MORGENSTERN, Brian Douglas	Vancouver, BC	2003
MORRALL, John F.	Calgary, AB	1998
MORRIS, Glenn A.	Winnipeg, MB	1982
MORRISON, Kenneth A.	Willowdale, ON	1996
MOSELHI, Osama E.	Montréal, QC	1994
MOULDING, Herbert C.	Kelowna, BC	1983
MUDRY, Nestor	Winnipeg, MB	1983
MUFTI, Aftab A.	Halifax, NS	1984
MUNRO, Bert	Saskatoon, SK	2008
MURRAY, H. Ramsay M.	Victoria, BC	1991
MUTRIE, James G.	North Vancouver, BC	1999
MUZYCZKA, Walter	Winnipeg, MB	2004
NASSER, Karim W.	Saskatoon, SK	1995
NAVIN, Francis P.D.	Vancouver, BC	1988
NEALE, Kenneth	Sherbrooke, QC	1993
NEILL, Charles R.	Edmonton, AB	1983
NEIS, Vernon V.	Kelowna, BC	1986
NELL, Peter	St. John's, NL	2004
NICOLET, Roger R.	Montréal, QC	1988
NICOLL, Murray	Dartmouth, NS	1998
NOËL, Bernard	St. Lambert, QC	2002
O'HALLORAN, Daniel P.	Halifax, NS	1990
OJALA, Peter	Markham, ON	2004
OLESZKIEWICZ, Jan A.	Winnipeg, MB	1995
OLSEN, Harvey	Calgary, AB	2000
OUELLET, Yvon	Ste-Foy, QC	1988
PAGANUZZI, Peter	Montréal, QC	2000
PALL, Avtar		2003
PARCHEWSKY, Nicholas	Montréal, QC Hinton, AB	1984
PARDOE, Maurice F.	Saskatoon, SK	1992
PAULTRE, Patrick	Sherbrooke, QC	1997
PEKAU, Oscar A. PENTLAND, Edward R.	Montréal, QC	2011
PENTLAND, Edward R. PENTLAND, Ray S.	Langley, BC	2010
. ,	Regina, SK	1997
PERKS, Alan R.	Ottawa, ON	1996
PERRY, Victor H.	Calgary, AB	1999
PETERSON, Arthur E.	Edmonton, AB	1996
PICKLE Parada	Québec, QC	1991
PICKLE, Randy	Oshawa, ON	2004

PIGEON, Michel	Ste-Foy, QC	1992
PLOURDE, François	Laval, QC	2005
POSCHMANN, Anne	Mississauga, ON	2006
POULIN, Rock	Ville Mont-Royal, QC	2002
PRATLEY, Hugh H.L.	Westmount, QC	2002
PRINCE, George S.	Victoria, BC	1991
PRION, Helmut	Vancouver, BC	2005
PUTZ, Gordon	Saskatoon, SK	2005
QUAILE, Allan T.	Newmarket, ON	2002
QUICK, Michael C.	Vancouver, BC	1997
RAINER, J. Hans	South Surrey, BC	1995
RAJAPAKSE, Nimal	Vancouver, BC	2000
RAJARATNAM, Nallamuthu	Edmonton, AB	1993
RAMAMURTHY, Amruthur S.	Montréal, QC	1998
RAMSAY, James A.	Toronto, ON	1983
RASMUSSEN, Peter	Winnipeg, MB	2011
RAZAQPUR, Abdul Ghani	Hamilton, ON	1998
REICHERT, Jeff	Saskatoon, SK	2009
REICHERT, Karl A.	Milton, ON	2002
REMISZ, Wojciech	Nepean, ON	2005
RENNEBERG, Russel James	Edmonton, AB	2000
RETZLAFF, Howard	Regina, SK	2010
RICHARD, Guy	Québec, QC	2008
RICHTER, Susan H.	St. John's, NL	1998
RIEMER, Paul*	Saskatoon, SK	1983
RITCHIE, J. Keith	North York, ON	1990
RIZKALLA, Sami	Winnipeg, MB	1992
ROBINSON, Ronald	Bowmanville, ON	2005
ROHACEK, Edward J.	Don Mills, ON	2000
ROHAN, Karol	Sherbrooke, QC	1985
ROTHENBURG, Leo	Waterloo, ON	2008
ROUSSELLE, Jean	Montréal, QC	1990
ROWE, R. Kerry	London, ON	1998
ROY, Jean Jacques	Moncton, NB	2003
RUSHFORTH, Andrew J.	Victoria, BC	2001
RUSSELL, Alan David	Vancouver, BC	2000
RUSSELL, S.O. (Dennis)	Vancouver, BC	1988
SAATCIOGLU, Murat	Ottawa, ON	2007
SALTZBERG, Walter	Winnipeg, MB	2007
SCHECKENBERGER, Ron	Millgrove, ON	2012
SCHRIEVER, William Robert	Ottawa, ON	1991
SCHROEDER, Kenneth	Hamilton, ON	1990
SCHUBACK, Robert	Port Coquitlam, BC	2008
SCHUSTER, Reinhold	Waterloo, ON	2001
SCHWINGHAMER, A. (Al) J.	Moose Jaw, SK	1996
SELBY, David A.	Montréal, QC	1986
SELVADURAI, Patrick A.	Montréal, QC	1989
SENNAH, Khaled	Toronto, ON	2011
SEXSMITH, Calvin	Saskatoon, SK	2007
SEXSMITH, Robert G.	West Vancouver, BC	1988
JEAJMITTI, ROUGIT G.	west valicouvel, DC	1700

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TREMBLAY, Robert	Montréal, QC	2004
TROTTIER, Guy	Ste-Foy, QC	1989
TUREK, Michael E.	London, ON	2001
TURKSTRA, Carl J.	Hamilton, ON	1982
ULYATT, Norman B.	Winnipeg, MB	1998
VALSANGKAR, Arun	Fredericton, NB	2005
VAN DUSEN, H. Al	Agincourt, ON	1985
VAUGHAN, J. Philip	Halifax, NS	1982
VENTURA, Carlos	Vancouver, BC	2001
VICKERS, T. Victor E.	Qualicum Beach, BC	1991
VIERHUIS, Hans	Markham, ON	2005
VINCENT, Claude	Québec, QC	1997
VINCENT, Richard B.	Pointe-Claire, QC	1996
VIRARAGHAVAN, T.	Regina, SK	1991
VIZER, Andrew	Vancouver, BC	1999
WALLACE, John A.	Burnaby, BC	2006
WALLACE, Reginald	Toronto, ON	2001
WALLER, Donald H.	Halifax, NS	1983
WATT, W. Edgar	Kingston, ON	1991
WAUGH, Lloyd	Frederiction, NB	2002
WEBER, Orlan John	Edmonton, AB	1994
WEILER, Gerry	Burnaby, BC	2000
WEIR, Charles H.*	Edmonton, AB	2012
WEISMAN, Simon	North York, ON	2000
WHETEN, Waldo A.	Hamilton, ON	1995
WHITMORE, David	Winnipeg, MB	2010
WINDSOR, Neil	Lewisport, NF	2012
WIGHAM, John A.	Saskatoon, SK	1988
WIDEMAN, R. Max	Vancouver, BC	1994
WILKINS, E.B. (Bert)	Victoria, BC	1996
WILSON, Frank R.	Fredericton, NB	1983
WILSON, Kenneth	Victoria, BC	2001
WIRASINGHE, Chan	Calgary, AB	2001
WOINOWSKY-KREIGER, Alexandre	Québec, QC	2002
WOODALL, David C.	Calgary, AB	2000
WREFORD, Geoffrey	Calgary AB	1999
WRIGHT, Douglas T.	Waterloo, ON	1984
WRIGHT, E. Whitman	Ottawa, ON	1983
WRIGHT, Peter M.	Toronto, ON	1983
YANFUL, Ernest	London, ON	2011
YAREMKO, Eugene K.	Edmonton, AB	1997
ZBEETNOFF, Joseph G.	Prince Albert, SK	1991

<sup>\*</sup> Deceased during the past year. Décédé l'année dernière.

PRIX	WALTER	<b>SHANLY</b>	<b>AWARD</b>
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2001	Simaan AbouRizk
2002	Alan D. Russell
2003	Osama Moselhi
2004	Peter Dozzi
2005	John Christian
2007	Sabah Alkass
2006	Lloyd Waugh
2009	Siri Fernando
2011	Aminah Robinson Fayek
2012	Janaka Ruwanpura
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### PRIX SANDFORD FIFMING AWARD

I KIN SAKDI OKD I ELIHIKU AMAKD		
1999	Ralph Haas	
2000	Bruce Hutchinson	
2001	Francis Navin	
2002	John Morrall	
2003	Said Easa	
2004	Frank Wilson	
2005	A.O. Abd El Halim	
2006	Alan Clayton	
2007	Lynne Cowe Falls	
2008	Anne-Marie Leclerc	
2010	Tarek Sayed	
2011	Andrew Horosko	
2012	Neil Irwin	
DDIV W	CUBDUN DI EMES VMVBU	
PRIXW	FIIKIIIN FIEWEZ VWVKII	

# PRIX W. GURDUN PLEWES AWARD

1992	Robert F. Leggett
1993	Gilles Desaulniers
1994	Phyllis Rose
1995	Roy Minter
1996	Robert W. Passfield
1997	Georges-Hébert Germain
1998	Ken Coates
1999	Mark Andrews
2000	Norman R. Ball
2001	Robert G. Harvey
2002	Michel L'Hébreux
2003	Andrew H. Wilson
2004	Jerry Disher
2005	Ralph Crysler
2006	Richard Wallace White
2007	Roberta M. Styran
2010	Theresa Charland

# MÉDAILLE HORST LEIPHOLZ MEDAL

1992	N.R. Thompson & J.F. Sykes
1993	M. Isaacson, E. O'Sullivan,
	& J. Baldwin
1995	Branko Ladanyi
1996	Ricardo O. Foschi
1998	Archibald N. Sherbrourne
1999	Ian Jacques Jordaan
2000	Nimal Rajapakse
2002	Kenneth Neale
2007	Leslie Jaeger
2008	Baidar Bakht
2012	Nemy Banthia

# MÉDAILLE ALBERT E. BERRY MEDAL

MIEDAILLE ALDERT E	. DERKT MEDAL
1992	Donald S. Mavinic
1993	Gerhard William Heinke
1994	Norbert W. Schmidtke
1995	William K. Oldham
1996	J. Glynn F. Henry
1997	Donald R. Stanley
1998	Jan Oleszkiewicz
2000	Peter Huck
2001	Peter J. Laughton
2002	George Powell
2003	Orlando Martini
2005	Ronald L. Droste
2006	T. Viraraghavan
2007	Boyd Touchie
2008	Rodger McDonald
2011	Nihar Biswas

PRIX E. WHITMAN \	VRIGHT AWARD	PRIX A.B. SANDERS	ON AWARD
1992	Siegfried F. Stiemer	1992	John Springfield
1993	Mehmet N. Baltacioglu	1993	Amin Ghali
1994	Alan A. Smith	1994	James G. MacGregor
1995	Donald Grierson	1995	Krishnan G. Bassi
1996	Mo-Shing Cheung	1996	Peter G. Buckland
1998	George Casoli	1997	Michael P. Collins
2001	Jag Mohan Humar and	1998	Noel D. Nathan
	Kohn Krahn	1999	Gamil Tadros
2002	Simaan AbouRizk	2000	Sami Rizkalla
2003	Patrick Paultre	2001	Peter Taylor
2004	Douglas Stewart	2002	Walter Dilger
2005	Alan Russell	2003	Jag Mohan Humar
2006	Gamil Tadros	2004	Baidar Bakht
2007	David Lau	2005	Denis Mitchell
2008	Pierre Léger	2006	Aftab Mufti
2009	René Tinawi	2007	Robert Sexsmith
2010	Jean Proulx	2008	Amin Khouday
2011	Frank Vecchio	2009	Ron DeVall
		2010	Robert Loov
PRIX CAMILLE A. D.	AGENAIS AWARD	2011	Sher Ali Mirza
1992	B.G. Krishnappan	2012	Ghani Razaqpur
1993	Michael Isaacson		
	Nallamuthu Rajaratnam		
1994			
1994 1995		PRIX JAMES A. VAN	CE AWARD
1995	J. Alexander McCorquodale		
1995 1996	J. Alexander McCorquodale Michael C. Quick	1992	Anthony Kruysse
1995 1996 1997	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin	1992 1993	Anthony Kruysse Barry DeV. Batchelor
1995 1996 1997 1998	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray	1992 1993 1994	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson
1995 1996 1997 1998 1999	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray Spyros Beltaos	1992 1993 1994 1995	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson Glenn Morris
1995 1996 1997 1998 1999 2003	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray Spyros Beltaos Ronald Townsend	1992 1993 1994 1995 1996	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson Glenn Morris Sami H. Rizkalla
1995 1996 1997 1998 1999 2003 2004	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray Spyros Beltaos Ronald Townsend Peter Steffler	1992 1993 1994 1995 1996 1997	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson Glenn Morris Sami H. Rizkalla Baidar Bahkt
1995 1996 1997 1998 1999 2003 2004 2005	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray Spyros Beltaos Ronald Townsend Peter Steffler Slobodan Simonovic	1992 1993 1994 1995 1996 1997 1998	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson Glenn Morris Sami H. Rizkalla Baidar Bahkt James J. Sharp
1995 1996 1997 1998 1999 2003 2004 2005 2006	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray Spyros Beltaos Ronald Townsend Peter Steffler Slobodan Simonovic William James	1992 1993 1994 1995 1996 1997	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson Glenn Morris Sami H. Rizkalla Baidar Bahkt James J. Sharp William Hibbard &
1995 1996 1997 1998 1999 2003 2004 2005 2006 2007	J. Alexander McCorquodale Michael C. Quick M. Selim Yalin Dale I. Bray Spyros Beltaos Ronald Townsend Peter Steffler Slobodan Simonovic William James Chris Katopodis	1992 1993 1994 1995 1996 1997 1998 1999	Anthony Kruysse Barry DeV. Batchelor Bruce Hutchinson Glenn Morris Sami H. Rizkalla Baidar Bahkt James J. Sharp William Hibbard & Kenneth A. Morrison
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# GOVERNMENTAL LEADERSHIP IN SUSTAINABLE INSTRSTRUCTUREÉLEADERSHIP GOUVERNE-MENTAL EN INFRASTRUCTURE DURABLE

2012 City of Edmonton

# EXCELLENCE IN INNOVATION IN CIVIL ENGI-NEERING AWARD / PRIX D'EXCELLENCE EN IN-NOVATION DANS LE DOMAINE DU GÉNIE CIVIL

2008	Jeffrey Alan Packer,
	Constantin Christopoulos,
	Carlos de Oliveira &
	Michael G. Gray
2009	Association of Professional
	Engineers & Geoscientists of BC;
	BC Ministry of Education;
	Seismic Peer Review
	Committee; and the
	University of British Columbia
	- Department of Civil
	Engineering, Earthquake
	Engineering Research Facility
2010	DIALOG, Lafarge Canada
	and the University of Calgary

## LA BOURSE DONALD JAMIESON FELLOWSHIP

1992 & 1993	Diana Inculet
1994 & 1995	Robert Driver
1996 & 1997	Claire Girard
1998 & 1999	Scott Benson
2000	Dan Palermo
2002 & 2003	Adam Lubell
2004 & 2005	Lisa R. Feldman
2006	Ved Prakash Sharma
2009	Michael G. Gray
2010 & 2011	Sébastien Langlois
2012 & 2013	Fei Tong

## PRIX DONALD R. STANLEY AWARD

2006	Jeffrey W.A. Charrois, Jessica M. Boyd,
	Kenneth L. Froese & Steve E. Hrudey
2007	Stéphanie Bougie &
	Jean-Sébastien Dubé
2008	K.P. Fattah, Y. Zhang, D.S. Mavinic &
	F.A. Koch
2009	Chen He & Jiri Marsalek
2012	Beatrice B. Yung, Bryan A. Tolson &
	Donald H. Burn

# PRIX STEPHEN G. REVAY AWARD

I KIN OIL	THER G. RETHI ANNALD
2005	Aminah Robinson Fayek, Manjula
	Dissanayake & Oswaldo Campero
2007	A.D. Russell, P. Tawiah & S. De Zoysa
2009	Brenda McCabe, Catherine Loughlin,
	Ramona Munteanu, Sean Tucker &
	Andrew Lam
2012	Mahdi Salehi Sichani, Sanghyun Lee &
	Aminah Robinson Fayek
PRIX P.L.	PRATLEY AWARD
1992	F.M. Bartlett, P.G. Buckland &
	D.J. Laurie Kennedy
1993	A. Mufti, L. Jaeger, B. Bakht &
1775	L.D. Wegner
1994	D. Beaulieu & André Picard
1995	Tarek Ebeido & John B. Kennedy
1996	M. Bruneau, J.C. Wilson &
	R. Tremblay
1997	K.M. Sennah & John B. Kennedy
1998	S.D. Leitch & F.M. Bartlett
1999	Sylvanus Marshe & Mark F. Green
2000	Amin Ghali, Mamdouh El Badry &
	Sami Megally
2001	T.G. Brown, I.J. Jordaan &
	K.R. Croasdale
2002	F. Michael Bartlett & J. Peter C. King
2004	Dongning Li, Marc A. Maes &
	Walter H. Dilger
2006	Daman K. Panesar & F. Michael Bartlett
2007	Emile Shehata & Aftab Mufti
2008	Ahmed K. El-Sayed &

Brahim Benmokrane Guy Mailhot

Reid Coughlin & Scott Walbridge

2010

2012

MÉDAILL	E THOMAS C. KEEFER MEDAL	MÉDAILL	E CASIMIR GZOWSKI MEDAL
1992	S.J. Stanley & R. Gerard	1992	A. Brattland & D.J.L. Kennedy
1993	K.W. Biggar, D.C. Sego & M.M. Noël	1993	FZ. Yao, B. Folz & R.O. Foschi
1994	K.Y. Lo, J. Q. Shang & I.I. Inculet	1994	Michel Bruneau
1995	M. Isaacson, N. Whiteside, R. Gardiner	1995	P.A. Irwin, S. Gamble &
	& D. Hay		Donald A. Taylor
1996	S. Easa, A.O. Abd El Halim &	1996	G.C. McRostie, I. Morissette &
	Y. Hassan		M.W. St-Louis
1997	Hua Zhong Mao & Daniel W. Smith	1997	Gamil Tadros
1998	François Anctil, Nicolas Martel &	1998	A.G. Sherif & W.H. Dilger
	Van Diem Hong	1999	Michael P. Collins &
1999	Robert Chapuis		Khaldoun N. Rahal
2000	R. Kerry Rowe, Chris J. Caers,	2000	P. Labossière, K.W. Neale, P. Rochette,
	Glenn Reynolds & Cliff Chan		M. Demers, P. Lamothe, P. Lapierre
2001	Laurie Neilson-Welch & Leslie Smith		&. R. Desgagné
2002	D. Dixon, N. Chandler, J. Graham &	2001	M. Saatcioglu, D. Mitchell, R. Tinawi,
	M.N. Gray		N.J. Gardner, A.G. Gillies,
2003	Brian Morse, Masoud Hessami &		A. Ghobarah, D. L. Anderson & D. Lau
	Céline Bourel	2002	B.J. Schmidt & F. Michael Bartlett
2004	R. Martel, L. Trépanier, B. Lévesque,	2003	D. Mitchell, P. Tremblay, E. Karacabeyli,
	G. Sanfançon, P. Brousseau,		P. Paultre, M. Saatcioglu &
	M-A. Lavigne, L-C. Boutin, P. Auger,		D.L. Anderson
	D. Gauvin & L. Galarneau	2004	Dan Yang, Ernest Naesgaard,
2005	Mustafa A. Samad & Ernest K. Yanful		Peter M. Byrne, Korhan Adalier, and
2006	Reagan McIsaac & R. Kerry Rowe		Tarek Abdoun
2007	H.K. Zare & R.E. Baddour	2005	Kianoosh Hatami & Richard J. Bathurst
2008	Jennifer L. Kerr, Zhenyu Guo,	2006	Martin Lacerte & Robert Tremblay
	Daniel W. Smith, Greg G. Goss &	2007	Peter H. Bischoff
	Miodrag Belosevic	2008	Richard J. Bathurst, Tony M. Allen, and
2009	G. Adriana Camino, David Z. Zhu,		Andrzej S. Nowak
	Nallamuthu Rajaratnam &	2009	Hamid Toopchi-Nezhad,
	Manas Shome		Michael J. Tait, & Robert G. Drysdale
2010	Michael Isaacson	2010	J. Paul Dittrich, R. Kerry Rowe,
2012	W.T. Menzies, G.A. Fenton, C.B. Lake	2012	Dennis E. Becker & K.Y. Lo
	& D.V. Griffiths	2012	Elena Nuta, Constantin Christopoulos
			& Jeffrey A. Packer

# **CAN-AM AMITY AWARD**

1992	Robert (Larry) Gerard
1993	M. Saeed Mirza
1995	Branko Ladanyi
1996	Nicolas Isyumov
2011	Don Hayley

# **COMITÉS DE SÉLECTION SELECTION COMMITTEES 2012 - 2013**

#### BOURSE DONALD JAMIESON FELLOWSHIP

Vic Anderson, Toronto (Chair/Président) Denis Beaulieu, Québec David H. Mackinnon, Markham Khaled Sennah, Toronto

# AWARD FOR GOVERNMENTAL LEADERSHIP IN SUSTAINABLE INFRASTRUCTURE / PRIX POUR LE LEADERSHIP GOUVERNEMENTAL EN INFRA-STRUCTURE DURABLE

Guy Félio, Rockland (Chair/Président) Martin J. Gordon, Victoria Matthew Hough, Ottawa Harvey L. Mead, Québec (Advisor/Conseiller) Catherine Mulligan, Montréal Doug Salloum, Montréal (ex-officio)

## PRIX WALTER SHANLY AWARD

Simaan Abou Rizk, Edmonton Siri Fernando, Edmonton

#### PRIX SANDFORD FLEMING AWARD

Lynne Cowe Falls, Calgary, (Chair/Président)
Said Easa, Toronto
R.C. Haas, Waterloo
John Morrall, Calgary
Martin Trépanier, Montréal
Frank Wilson, Fredericton
Abd El Halim, Ottawa

### MÉDAILLE HORST LEIPHOLZ MEDAL

Baidar Bakht, Toronto (Chair/Président) Marie-Anne Erki, Kingston Aftab Mufti, Vancouver Khaled Sennah, Toronto

#### PRIX CAMILLE DAGENAIS AWARD

Bill James, Guelph Christos Katopodis, Winnipeg (Chair/Président) Slobodan Simonovic, London Peter Steffler, Edmonton

## PRIX A.B. SANDERSON AWARD

Ashraf El Damatty, London Murat Saatcioglu, Ottawa Robert Sexsmith, Vancouver (Chair/Président) Adel Zaki, Montreal

#### PRIX IAMES A. VANCE AWARD

Gordon Jin, St. John's Vic Perry, Calgary Randy Pickle, Oshawa (Chair/Président)

#### PRIX DONALD R. STANLEY AWARD

Tom Brown, Calgary Bob Dawson, Victoria (Chair/Président) Dave Pernitsky, Calgary

# PRIX STEPHEN G. REVAY AWARD

Tarek Hegazy, Jeff Rankin, Fredericton, Aminah Robinson-Fayek, (Chair/Président) Tarek Zayed

#### PRIX P.L. PRATLEY AWARD

Roman Cap, Vancouver Doug Dixon, Mississauga Paul Gauvreau, Toronto (Chair/Président) Frédéric Légeron, Sherbrooke Guy Mailhot, Montréal John Stephenson, Cambridge

# MÉDAILLE THOMAS C. KEEFER MEDAL

Nihar Biswas, Windsor (Chair/Président) Michel Grégoire, Winnipeg Arbind Mainali, Edmonton

## MÉDAILLE CASIMIR GZOWSKI MEDAL

James Blantz, Winnipeg Peter H. Bischoff, Fredericton (Chair/Président) Pierre Leger, Montréal Adam Lubell, Vancouver

# COMITÉS DE SÉLECTION SELECTION COMMITTEES 2012 - 2013

# MEMBERS OF HONOURS AND FELLOWSHIPS COMMITTEE / MEMBRES DU COMITÉ DES DIS-TINCTIONS HONORIFIQUES ET DES FELLOWS

George Akhras, Kingston
Michael Bartlett, London
Cathy Lynn Borbely, Regina
Tom Brown, Calgary
Andy Horosko, Winnipeg
Gordon Jin, St. John
Amin Khouday, Montréal
Alistair MacKenzie, Toronto
Bob Milburn, Yellowknife
Arbind Mainali, Edmonton (Ex-officio)
Ron Townsend, Ottawa (Past Chair/Président sortant)
Lloyd Waugh, Fredericton (Chair/Président)

CSCE ANI	NUAL CONFERENCES	PAST-PRESIDENTS OF THE CSCE /
1972	Saskatoon, SK (with EIC)	ANCIENS PRÉSIDENTS DE LA SCGC
1972	Montréal, QC (with EIC)	
	_	1972-73 Camille A. Dagenais, FLM.SC.GC
1974	Toronto, ON (with EIC and Union	1973-74 Harold L. Macklin, FLMCSCE
1075	Pan-American D'Ingeneiros (UPADI))	1974-75 Eric C. Garland*
1975	Winnipeg, MB (with EIC)	1975-76 D.J. Laurie Kennedy*
1976	Halifax, NS (with EIC)	1976-77 John (Jack) Priestman*
1977	Victoria, BC (with APEBC –	1977-791 Peter R. Hart, FLMCSCE
	now APEGBC)	1979-80 Jerry W. Disher, FLMCSCE
1978	Toronto, ON (with CSME –	1980-81 Marcel Frenette, FSCGC
	no General Meeting)	1981-82 Peter Wright, FCSCE
1979	Montréal, QC	1982-83 W.A. Filer, FCSCE
1980	Winnipeg, MB	1983-84 Ira M. Beattie*
1981	Fredericton, NB	1984-85 Clifford D. Smith, FLMCSCE
1982	Edmonton, AB	1985-86 M. Saeed Mirza, FCSCE
1983	Ottawa, ON	1986-87 Chris D. Thompson, FCSCE
1984	Halifax, NS (with EIC)	1987-88 Daniel W. Smith, FCSCE
1985	Saskatoon, SK	1988-89 Peter Smith*
1986	Toronto, ON	1989-90 Stephen G. Revay*
1987	Montréal, QC (with EIC)	1990-91 H. Keith Bowers, FCSCE
1988	Calgary, AB	1991-92 Martin C. Jones, FCSCE
1989	St. John's, NL	1992-93 Leslie G. Jaeger, FCSCE
1990	Hamilton, ON	1993-94 Claude Johnson, FCSCE
1991	Vancouver, BC	1994-95 P. Daniel Burns, FCSCE
1992	Québec, QC	1995-96 Jules Houde, FSCGC
1993	Fredericton, NB	1996-97 Michael Ircha, FCSCE
1994	Winnipeg, MB	1997-98 Mel Hosain, FCSCE
1995	Ottawa, ON	1998-99 Alan Perks, FCSCE
1996	Edmonton, AB	1999-00 Georges Archer, FSCGC
1997	Sherbrooke, QC	2000-01 Robert Loov, FCSCE
1998	Halifax, NS	2001-02 Ronald Townsend, FCSCE
1999	Regina, SK	2002-03 Denis Beaulieu, FSCGC
2000	London, ON	2003-04 David Innes, FCSCE
2001	Victoria, BC	2004-05 Cathy Lynn Borbely, FCSCE
2002	Montréal, QC	2005-06 Alistair MacKenzie, FCSCE
2003	Moncton, NB	2006-07 A. Ghani Razaqpur, FCSCE
2004	Saskatoon, SK	2007-08 Lloyd M. Waugh, FCSCE
2005	Toronto, ON	2008-09 Guy Gosselin, FCSCE
2006	Calgary, AB	2009-10 Gordon Jin, FCSCE
2007	Yellowknife, NT	
2008	Québec, QC	2010-11 Vic Perry, FCSCE 2011-12 Randy Pickle, FCSCE
2009	St. John's, NL	2011-12 Randy Fickie, FCSCE
2010	Winnipeg. MB	
2010	Ottawa, ON	* Dancard
2011	Edmonton, AB	* Deceased
2012	Edinoliton, AD	1 A change in the fiscal year in 1978 resulted in
		Peter Hart serving a nineteen-month term as President.