20 SCI® CANADA 23 AWARDS

18 APRIL 2023

DOUBLETREE BY HILTON TORONTO

where science meets business



WELCOME

Welcome to the SCI® Canada Awards celebration. Since its formation in 1902, SCI® Canada has recognized achievements in the Canadian chemical industry and has presented awards to meritorious chemistry and chemical engineering students, in order to sustain the drive for innovation.

This year, we will present seven prestigious awards to industry and academic leaders for their outstanding achievements and professional contributions. We will also recognize outstanding performance of undergraduate students in chemistry, biochemistry, and chemical engineering at universities across Canada, several of whom are in attendance this evening.

As Chair of the SCI® Canada Nominations Committee, my colleagues and I are privileged to be able to recognize achievement, to celebrate success, and to encourage excellence in the chemical industry. Through this annual awards program, we aim to strengthen our ties with industry, academia, and business across Canada and to further promote excellence in the sector.

I hope you have a wonderful evening.







A WORD FROM SHARON TODD

The Society of Chemical Industry (SCI®) was established in 1881 by scientists, inventors and entrepreneurs interested in creating new products and processes from the emerging technologies and innovations of the day.

Today, SCI® is a unique multi-science, multi-disciplinary, international community specifically designed to create collaborations across non traditional boundaries. Our charitable objective is to promote links between science and industry for the benefit of society, which allows us to look at opportunities to tackle global challenges and identify possible solutions.

SCI® fosters innovation through networking and education, which is an important part of this evening's Awards Dinner, where we recognise leaders and their achievements in chemical industry and education across Canada, as SCI® heads into its 142nd year. I am proud of SCI®'s heritage and the SCI® Canada International Group's Awards Programme and I would like to congratulate our winners on this prestigious evening. I would also like to say thank you to our table sponsors Syngenta, Croda, Inviand Sciences, University of British Columbia, Process Research ORTECH Inc, PEI BioAlliance, DuPont and Blachford all of whom have made this special evening possible.



Sharon Todd CEO of SCI®

SCI® CANADA

SCI® is a unique multidisciplinary forum where science meets business on independent, impartial ground. SCI® provides the opportunity for sharing information among sectors as diverse as Energy, Environment, Agri-Food, Health & Wellbeing, and Materials.

Established in 1881 as the Society of Chemical Industry and in Canada in 1902, SCI® is today a registered charity with individual members in over 70 countries. SCI®'s headquarters are in London, UK.

Ever since its foundation SCI®'s principal objective has been to further the application of chemistry and related sciences for the public benefit, through our events and publications.



20 SCI° CANADA 23 AWARDS

TUESDAY

18

APRIL
2023

LLLI AFTERNOON SEMINAR

15:30 **Registration & Refreshments** Introduction to the SCI® Canada Awards and 16:00 the role of the Nominations Committee Welcome & Introduction 16:05 Sharon Todd, CEO, SCI® Panel discussion: Unlocking the potential of Science Talent enabling impact on Canada's economic growth Panellists will include Rory Francis, Executive Director, 16:10 PEI Bioalliance (Purvis Memorial Award winner, 2023), Dr Alison Ewart, Dean of Center for Research & Innovation at Fanshawe College and Professor Howard Alper, Distinguished Professor at University of Ottawa.

17:00 Audience Q&A

17:25 Closing remarks

EVENING AWARDS DINNER

	18:00	Networking Reception Mandarin Ballroom Foyer
	18:35	Introduction to the SCI® Canada Awards and the role of the Nominations Committee Ravi Ramachandran, SCI® Canada Committee Chair and Territory Head of R&D, Syngenta Canada
	18:40	Welcome & Introduction Sharon Todd, <i>CEO, SCI®</i>
ш	18:45	Recognition of Student Awards winners
\geq	18:50	Presentation of the The Kalev Pugi Award Francesca Kerton
S	18:55	Presentation of the LeSueur Memorial Award Dr Rupert Spence
	19:00	Presentation of the International Award Dr Vaikuntam Iyer Lakshmanan
	19:05	Presentation of the Purvis Memorial Award Rory Francis
	19:10	Presentation of the Outreach Award Geoffrey Rayner-Canham, Chaim Christiana Andersen, Rosalina Naqitarvik
	19:15	Presentation of the Julia Levy Award Prof. Pieter Cullis
	19:20	Presentation of Canada Medal Dr Paul Smith
	19:30	Dinner
هـ	21:15	Post Event Networking

AWARD WINNERS

Canada Medal

Dr Paul Smith

Perimeter Institute for Theoretical Physics



SCI® Canada Medal - Dr Paul Smith

Paul Smith joined Perimeter Institute for Theoretical Physics in 2021 as Managing Director and Chief Operating Officer bringing a wealth of experience in scientific research and management. He was a member of the Xerox Senior Leadership Team and Vice President and Centre Director of Xerox Global Materials Research Centre from 2011-21, responsible for development of devices for IoT, CleanTech and 3D materials. In partnership with National Research Council of Canada, Dr. Smith helped create the Canadian Campus for Advanced Materials and Manufacturing, a partnership between government and industry for leading-edge, world-class R&D focused on commercialization of devices for the In-



ternet of Everything and CleanTech. Paul received a Chemistry PhD from University of Bath, England (1991), and an MBA from Rotman School of Management, University of Toronto (2001). Paul is Past Chair of the Chemical Institute of Canada and was inaugural Chairman of IntelliFLEX, the Canadian Printed Electronics Industry Association, a former Director of the Board of NGen Canada, and a past Chair of the Conference Board of Canada's Council for Innovation and Commercialization. He sat on the Editorial Advisory Board for the Canadian Science Policy Centre and the Deans Advisory Board for the Southern Alberta Institute of Technology (SAIT). From 2014-2018, he served on Canada's Natural Sciences and Engineering Research Councils (NSERC) Committee on Research Partnerships. Paul is a named inventor on 78 U.S, patents with 16 publications.

Purvis Memorial Award

Rory Francis PEI Bioalliance



Purvis Memorial Award - Rory Francis

Rory Francis is a native of Prince Edward Island. He earned a BSc in geology and chemistry from Mount Allison University and MSc in hydrogeology from the University of Waterloo. Since 2004 he has been CEO of the Prince Edward Island BioAlliance, a not-for-profit partnership of bioscience businesses, academic and research organizations, and government agencies that includes 60 companies earning over \$600 million in annual sales, making the bio sector the second largest industry in the Province. He is a founder of the Emergence Bioscience Business Incubator, Natural Products Canada, a national natural products ecosystem and business accelerator, and of the Canadian Alliance for Skills and Training in Life Sciences. From 1991-2003 Mr. Francis held Deputy Minister positions in



several provincial government departments, including Environment; Agriculture and Forestry; Fisheries & Aquaculture; and Health & Social Services. Rory has served as a Board member with the Canadian Agri-Food Policy Institute, the Greater Charlottetown Area Chamber of Commerce, the Vineland Research and Innovation Centre, and is President of the Eastern Canada Oilseeds Development Alliance. He is a Board Member with Canada's Ocean SuperCluster, chairs the Advisory Board for the Culinary Institute of Canada's Technology Access Centre and is a member of the National Research Council's Advisory Board for their Aquatic and Crop Resource Development Program. He is married to Ann and is the father of three grown children.

AWARD WINNERS

LeSueur Memorial **Award**

OUPONT

Dr Rupert Spence

DuPont Canada

LeSueur Award - Dr Rupert Spence

Rupert Spence, Senior Scientific Laureate at DuPont, came to Canada in 1987 from the UK to complete his PhD in Chemistry at Dalhousie University. He subsequently held post-doctoral fellowships at Massachusetts Institute of Technology and University of Guelph. Rupert began his industrial career in 1995 at Nova Chemicals in Calgary where he developed a new catalyst technology. This technology was a key component to the 2001 start-up of Nova's first SCLAIRTECH plant, a one-billion-pound polyeth-



ylene facility in Joffre, AB. In 2002, Rupert joined DuPont Canada, Kingston to focus further on chemical technology scale up and commercialization, translating laboratory discoveries to commercial practices. At the Kingston Technology Centre, Rupert leads global teams in technology development for numerous DuPont businesses. Chemical processes developed under Rupert's leadership operate commercially in Canada, the US, and Asia including in Biomaterials, Crop Protection, Protective Fibers and Electronics Materials. Rupert has been the recipient of the following awards for industrial chemistry: DuPont's Engineering Excellence Award, Nova Chemical's Distinguished Applause Award, and the Salter's National Prize for Industrial Chemistry and is the recipient of the 2023 SCI LeSueur Memorial Award for technical excellence.

International Award

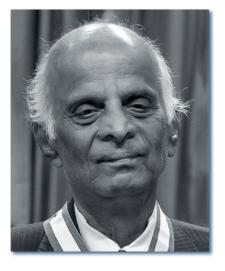


Dr Vaikuntam Iyer Lakshmanan

Process Research ORTECH Inc.

International Award - Dr Vaikuntam Iyer Lakshmanan

Dr Vaikuntam Iyer Lakshmanan has established a track record in the field of aqueous processing associated with metallurgical operations. He has worked with industrial partners to develop and transfer new environmentally sound technologies to a host of companies in Canada and abroad. This includes developing water treatment solutions for both industrial effluents and drinking water sources. He has advised the United Nations, government agencies abroad and a broad range of environmental and waste processing groups. From humble family beginnings, Dr. Lakshmanan became an international expert in clean separation technologies for obtaining high purity base/rare metals and specialty chemicals as well environmentally sound tech-



nologies for solid waste treatment and effluent separation. He is also an inspirational mentor for the current generation of professional chemists and a passionate philanthropist.

AWARD WINNERS

Julia Levy Award

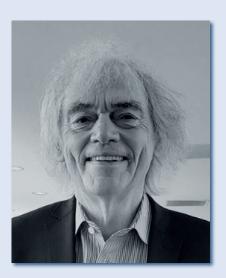
Prof. Pieter Cullis

The University of British Columbia



Julia Levy Award - Prof. Pieter Cullis

Professor Pieter Cullis received a PhD in physics from the University of British Columbia and then moved to Oxford University to work as a postdoctoral fellow in biochemistry. During his time at Oxford, he started to work on lipids. In the 1980s, he established his own laboratory at the University of British Columbia in biochemistry and started to create lipid bilayers and founded Inex Pharmaceuticals, where they researched ways to encapsulate drugs and nucleic acids within the lipid particles. His discovery and development of lipid nanoparticles were instrumental in generating the first mRNA vaccines that was critical for the development of mRNA vaccines for the treatment of COVID-19. He has received numerous awards and he is an officer of the Order of Canada and a Fellow of the Royal Society of Canada.



Kalev Pugi Award

Prof. Francesca Kerton

Memorial University



Kalev Pugi Award - Francesca Kerton

Francesca Kerton is Professor of Chemistry at Memorial University of Newfoundland and has a global reputation for innovative research on sustainable chemistry related to the oceans. She received the Canadian Green Chemistry and Engineering Award in 2019. She is a Fellow of The Royal Society of Chemistry and is a member of many scientific panels and committees worldwide. She currently chairs IUPAC's standing committee on Chemical Research Applied to World Needs (CHEMRAWN), and is chair of the 27th Annual Green Chemistry & Engineering Conference (June 2023). She is an Advisory Board member for the journal Reaction Chemistry & Engineering and an Associate Editor for the journal RSC Sustainability. She will chair the 2027 IUPAC World Chemistry



Congress and General Assembly. She obtained her PhD in Chemistry at the University of Sussex, UK and was a postdoctoral research associate at the University of British Columbia. In addition to authoring over 80 journal articles, she has contributed several books and chapters on aspects of green chemistry including "Alternative Solvents for Green Chemistry". Her current research group is focused on developing environmentally friendly ways to process bio-sourced molecules and materials, catalysis and sustainable polymers. She also performs research in carbon dioxide utilization and is part of an NSERC-funded training network "Centre for Innovation and Research on Carbon Dioxide Utilization in Industrial Technologies".

AWARD WINNERS

Outreach **Award**



Prof. Geoffrey Rayner-Canham Chaim Christiana Andersen Rosalina Nagitarvik

Memorial University

Outreach Award - Geoffrey Rayner-Canham, Chaim Christiana Andersen, Rosalina Nagitarvik

Geoff Rayner-Canham, Professor Emeritus at the Grenfell Campus of Memorial University, Corner Brook, NL, has always vehemently argued for the need to make chemistry accessible and understandable to the wider community. As part of this endeavour, for the past 20 years, Geoff has been taking Chemistry Outreach to grade school students in remote communities; in particular, the Inuit students in Nunatsiavut, Nunavut, and NunatuKavut.

A crucial part of the Outreach has been the involvement of chemistry student colleagues. One of these students was Chaim Christiana Andersen, Inuk of Nain, Nunatsivut; while another, more recently, was Rosalina Nagitarvik, Inuk of Arctic Bay, Nunavut. First with Chaim, then with Rosalina, Geoff co-researched the way in which chemistry was the basis for much of the Inuit way of life. The trio felt it was important to share this knowledge with Inuit students, to encourage them to study the sciences, and to consider science-based careers.

The trio also felt it vital to share the knowledge with students in southern Canada, so they would appreciate the applications of science in the context of Inuit life & culture. The magazine Chem13 News, published by the University of Waterloo, provided them with a 72-page issue devoted completely to their research studies. A copy of this issue has been sent to every high school across Canada, and some school science teachers have already begun to incorporate the Inuit context into their mainstream chemistry courses. Meanwhile, Rosalina and Geoff have developed a presentation based on the trios work which will taken to schools in Nunavut, NunatuKavut, and Nunatsiavut later this year.







STUDENT MERIT AWARD WINNERS

Raphaël	Poirier	Bishops University	Chemistry
Sam	Dudra	Dalhousie University	Chemistry
Raymond	He	Dalhousie University	Biochemistry & Molecular Biology
Jonas	Olsen	Lakehead University	Biochemistry
Michael	Pimentel	Lakehead University	Chemical Engineering
Samantha	Stubbs	Lakehead University	Chemistry
Xiao	Wang	McGill University	Chemical Engineering
Yiming	Zhang	McGill University	Biochemistry
Oishi	Hawlader	Memorial University of New foundland	Biochemistry
Willow	Squires	Memorial University of New foundland	Chemistry
Elise	Hansen	Mount Allison University	Chemistry and Biochemistry
Olivia	Hansen	Mount Allison University	Chemistry and Biochemistry
Bradley	Isenor	Mount Allison University	Chemistry
Parsa	Abedinzadegan Abdi	Queen's University	Chemical Engineering
Charlotte	Cameron- Hamilton	Queen's University	Engineering Chemistry
John	Habib	Queen's University	Chemistry
Jerod	Miksza	Queen's University	Biochemistry
Mackenzie	LeVernois	St. Francis Xavier University	Chemistry
Hannah	Girard	Trent University	Chemistry
Sophia	Williams	Trent University	Chemistry
André	Gallant	Université de Moncton	Chimie et biochimie
Philippe	Soucy	Université de Moncton	Chimie et biochimie
Nicole	Trieu	Université de Montréal	Chemistry
Catherine	Gagnon	Université Laval	Chemistry
Quinn	Halldorson	University of Alberta	Chemistry
Andrew	Poholka	University of Alberta	Chemical Engineering
Denis	Ryabinin	University of Alberta	Chemical Engineering
Candice	Chua	University of British Columbia	Chemistry
Jeffrey	Но	University of British Columbia	Biochemistry

STUDENT MERIT **AWARD WINNERS**

Rhett	Tyler	University of Calgary	Chemistry
Liam	Guetg	University of Calgary	Biochemistry
Sydney	Usselman	University of Calgary	Engineering
Taylor	Chalmers	University of Guelph	Chemistry
Chau	Tran	University of Guelph	Molecular & Cellular Biology
Krish	Valluru	University of Guelph	Chemistry
Tanner	Lockwood	University of Lethbridge	Chemistry & Biology
Rachael	Wells	University of Lethbridge	Chemistry & Biology
Eden	Keilty	University of New Brunswick	Chemical Engineering
Pascale	Nevins	University of Ottawa	Chemistry & Biomolecular sciences
Joseph	Sorrini	University of Ottawa	Chemical and Biological Engineering
Clara	Zwanziger	University of Ottawa	Chemistry & Biomolecular sciences
J.	Churchill	University of Saskatchewan	Engineering
Meet	Patel	University of Saskatchewan	Biochemistry, Microbiology & Immunology
Simon	Foucault	University of Sherbrooke	Chemistry
Mathieu	Pelletier	University of Sherbrooke	Chemical and biotechnological engineering
Marc-Antoine	Poulin	University of Sherbrooke	Biotechnology
Jinmyung	Jang	University of Toronto	Chemical Engineering & Applied Chemistry
Tony	Yu	University of Toronto	Biochemistry
Zaheer	Khan	University of Toronto Mississauga	Forensic Chemistry Specialist
Ivonne	Lopez- Miranda	University of Toronto Mississauga	Biological Chemistry Specialist
Leen	Sabih	University of Toronto Mississauga	Chemistry Specialist
Kelly	Louie	University of Victoria	Chemistry
MacKenzie	Strong	University of Waterloo	Chemical Engineering
Melissa	Berberi	University of Windsor	Chemistry & Biochemistry
Kasey	Brown	University of Windsor	Chemistry & Biochemistry
Emily	Anacleto	York University	Biochemistry
Hetvi	Shah	York University	Chemistry
Leeya	Wilson	York University	Chemistry
Benjamin	Zondeg	York University	Chemistry

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THANK YOU to all our sponsors



SCI® CANADA **COMMITTEE**

Dr Ravi Ramachandran

Head of Research and Development for Crop Protection, Syngenta



Since its formation 1902, SCI® Canada has recognised achievements in Canadian chemical industry and has presented awards to chemistry and chemical engineering students, in order to bolster the drive for innovation.

As Chair of the SCI® Canada Nominations Committee, my colleagues and I are privileged to be able to recognise achievement, to celebrate success and to encourage excellence in the chemical industry and through our awards programme.





Dr Deborah Nicoll-Griffith

Ordinary member Chair Chemical Institute of Canada (CIC)



Professor Laurel Schafer

Ordinary member Professor, Chemistry The University of British Columbia



Professor Mohini Sain

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Ordinary member Research and Technology Manager Croda





Charles Tascherau

Ordinary member President and COO AEM



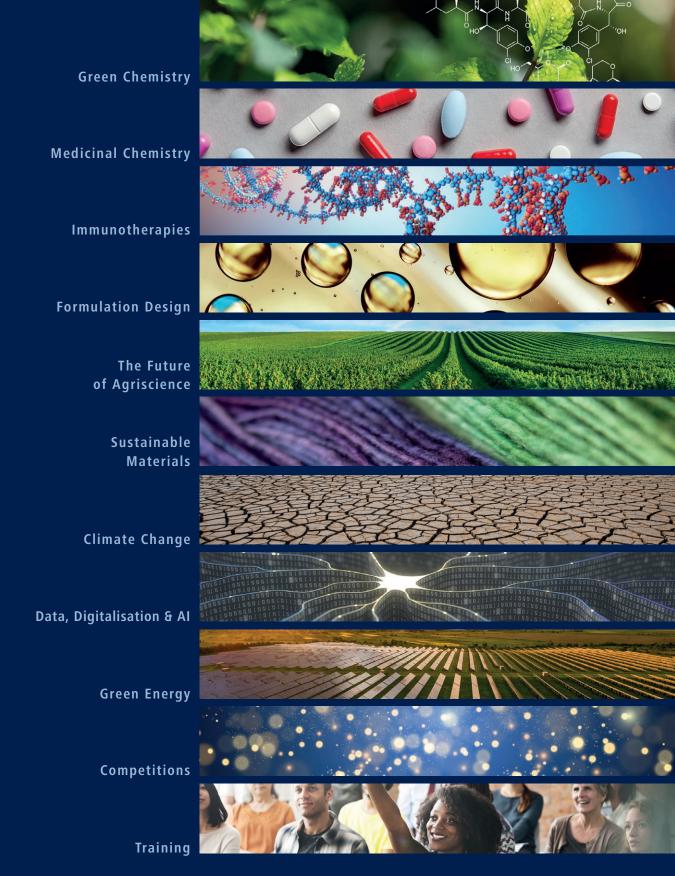


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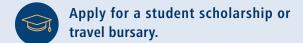
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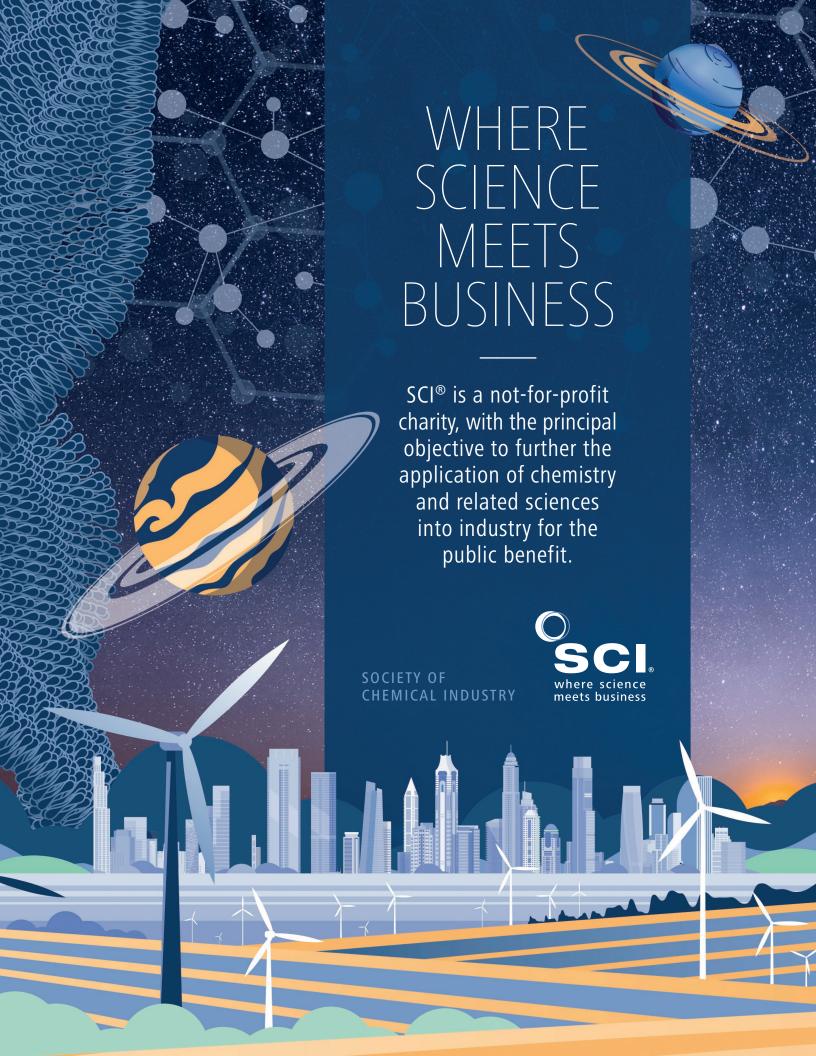
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for some 25 years and it is a delight to read the publications and keep up to date with things that are happening in the world of chemistry and industry.

Dr Helen Sharman OBE, Britain's first astronaut







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