

# CORS·SCRO

# Canadian Operational Research Society Société canadienne de recherche opérationnelle

The Bulletin

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#### Volume 57 Number 2 May 2023

# IN THIS ISSUE

Bulletin Editor, Andrea Friars

Dear CORS members,

Firstly, we are only weeks away from the annual conference at HEC Montreal, and there is still time to make plans to attend. The website is where you'll find the latest details and sign up for a mailing list. You can also read all about this year's Harold Larnder prize winner, Sophie D'Amours, and the topic of her lecture.

Next, we welcome and introduce the newest members of the CORS Council. A big thank you to all who volunteer their time to help keep the society running smoothly.

The bulletin also includes the abstracts for the Practice Prize finalist projects, as well as the topics for the Queueing and Applied Probability SIG Student Paper Competition. Congratulations to the finalists and good luck in the competitions.

Lastly, we finish with news from our SIGs and what they have in store for the conference. I look forward to seeing many of you in attendance.

Cheers,

Andrea

#### **Elected Officers**

President Peter Vanberkel
Vice President Samira Abbasgholizadeh-Rahimi
Past President Jules Comeau
Secretary Marko Bijvank
Treasurer Gregory Paradis
Councillors Nadia Lahrichi (21–23)

Masoud Chitsaz (21–23) Sibel Alumur Alev (22–24) Houra Mahmoudzadeh (22–24)

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Awards Samira Abbasgholizadeh-Rahimi Education Nadia Lahrichi Membership Gregory Paradis Program Samira Abbasgholizadeh-Rahimi

Taraneh Sowlati, Nadia Lahrichi

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Publications Joe Naoum-Sawaya, Andrea Friars Special Interest Groups Sibel Almur Alev, Peter Vanberkel

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past presidents

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Peter Vanberkel

Samira Abbasgholizadeh-Rahimi Accounting System Project Gregory Paradis, Jules Comeau

Industry Masoud Chitsaz

Micro Events Marco Bijvank, Masoud Chitsaz

Houra Mahmoudzadeh

Equity, Diversity, Inclusivity Samira Abbasgholizadeh-Rahimi

Peter Vanberkel (co-chairs)

Sibel Alumur Alev, Gregory Paradis

Students Houra Mahmoudzadeh

Peter Vanberkel, Jules Comeau

Nadia Lahrichi

Nominating Jules Comeau
INFOR Editor Joe Naoum-Sawaya
Travelling Speakers Program Jules Comeau

I raveiling Speakers Program Jules Comeau IFORS Representative Marco Bijvank



# **CORS COUNCIL**

CORS Council consists of the officers of the society, four councillors, the immediate past president, and the standing committee chairs. Contact information for council representatives is below. See <a href="https://www.cors.ca">www.cors.ca</a> for a complete listing.

President	Peter Vanberkel, Dalhousie University, president@cors.ca
Vice President	Samira Abbasgholizadeh-Rahimi, McGill University, vicepresident@cors.ca
Secretary	Marco Bijvank, University of Calgary, secretary@cors.ca
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Councillor (2021-2023)	Masoud Chitsaz, Kinaxis, mchitsaz@kinaxis.com
Councillor (2022–2024)	Sibel Alumur Alev, University of Waterloo, sibel.alumur@uwaterloo.ca
Councillor (2022–2024)	Houra Mahmoudzadeh, University of Waterloo, houra.mahmoudzadeh@uwaterloo.ca

# **SECTION AND CHAPTER PRESIDENTS**

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Southwest Ontario	Joe Naoum-Sawaya, Western University, jnaoum-sawaya@ivey.ca
Saskatoon	Hamed Samarghandi, University of Saskatchewan, samarghandi@edwards.usask.ca
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Montreal Student	Başak Tozlu, Concordia University, basaktozlu@gmail.com
Toronto Student	Moira MacNeil, University of Toronto, m.macneil@mail.utoronto.ca
Hamilton Student	Si Liu, McMaster University, lius278@mcmaster.ca
Okanagan Student	Mohammad Mosaffa, UBC Okanagan, mohammad.mosaffa@ubc.ca



# PRESIDENT'S MESSAGE

Dear Colleagues,

This is my last bulletin message as President, and I would like to use the space to review CORS/SCRO community activities to highlight how our society is thriving! We are counting down the days until our annual conference in Montreal with lots of new and exciting initiatives planned. Our new SIGs are actively formalizing their bylaws and getting ready for their inaugural in-person meetings in Montreal. Our SIG-organized CHOW and CanQueue events are planned and ready to go. And we've had multiple Micro Events keeping our community connected virtually between in-person conferences.

At **CORS/JOPT 2023** in Montreal, we will see the return of NSERC to our annual meeting. NSERC will host two sessions; one will cover NSERC News and Updates and the other will cover How to Apply to Discovery Grants. New to the conference this year are three discussion panels



geared towards PhD students to address: how to prepare a stellar CV; how to ace the job interview and academic talk; and how to navigate your first teaching role. Thanks to Tiffany Bayley, Houra Mahmoudzadeh, Moira MacNeil, Kiefer Joe Burgess, and Si Liu for bringing this initiative to life. Further supporting students will be a writing and presenting workshop which will see students matched with experienced peers and faculty members. Finally, Wednesday will be a day dedicated to industry, providing the opportunity to meet with practitioners and discuss real-life problems and solutions.

The Health Care Operational Research Special Interest Group is once again hosting the Canadian Healthcare Optimization Workshop (**CHOW**). This workshop provides a forum for researchers with a common interest in healthcare optimization to share the latest advances with other researchers and practitioners in the field. CHOW will be an in-person event, held on Sunday, May 28 (preceding CORS/JOPT 2023) at HEC Montréal from 1pm to 8pm. The **CanQueue 2023** conference will be held in the beautiful town of Niagara-on-the-Lake, ON, on August 25 and 26. Presentations of ongoing or completed research in queueing theory and related areas are invited. The attendance and presentations of students, postdoctoral fellows, women, and members of underrepresented minorities are especially encouraged and partial fundings is available to support their participation at the conference.

I'm also happy to share that our **CORS/SCRO 2024** conference will take place June 3–5, 2024 in London, Ontario. The Organizing Committee includes Fredrik Odegaard (General Chair) and Tiffany Bayley (Program Chair). They welcome your ideas and ask everyone who wants to be involved in the organization of the conference to reach out.

Administratively, there is also news. Our accounting project overhaul reached a major milestone on April 1. With the start of the new fiscal year, we have transitioned to our new system which streamlines our processes, improves our reporting and accountability, and modernizes our financial transactions. This has been an enormous undertaking by Jules Comeau and Gregory Paradis who have spent countless hours aligning our accounting system with modern best practices. We have also signed a new contract with INFOR publisher Taylor & Francis which increases our revenue and streamlines the process for members to access the journal. Thanks to Joe Naoum-Sawaya for negotiating with Taylor & Francis and for finding ways to bring more benefits to CORS/SCRO members.



Finally, our 2023-24 CORS/SCRO Council is introduced in this bulletin. Many thanks to all who have stepped up and offered to support CORS/SCRO in this way. There is lots of life in the CORS/SCRO community and it's an exciting time to support the society as a member of council.



### **ANNOUNCEMENTS**

#### Council Corner

This section of the CORS Bulletin highlights recent discussions by the CORS Council and motions of particular interest that have been passed.

- Motion: That the CORS/SCRO 2024 conference take place June 3-5, 2024 in London, Ontario. Organizing Committee includes Fredrik Odegaard (General Chair) and Tiffany Bayley (Program Chair).
- Motion: That council ratifies a new contract with Taylor and Francis, publisher of INFOR

#### Items for Discussion at AGM

We will discuss bylaw changes to formalize the role of CORS/SCRO Student Councillor

# **CORS Membership**

It's time to renew your CORS membership from now until **March 31, 2024**. You may be able to use an NSERC grant to pay membership dues for yourself and your graduate students. Please renew your membership at (http://www.cors.ca/sites/cors\_php/en/membership/renewal.php). For more information, please email members@cors.ca

# **CORS FUNDING OPPORTUNITIES**

# **Traveling Speakers Program (TSP)**

https://cors.ca/?q=content/traveling-speakers-program

The Traveling Speakers Program (TSP) enables local sections to bring OR practitioners and researchers in Canada as speakers to their local events. In order to keep costs in line while maximizing the CORS National profile, CORS sponsorship will be limited to 50% of the total expenses, up to a maximum of \$500 per speaker or \$1000 for a single event (conference, workshop). Other expenses can be covered by the local section. The program of the event must acknowledge the contribution of CORS. The president of the local section must contact the TSP Coordinator to obtain approval for funding at least one month in advance of the event date. The president of the local section fills out the application form (http://www.cors.ca/sites/default/files/documents/tsp.pdf) and submits the form to the TSP Coordinator, Jules Comeau (pastpresident@cors.ca)

# **CORS**

# Canadian Operational Research Society Annual Conference, Optimization days



# MONTREAL, QUEBEC MAY 29-31, 2023

On behalf of the 2023 Canadian Operational Research Society (CORS) organizing committee, it is our pleasure to invite you to join us in stunning Montreal, Quebec!

CORS and CIRRELT are excited to jointly organize **their annual conference at HEC Montreal**. The aim of the meeting is to survey current research trends in operational research and optimization methods and their applications, and to provide an opportunity for interaction between various research groups from around the world.

Many events will be organized during the conference, such as an industrial day, the Canadian healthcare optimization workshop, and activities dedicated to students (writing and presenting, competitions).



+300 Presentations from graduate students, professors, and the industry



National and international research in optimization and OR and their applications



Parallel sessions, student competitions

**5 plenaries** 4 tutorial speakers





# HAROLD LARNDER PRIZE WINNER

# Sophie D'Amours

Professor Sophie D'Amours is the first female rector of Université Laval in Québec City and the 26th person to hold the position. Elected in 2017, she was re-elected for a second term in 2022.

Sophie D'Amours is a mechanical engineer. She holds a master's degree in business administration from Université Laval and a doctorate in engineering mathematics from École Polytechnique de Montréal. Having served as a professor in Université Laval's Department of Mechanical Engineering since 1995 and as the University's vice-rector of research and innovation from 2012 to 2015, D'Amours has a wide range of experience in higher education, research, and university management both at home and abroad.



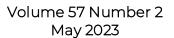
Her career has been marked by significant research contributions in business engineering and planning, particularly in the forestry sector. She has held a Canada Research Chair and an Industrial Research Chair from the Natural Sciences and Engineering Research Council of Canada (NSERC) and has led national and international initiatives in her field. She has also taught as a visiting professor in numerous countries.

D'Amours is particularly proud of Université Laval's impact in responding to societal challenges and improving population well-being. She is committed to furthering that contribution by supporting innovation in higher education, fostering research partnerships, and increasing Université Laval's presence in the community and on the world stage.

Committed and driven, D'Amours places a premium on teamwork, efficiency, and network collaboration. In addition to her responsibilities at Université Laval, she holds the role of past chair on the board of Universities Canada and is a member of the board of governors of the International Development Research Centre of Canada as well as a member of the board of directors of the Foundation for Educational Exchange between Canada and the United States of America (Fulbright Canada). Sophie D'Amours also chairs the international evaluation committee of the High Council for Evaluation of Research and Higher Education (HCERES) in France.

As someone who cares deeply about economic and social development in her home province and city, Sophie D'Amours is president of Conseil de l'innovation du Québec and a member of the board of directors of Québec International.

Sophie D'Amours has received numerous awards and honours throughout her career. With colleagues, she was awarded the prestigious Brockhouse Canada Prize. She also received the Prix Henri-Gustave-Joly-de-Lotbinière from Ordre des ingénieurs forestiers du Québec for her contribution to Québec's forest industry. She is an Officer of the Ordre national du Québec, an Officer of the Order of Canada,



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an Officer of the National Order of Merit of the French Republic, a member of the Canadian Academy of Engineering, and an international member of the Royal Swedish Academy of Agriculture and Forestry.

# Science and partnership: Value chains complexity in the forest sector

Over the past 25 years, the way activities are planned in the forestry sector has greatly evolved. This presentation will illustrate this evolution, with a focus on understanding the value chains of the forestry sector, the nature of planning decisions, and the interconnections between chains. Planning, decision making, and implementation will be explored through an integrated and collaborative planning framework. A better understanding of the forest and business reality associated with the preservation and valorization of forest resources has contributed over the years to an intensification of research on decision support systems (e.g., investment, revenue and demand management, collaborative logistics and forest management). This research offers new analytical tools to support a more sustainable development of the sector, which will be illustrated by various applications. The links between science and innovation will be addressed, as well as the importance of knowledge and technology transfer in a context of digital, environment and socio-economic transitions. Serious games will be presented as interactive tools to enhance knowledge transfer, learning and skills development.



# **NOMINEES FOR 2023–2024 CORS COUNCIL**

### President Samira Abbasgholizadeh-Rahimi McGill University

Prof. Samira Rahimi is an Assistant Professor in the Department of Family Medicine at McGill University, affiliated scientist at Lady Davis Institute for Medical Research of Jewish General Hospital, and an Associate Academic Professor of Mila-Quebec Al Institute. Prof. Rahimi is also Director of Artificial Intelligence in Family Medicine (AIFM) at McGill, and is Fonds de Recherche du Québec-Santé (FRQS) Junior 1 Research Scholar in humancentered Al in primary health care. With an interdisciplinary background, she is interested in the development, evaluation, and implementation of decision support tools and patient decision aids in primary health care as well as integrating human-centered Al tools in primary health care. Her work as Principal Investigator has been funded by the Fonds de recherche du Québec – Santé (FRQS), Natural Sciences and Engineering Research Council (NSERC), Roche Canada, Brocher Foundation (Switzerland), and

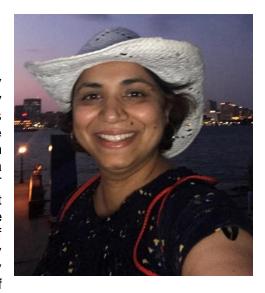


the Strategy for Patient-Oriented Research (SPOR)-Canadian Institutes of Health Research (CIHR). In recognition of her outstanding work, Prof. Rahimi has received numerous awards, including the prestigious 2022 New Investigator Primary Care Research Award from the North American Primary Care Research Group (NAPCRG).



#### Vice-President Anjali Awasthi Concordia University

Dr. Anjali Awasthi is Full Professor and Concordia University Research Chair (Tier-II) in Connected Sustainable Mobility Systems at Concordia Institute for Information Systems Engineering (CIISE), in Concordia University, Montreal. She received a PhD in industrial engineering and automation from INRIA Rocquencourt and University of Metz, France and a Masters in Industrial and Management Engineering from IIT Kanpur, India. Prior to Concordia, Dr. Awasthi worked at University of British Columbia and University of Laval where she was involved in several projects on industrial applications of operations research. In France, she was involved in many European projects aimed at improving urban mobility in cities, city logistics and on cybernetic transportation systems. Her areas of



research are modeling and simulation, data mining, Information Technology and decision making, sustainable logistics planning, quality assurance in supply chain management and sustainable supply chain management. She is the author of several books, journal and conference papers on these topics.

Dr. Awasthi has served as the Education Chair for CORS (Canadian Operations Research Society) and a senior member of ASQ (American Society for Quality). Presently, she is an associate of LSRC (Loyola Sustainability Research Center), and a regular member of CIRRELT (Centre Interuniversitaire de Recherche sur les Reseaux d'Entreprise, la Logistique et le Transport). She received the newsmaker of the week award in 2019. She is also the recipient of Eldon Gunn service award (CORS 2018, Halifax) and IEOM Special Recognition Award (4th North American Conference on Industrial Engineering and Operations Management, Toronto, 2019).



Secretary Majid Taghavi Saint Mary's University

Majid Taghavi is an Associate Professor at the Sobey School of Business of Saint Mary's University. He conducts research in the field of healthcare operations, specifically focusing on the use of stochastic operational research and artificial intelligence techniques to improve healthcare operations. His research has received funding from various organizations, such as the Natural Sciences and Engineering Research Council (NSERC), Research Nova Scotia, and Nova Scotia Health Research Foundation (NSHRF). Majid is an active member of the Canadian Operational Research Society (CORS) and has served in various capacities, including as a Councillor from 2020 to 2022, the track organizer for the CORS Healthcare Operations Research Special Interest Group (HCOR SIG) from 2018 to 2020, and as a member of the organizing committee for the CORS annual conference in 2018 held in Halifax, NS.





#### Councillor Saied Samiedaluie University of Alberta

Saied Samiedaluie is an Assistant Professor of Operations Management at the University of Alberta's School of Business. He received his Ph.D. in Operations Management from McGill University in 2014. He also holds B.Sc. and M.Sc. in Industrial Engineering from Sharif University of Technology and Amirkabir University of Technology, respectively. In large part, his research focuses on two main streams: 1) Approximate Dynamic Programming (ADP), in which he either develops new ADP methodologies or applies state-of-the-art ADP methods to complex problems in different areas of service operations management; and 2) Healthcare Operations Management, in which he provides



solutions and managerial insights for practically relevant and critical operational problems in healthcare. His research has been supported by several internal and external grants, including an NSERC Discovery Grant that he received for developing ADP methodologies for service systems. Saied served the CORS Healthcare Operational Research SIG as the secretary/treasurer officer between 2018–2020.

#### Councillor Masoud Chitsaz Kinaxis

Masoud is interested first and foremost in helping companies leverage analytics in business operations. He has over 20 years of experience in supply chain and operations management both on the industry and academic sides. He co-founded a successful consulting company where he worked with a diverse set of public and private clients in retail, transportation, supply chain, steel production, auto manufacturing, infrastructure, and real estate.



Masoud is a technical thought leader at Kinaxis, and mentor for supply chain startups at Next AI. He has a master's degree in transportation, MBA, and PhD in Operations Management from HEC Montreal with the school's best thesis award. He published papers in top-tier journals in the field of operations management and supply chain. Masoud has a special interest in partnerships between industry and academia.



# 2023 PRACTICE PRIZE FINALIST PROJECTS

#### **Weather Routing for Maritime Vessels**

Mikael Rönnqvist, (Université Laval), Jean-Francois Cordeau (HEC), Jean-Francois Audy (UQTR), Camélia Dadouchi (Polytechnique Montréal), Nazanin Sharif (Université Laval), Kaoutar Hajli (Université Laval), Patrik Flisberg (Research Professional), Gurjeet Warya, Trung Ngo, Martin Brousseau, Brian Hatter (True North Marine)

True North Marine (TNM) is a Montreal-based consulting firm offering services on route selection and analysis to ocean-going bulk vessels. Each day, hundreds of vessels are supported by some 40 route planners in selecting the best route and speed giving the current weather forecast. Automatic weather routing is very complex. The detailed weather information is available as forecasts in speed and direction for wind, waves, and currents for every three hours in the next seven days. Each route requires its own large network resulting in challenging optimization. We describe a system with many analytics modules developed that shows large potential savings.

# Optimizing milk pools at the Rogers Hixon Ontario Human Milk Bank

Timothy C. Y. Chan (University of Toronto), Rachel Wong (Ontario Health), Rafid Mahmood (University of Ottawa), Ian Yihang Zhu (University of Toronto), Debbie Stone (Rogers Hixon Ontario Human Milk Bank), Deborah O'Connor (University of Toronto), Sharon Unger (Roger Hixon Ontario Human Milk Bank, Sinai Health System, University of Toronto), Kate Wilkinson (Sinai Health System)

Human donor milk is vital for millions of preterm infants born each year, but the macronutrient content of donations can vary significantly. In collaboration with the Rogers Hixon Ontario Human Milk Bank, we developed a data-driven framework to pool multiple donations using machine learning and optimization. Over a one-year trial, our implementation yielded significantly higher macronutrient content than current pooling practices, with the proportion of pools meeting clinical fat and protein targets increasing by approximately 31%, with a 60% decrease in recipe creation time.



# Real-time management of traffic lights – improving mobility and decreasing greenhouse gas emissions

Jacques Renaud, Leandro C. Coelho, Khaled Belhassine (Université Laval), Vincent Turgeon (Ville de Trois-Rivières)

Congestion in urban centers causes stress, delays, increased fuel consumption and emissions. In dense areas, many consecutive traffic lights impose significant stop-and-go for all vehicles, particularly harmful for trucks and buses. A single stop avoided for a heavy truck can represent up to 2.5 liters of fuel saved; they accelerate slowly, are noisy, and cause further delays for the vehicles behind them. Moreover, helping buses avoid red lights supports adherence to the schedule. Avoiding stops at red lights for these vehicles is a win-win situation for their operators and for all the remaining traffic in the city. This project consists of a successful collaboration between our research team, the city of Trois-Rivières, the Société de Transports de Trois-Rivières, and industrial partners. We focused on 14 traffic lights on an important avenue in the city. Our collaboration enabled these lights to be connected to an intelligent traffic management system to grant priority to trucks and buses, in real-time and without human intervention. By avoiding stops for these large and heavy vehicles, we obtain multiple benefits in terms of time, efficiency, economy, and emissions. We performed a detailed modeling of the network and traffic of Trois-Rivières. We developed a simulation tool with the latest origin-destination survey from the Ministère des transports du Québec, validated manual and automated counters, and calibrated the results with observations from LiDAR scanners installed at strategic points in the city. Our microsimulation models a large territory of 39 km2, for a total of 659.85 km of road network comprising over 5 480 edges, handling 289 000 vehicles per day, which is significantly larger than most simulation studies. We implemented the traffic signal phasings used by the city and developed optimized signal priority rules that were systematically tested with the simulator. Our results indicate that a parsimonious prioritization strategy has huge benefits for all parties. The strategy delays the green light at the end of a cycle for no more than 15 seconds, or truncates the red phase at most 15 seconds in advance, to grant priority for an incoming truck or bus that would otherwise have stopped. We can avoid 8% of stops for the trucks, improving their travel time and decreasing fuel consumption by 1.9%, which corresponds to 10 tonnes of GHG emitted over the course of a year for a single truck. The impact on the overall traffic is negligible, and often positive: during the PM peak traffic, granting priority for the trucks also improves fluidity for the overall traffic, improving their travel times and decreasing overall fuel consumption by 0.11%. For the transit provider, we observed up to 846 occasions of buses of a given line being more than 1 minute late in the simulation, and granting them priority reduces it by up to 47%. The average delay over the line can be virtually removed. The impact on the surrounding vehicles is shown to be negligible or even slightly positive: average travel times and waiting times for society can be slightly improved, with decreased consumption and emissions. These results are currently being implemented by the city administration with the support of a technology partner while the city updates its traffic signal hardware. A private fleet of trucks has been equipped with real-time GPS monitors and the results of this pilot study systematically confirm the simulated benefits. Buses are also currently being granted priority based on the policies we developed, and the results are also being confirmed in reality. This project has demonstrated that advanced analytics, optimization, and a strong collaboration between industry and academia can provide strong results for society. Benefits include decreased travel times, improved transit systems, better financial performances, and lower emissions.



### **CORS SPECIAL INTEREST GROUPS**

A SIG provides a mechanism to promote CORS, the SIG area and the SIG members, as well as the opportunity for CORS members with common interests to interact and network.

#### **Analytics SIG**

Gregory Paradis, cors.analytics.sig@01101.io University of British Columbia www.cors.ca/SIG/Analytics

#### **Forestry SIG**

Foroogh Abasian, fabasiyan67@gmail.com FPInnovations www.cors.ca/SIG/Forestry

#### **Health Care Operational Research SIG**

Valérie Bélanger, valerie.3.belanger@hec.ca HEC Montréal www.cors.ca/SIG/HCOR

#### **Queueing and Applied Probability SIG**

Yichuan Ding, daniel.ding@mcgill.ca McGill University www.cors.ca/SIG/Queueing

#### **Teaching and Learning SIG**

Tiffany Bayley, tbayley@ivey.ca Ivey Business School www.cors.ca/SIG/Teaching

#### **Transportation and Logistics SIG**

Sibel Alumur Alev, sibel.alumur@uwaterloo.ca University of Waterloo www.cors.ca/SIG/Transportation

If you would like to join a SIG, contact the people listed above, or indicate when you renew your CORS membership. CORS encourages members with common interest in an area within or related to operational research to form additional SIGs.

More information can be found online at www.cors.ca/?q=content/communities

If you are interested in forming a SIG in a particular area, contact: Samira Abbasgholizadeh-Rahimi (vicepresident@cors.ca)



# **SIG NEWS**

# **Queueing and Applied Probability**

The CORS Queueing and Applied Probability SIG Student Paper Competition Committee is delighted to announce the selection of three outstanding finalists, listed in alphabetical order:

- 1. Likang Ding, Alberta School of Business, University of Alberta, "Calculating Service Rates from Empirically Obtained State-Dependent Mean Service Times"
- 2. Setareh Farajollahzadeh, Rotman School of Management, University of Toronto, "Potty Parity: Achieving Process Flexibility through Unisex Restrooms"
- 3. Zhoupeng Zhang, Rotman School of Management, University of Toronto, "Exploring the Implications of Worker Classification in the On-Demand Economy"

The winner will be revealed in the session "Queueing and Applied Probability SIG Student Paper Competition", at the CORS Annual Conference in Montreal, taking place from May 29-31, 2023. The winner will receive a \$200 prize, while the two remaining finalists will each be awarded \$25.

CORS Queueing and Applied Probability SIG Student Paper Competition Committee (Tim Huh, Ningyuan Chen, Yichuan Ding)

# **Teaching and Learning SIG**

The Teaching and Learning SIG is hosting several events at CORS 2023. Geared to doctoral students, the sessions will address: 1) how to prepare a stellar CV; 2) how to ace the job interview and academic talk; and 3) how to navigate your first teaching role. Bring your questions and hear from experienced faculty members who are eager to support you through this next stage in your academic journey! Our first annual SIG meeting will take place at CORS 2023. Members of the Teaching and Learning SIG will receive an email confirming the date, time, and location of the meeting – please be sure to join our SIG before then to stay up to date on future events.

We look forward to seeing you in Montreal this May!



# **MEETINGS AND CONFERENCES**

# **CORS Business Meetings**

Meeting #1, Vancouver
Meeting #2, Teleconference
Meeting #3, Montreal
Meeting #4, Teleconference
Meeting #5, Teleconference
Meeting #6, Montreal
Meeting #7, Montreal, SIGs, Sections, Chapters
Meeting #8, Montreal, CORS AGM

# **CORS Annual Conferences**

May 29-31, 2023 Annual Conference, Joint with Optimization Days, Montreal, QC

# **WWW Conference Listings**

CORS: www.cors.ca/?q=content/cors-annual-conferences INFORMS: https://www.informs.org/Meetings-Conferences

IFORS: www.ifors.org/web

Netlib Conference Database: ftp://ftp.cc.ac.cn/netlib/confdb/Conferences.html

SIAM: www.siam.org/meetings/calendar.php

POMS: https://pomsmeetings.org

EURO: www.euro-online.org/web/pages/460/calendar



#### THE NEXT ISSUE

The next issue of the Bulletin will be published in **August**. Contributions to this issue, especially news on the activities of local sections or CORS members, should be submitted by **July 21**, **2023** to:

Andrea Friars Editor, CORS Bulletin

Email: AndreaFriars@gmail.com

The preferred method of submission is by an MS Word attachment to an email.

### CORS BULLETIN TRANSLATION POLICY

Items that are CORS business will be translated into English and French. All other items will be published in the language they are submitted in.

### CORS BULLETIN ADVERTISING POLICY

Ads cost \$120 per page, proportional for fractional pages. Logos and prepared layouts can be accommodated. This fee also includes distribution of the advertisement on the CORS Mailing List. Direct inquiries to the Editor.

#### **CORS MAILING LIST**

As a benefit of membership, members may use the CORS Mailing List to transmit messages, announcements, and job postings to the entire membership or to a targeted subgroup such as a local section. For example:

- messages regarding the activities and business of the society
- announcements about conferences, conference sessions, special journal issues, seminars, or other activities if these are related to operational research in its broadest sense
- job postings of general interest to CORS members

The Mailing List is not used for commercial purposes, and all messages are vetted before they are sent out. To submit items to the Mailing List, please email members@cors.ca

For non-members, a fee of \$60 is charged for the distribution of job postings and other announcements or messages of interest to the CORS membership.



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The **Canadian Operational Research Society** was founded in 1958. Its goal is to advance the theory and practice of OR and to stimulate and promote contacts between people interested in the subject.

**Publications**: A quarterly scientific journal called *INFOR* and a news *Bulletin*.

**Meetings**: An annual national conference with an award ceremony, occasionally organized jointly with an international society (IFORS, INFORMS), and numerous local events organized by local sections.

**Local Sections & Chapters**: CORS has twelve local sections located throughout Canada and six student chapters.

Awards and Prizes: CORS presents the following annual awards and prizes at its conference:

**Award of Merit** for significant contributions of a present or past member of CORS to the profession of OR.

Harold Larnder Award to an individual who has achieved international distinction in OR.

**Omond Solandt Award** to an organization, private or governmental, that is deemed to have made an outstanding contribution to OR in Canada.

**Practice Prize** for the challenging application of the OR approach to the solution of applied problems.

**Eldon Gunn Service Award** for outstanding contributions of time and service to the society.

**Student Paper Competition** to recognize the contribution of a paper either directly to the field of OR through the development of methodology or to another field through the application of OR.

**Graduate Student Funding**: CORS encourages attendance of graduate students at its conference by providing partial funding. Visit CORS website for details.

**CORS Diploma**: This diploma is awarded to students graduating from a university curriculum comprising several OR courses. Criteria may be found on the CORS website.

**Membership Directory**: An online directory of CORS members is available as a membership benefit.

**To join CORS**: Go to the CORS website and join online by credit card using the form found under membership or complete the PDF application form found on the CORS website and mail it with payment to the address below.

**Fees**: Member \$110; Retired Member \$55; Student Member \$45 (including post-doctoral researchers)

Website: www.cors.ca

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