

CORS·SCRO

Canadian Operational Research Society Société canadienne de recherche opérationnelle

The Bulletin

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Volume 53 Number 4 November 2019

In this Issue

Dear CORS members,

In this issue, you'll find the call for nominations for the Omond Solandt Award, the CORS Award of Merit, and the Eldon Gunn Service Award. The Omond Solandt Award has a deadline of January 17, 2020, so be sure to nominate a deserving organization while the year is young.

Abstract submission is now open for the CORS 62nd Annual Conference in Toronto. The early bird registration deadline is March 31, 2020, so we will be sure to get in one more bulletin reminder to help you take advantage of the best conference rate. The event will once again feature an Analytics Day and a CHOW workshop, so it promises to cover a large spectrum of areas of interest. The Practice Prize and Student Paper Competitions applications have also been posted so please take note and start preparing your submissions.

In the special interest group section, you'll find more details about the CHOW workshop and what to expect at the conference, including details about the health care student presentation prize. The Queueing SIG is also holding their eight annual student prize competition, with a submission deadline of December 31, 2019, so don't delay!

I wish you all a pleasant end to 2019 and look forward to seeing you in Toronto next year. As always, if you have content you would like to see in the next bulletin, please submit it to me at AndreaFriars@gmail.com

Cheers, Andrea Friars

Bulletin Editor Andrea Friars

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Past-President Mehmet Begen
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Nominating Mehmet Begen

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INFOR Administrator Bev Rodgers

Travelling Speakers Mehmet Begen

Program

IFORS Representative Marko Bijvank

Membership Services & Website Administrator

Erla Anderson



The 2019-2020 Council

CORS Council consists of the officers of the society, four councillors, the immediate past president, a representative designated by each local section and chapter of the society, SIG presidents, and the standing committee chairs. Contact information for council representatives is below. See www.cors.ca for a complete listing.

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President	Stanko Dimitrov, University of Waterloo, sdimitro@uwaterloo.ca
Vice-President	Mike Pavlin, Wilfrid Laurier University, vicepresident@cors.ca
Secretary	Marco Bijvank, University of Calgary, marco.bijvank@haskayne.ucalgary.ca
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Past-President	Mehmet Begen, Western University, mbegen@ivey.uwo.ca
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Councillor	Jules Comeau, Université de Moncton, jules.comeau@umoncton.ca
Councillor	Mehmet Coskun, Manulife / John Hancock, mehmeterdemcoskun@gmail.com
Analytics SIG	Gregory Paradis, University of British Columbia, greg.paradis@ubc.ca
Forestry SIG	Maha Ben Ali, Polytechnique Montréal, maha.ben-ali@polymtl.ca
HCOR SIG	Timothy Chan, University of Toronto, tcychan@mie.utoronto.ca
Queueing Theory SIG	David Stanford, Western University, stanford@stats.uwo.ca
Atlantic	Claver Diallo, Dalhousie University, claver.diallo@dal.ca
Québec	Irène Abi-Zeid, Université Laval, irene.abi-zeid@osd.ulaval.ca
Montréal	Nadia Lahrichi, École Polytechnique de Montréal, nadia.lahrichi@polymtl.ca
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Kingston	Mohan Chaudhry, Royal Military College of Canada, chaudhry-ml@rmc.ca
Toronto	Hassan Anis, University of Toronto, hassan.anis@mail.utoronto.ca
Southwest Ontario	Joe Naoum-Sawaya, Western University, jnaoum-sawaya@ivey.ca
Saskatoon	Hamed Samarghandi, University of Saskatchewan, samarghandi@edwards.usask.ca
Calgary	Owen James, Associated Engineering, jameso@ae.ca
Edmonton	Armann Ingolfsson, University of Alberta, armann.ingolfsson@ ualberta.ca
Vancouver	Stuart Donald, University of British Columbia, stuart.donald@sauder.ubc.ca
Waterloo Student	Khaled Shah, University of Waterloo, khaled.mostafa.shah@uwaterloo.ca
Québec Student	Irène Abi-Zeid, Université Laval, irene.abi-zeid@osd.ulaval.ca
Montréal Student	Gabriel Vanasse, Concordia University, or.students.montreal@gmail.com
Toronto Student	Kyle Booth, University of Toronto, kyle.booth@mail.utoronto.ca Christopher Sun, University of Toronto, christopher.sun@mail.utoronto.ca
Winnipeg	Currently vacant
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President's Message

Greetings Fellow CORS members,

This year is in the home stretch, and the new year will be here before we know it. Those of us in academia or with school-aged children will note that students are back in school for a while and the first semester of the new academic year is nearly complete.

After the second CORS council meeting, a few great opportunities were identified that will be discussed in the future, once fleshed out further. As an overview, future conferences and ways to improve services and operational issues within CORS were all discussed. The next CORS meeting will take place at the end of November this year.



I am thankful for all of the work Fatma Gzara, as general chair, and Timothy Chan, as program chair, have and will put into the CORS 2020 conference. Due to their hard work, the conference website is already up (https://uwaterloo.ca/canadian-operational-research-society-conference/). You are welcome to submit your abstract and register now! I look forward to seeing everyone in Toronto next year.

With the upcoming conference, please keep an eye out for all competitions as they are announced. If you require funding for yourself or students, then please be sure to submit funding requests prior to posted deadlines. You are welcome to request funding even if you decide you are unable to attend the conference later.

If you have ideas or thoughts on what I or CORS may do to help you or a group member, then please reach out. I look forward to receiving your feedback.

As this is the last bulletin of year, I wish you a lovely end of the year and a very happy new year.

Sincerely,

Stanler Dimitron

Stanko Dimitrov



Announcements

CORS membership

The CORS website is ready to accept payment of membership fees for **April 1, 2020 to March 31, 2021**. You may be able to use an NSERC grant to pay CORS membership dues. Renew your membership at (http://www.cors.ca/sites/cors_php/en/membership/renewal.php). If you have questions, contact Membership Services at members@cors.ca

Access the journal INFOR

Current members receive an email message from Taylor and Francis with instructions to access the journal INFOR. If you have questions, contact Membership Services at members@cors.ca

CORS Funding Opportunities

Graduate Student Funding

CORS funds graduate students attending the CORS Annual Conference, using funds from SSHRC, when available. This funding is subject to availability and the following eligibility criteria:

- Student is a member of CORS, enrolled in a graduate program in a field related to operational research, studying at a Canadian university, or student is a Canadian citizen or permanent resident studying abroad
- Student must attend the CORS Annual Conference and present their registration receipt to receive any funding

The following criteria will be used to determine the amount awarded to each eligible applicant:

- If the applicant is presenting a paper at the CORS Annual Conference
- Travel cost from student's home city to the CORS Annual Conference

The application deadline is March 31, 2020

Anjali Awasthi, CORS Education Chair (anjali.awasthi@concordia.ca)

Traveling Speakers Program (TSP)

The TSP enables local sections to bring Canadian OR practitioners / researchers 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. Each local section must contact the TSP coordinator to obtain approval for funding preferably at least one month in advance of the event date. Payment will be made by the CORS Treasurer upon receipt of the expense form (https://www.cors.ca/sites/default/files/documents/expenses.docx).

Applicants fill out the application form

(https://www.cors.ca/sites/default/files/documents/tsp.docx) and submit to:

Mehmmet Begen, TSP Coordinator (mbegen@ivey.uwo.ca)



Call for Nominations

2020-2021 CORS Council

There are four positions to fill for the 2020–2021 CORS Council. To nominate a CORS member to serve in one of these positions send their name and contact information by **March 13, 2020** to **Mehmet A. Begen**, Past President (mbegen@ivey.uwo.ca); please make sure your nominee is aware of the nomination. Note that self-nominations are welcomed.

For more details regarding the various positions visit: www.cors.ca in particular see the Bylaws and Administrative Handbook online at www.cors.ca/?q=content/library

All nominees will be contacted and asked to provide a write-up for the May edition of the Bulletin.

Vice-President (President Elect)

The Vice President (one-year term) assists the President, participates in special projects and ad-hoc committees through the year, and takes over the role of President at the following Annual General Meeting (AGM). Only those who have served at least one year on Council shall be eligible for the office of Vice-President.

Treasurer

The treasurer is responsible for all financial matters of the Society. The treasurer maintains the Society's accounts, handles all disbursements and receipts of funds, provides financial reports to Council and to the members at the AGM, and chairs the Financial Planning Committee. CORS supports the treasurer by making an administrative assistant available to help with some of the administrative activities of the treasurer.

Two Councillors (two-year term)

A total of four councillors sit on council and participate in the management of the society. Often, councillors are called upon to chair or serve on ad hoc or standing committees and to work on special projects.





Venue -- Marriott Downtown at CF Eaton Center

This year's conference will be held in downtown Toronto – a vibrant city renowned for everything from its ethnic neighbourhoods to its role as the financial centre of Canada.

Visit the conference website at <u>uwaterloo.ca/cors2020</u> to book your stay at the conference rate.

The 4th annual Canadian Healthcare Optimization Workshop (CHOW)—Sunday June 7, 2020

This year the workshop will feature three plenary and six technical talks. All papers accepted for a technical session will be automatically entered into the inaugural CHOW best paper competition. The winner will be announced at the CHOW reception. The competition is open to faculty (pre-tenure), graduate and undergraduate students, and post-doctoral fellows. To submit a paper to present in a technical session, please send an e-mail to: chow2020toronto@gmail.com

Plenary Speakers: Oguzhan Alagoz, University of Wisconsin-Madison; Diwas KC, Emory University; Frank Rudzicz, University of Toronto

2nd annual CORS Analytics Day

On Wednesday, June 10th, CORS Analytics Day will be take place. The full day event with plenary speakers and panel discussions, aims to bring business and industry professionals together to share and discuss developments and challenges regarding Analytics.

Present your research and expand your network

Designed to bring together academics and practitioners from Operations Research, Management Science, Business Analytics, Industrial Engineering, and other related fields; the conference provides a forum to present recent developments in the theory and practice of operations research and to stimulate discussions, and foster connections between faculty members, graduate students, and representatives from different industries and government agencies.



Abstract submission is now open!

We invite you to present your work at the conference in one of seventeen clusters. Consult the list of cluster chairs and program committee and submit your abstract here.

- Abstract submission deadline: February 28, 2020
- Confirmation of abstracts: March 20, 2020
- Registration deadline for presenters: April 30, 2020

Conference registration

Register early and take advantage of reduced rates. Also consider becoming a CORS member, register at the member rate and save money!

- Early registration deadline: March 31, 2020
- Regular registration: April 1, 2020
- Late/Onsite registration as of: June 7, 2020



DATA ANALYTICS (3 tenure-track positions)

The Department of Management Sciences in the Faculty of Engineering at the University of Waterloo invites applications for three tenure-track faculty positions at the rank of Assistant Professor in **Data Analytics** with an anticipated start date of July 1, 2020. In the case of an exceptional candidate, an appointment at the rank of Associate Professor or Full Professor will be considered.

Applicants should hold a PhD or be near completion of their doctorate in related areas, and have demonstrated research and teaching potential in data analytics. We seek individuals with research and teaching interests at the interface of **Data Analytics** and **Operations Research (OR)**, **Information Systems (IS)**, or **Management of Technology (MOT)**. In particular, individuals in the following areas are encouraged to apply.

- i) Data Analytics and Operations Research: We seek applicants whose research involves problems at the intersection of Data Analytics and fields such as Operations Research, Industrial/Systems Engineering, and Operations Management. We are particularly seeking individuals with demonstrated research ability and have interests in Data Analytics focusing on interesting applications in domains such as Supply Chain Analytics, Service Operations Management, Advanced Production, Smart/Autonomous Systems, Healthcare Delivery, Energy, etc. The ideal candidates should be able to demonstrate their proficiency in OR/OM methodologies relevant to Data Analytics (e.g., optimization, stochastic processes, statistics, dynamic programming, simulation, etc.) and their experience in analysing large/complex data sets. Successful applicants should be capable and interested in teaching courses such as Statistics, Production Planning, Inventory Management, Supply Chain Management, and Simulation.
- ii) Data Analytics and Information Sciences: We seek applicants with experience and interest in large-scale data management and analysis, with an emphasis on solving real-world problems using cutting-edge data-intensive methods. Areas of interest include data systems, data mining, deep learning, and computational statistics. The successful applicant will be expected to teach undergraduate and graduate courses in areas such as database management systems, big data infrastructure, data mining, machine learning, and statistical methods for data analysis.
- iii) Data Analytics and Management of Technology: We seek applicants who study social behaviour and social phenomena using large-scale data. Areas of interest can include technological innovation, management of technology, and social impacts (e.g., ethical implications, built in biases) of new technologies, such as Al, big data, machine learning, etc. The successful applicant should be able to teach computational social science or courses that involve application of formal computational skills to a social science topic (e.g., social networks, cybersecurity, surveillance, etc.) at both the undergraduate and graduate levels. Applicants must hold a PhD in an area of social science such as economics, political science, sociology, psychology, or other closely related areas, with a strong background in statistical/econometric modeling (R, SAS, Stata, etc.), experimental design, machine learning, scripting languages (Python, JavaScript, etc), or databases (SQL, NoSQL, etc).



Successful applicants are expected to maintain an active program of research, to attract and supervise graduate and undergraduate students, and to participate in undergraduate and graduate teaching. The salary range at the rank of Assistant or Associate Professor is CAD \$110,000 to \$150,000. Negotiations beyond this salary range will be considered for exceptionally qualified candidates.

Management Sciences is a dynamic and growing interdisciplinary department in the Faculty of Engineering that has active research and teaching activities in Operations Research, Information Systems, and Management of Technology. The Department offers an undergraduate degree in Management Engineering, as well as Master's and PhD programs in Management Sciences.

Applications should be submitted electronically at: https://mansci-webapps.uwaterloo.ca/OFAS/ A cover letter indicating for which specific position the applicant wishes to be considered for, curriculum vitae, research vision statement, teaching vision statement (teaching evaluations if available), up to four sample publications, and the contact information for at least 3 references are required for the application to be considered fully complete. References will be contacted only if an applicant is shortlisted for a position.

Review of applications will begin on October 1, 2019. Deadline for all positions is January 5, 2020.

If you have any questions regarding the position, the application process, assessment process, eligibility, or a request for accommodation during the hiring process, please contact: Mrs. Gini Kennings, Administrative Assistant to the Chair, Department of Management Sciences, givan@uwaterloo.ca.

The University of Waterloo regards diversity as an integral part of academic excellence and is committed to employment equity and accessibility for all employees. As such, we encourage applications from women, Indigenous persons (First Nations, Métis and Inuit), persons with disabilities, members of diverse gender identities, and others who may contribute to the further diversification of ideas. At Waterloo, you will have the opportunity to work across disciplines and collaborate with an international community of scholars and a diverse student body, situated in a rapidly growing community that has been termed a "hub of innovation". All qualified candidates are encouraged to apply; however, Canadians and permanent residents will receive priority in the recruitment process.

Three reasons to apply: https://uwaterloo.ca/faculty-association/why-waterloo





Faculty Position in Management Science (Data Science, Business Analytics)

The **Ivey Business School** at Western University seeks candidates for a faculty position in the **Management Science** area, which includes **Data Science and Business Analytics**. Applicants will be considered for a Limited Term, rank to be determined by qualifications and experience. Applicants are expected to have an MBA or related graduate degree plus significant industry experience, or have or be nearing completion of their doctorate. The successful candidate will have demonstrated excellence in case teaching in core undergraduate, MSc and/or MBA courses using a case discussion format. The position is available to begin in July 2020, although alternate start dates may be arranged. This appointment may be for up to three years.

The successful candidate will be expected to teach management science subjects (including business analytics, management statistics and data science) in our student-centered, case-based undergraduate, MBA, or EMBA programs, or in the MSc or PhD programs. In addition to teaching, the successful candidate might also contribute to and complement the school's extensive research on Management Science and Business Analytics, specifically, with regard to Revenue Management, Health Care, Supply Chain Management, and Optimization.

APPLICATION PROCEDURE: Applicants are encouraged to submit materials (curriculum vitae, three letters of recommendation and copies of research papers) online to faculty/career-opportunities/ for other application details). Please ensure that the form available at http://www.uwo.ca/faculty/elations/faculty/Application-FullTime-Faculty-Position-Form.pdf is completed and included in your application submission. Review of applicants will commence on October 15, 2019, and applications will be considered until the position is filled.

The **Ivey Business School** is Canada's premier business school and is recognized globally for the quality of its management education and research. The School's major activities include: a highly regarded MBA program and undergraduate program; a well-established doctoral program; a diverse portfolio of executive programs; and a growing MSc program with new streams being added. The School is internationally oriented in terms of curricula, research, faculty, and student exchanges, with campuses in London (Canada), Toronto and Hong Kong.

Positions are subject to budget approval. Applicants should have fluent written and oral communication skills in English. The University invites applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

Accommodations are available for applicants with disabilities throughout the recruitment process. If you require accommodations for interviews or other meetings, please contact facultypositions@ivey.ca.



CORS Awards

Omond Solandt Award

The Omond Solandt Award is awarded to an organization, private or governmental, that is deemed to have made an outstanding contribution to operational research in Canada. Dr. Solandt was the founder and first chairman of the Defence Research Board (DRB). At various times in his life he headed the Science Council of Canada was a vice-chairman of Canadian National Railways (CNR), and Chancellor of the University of Toronto.

To nominate a company for the award, please email **Mike Pavlin** (vicepresident@cors.ca) by **January 17, 2020** with the company's name, headquarters location (city, country), and a brief statement supporting the nomination. Please also provide a contact person within the company if possible.

CORS Award of Merit

The Award of Merit acknowledges significant contributions of a current or past member of CORS to the profession of operational research. Significant contributions can include:

- being specially recognized as an operational research practitioner;
- the development of a methodology relevant to the use of operational research;
- the supervision and development of operational research competence in others;
- the promotion of operational research in Canada through talks, presentations, articles, books, or by other means;
- service to CORS at either the national or local level.

To nominate an individual for the award, please email **Mehmet Begen** (mbegen@ivey.uwo.ca) by **March 9, 2020** with the nominee's name, affiliation, and a brief statement supporting the nomination. Note that the nominee must be a present or past member of CORS.



Eldon Gunn Service Award

The Eldon Gunn Service Award is presented to Members of the Society who have made outstanding contributions of time and service to the Society, at the national or local level, as conference organisers or as editors of CORS publications. Eldon Gunn was a major contributor to the Society since the early 1980s and to operational research in Canada since the 1970s. He was one of the first recipients of the service award in 1987 after serving in Council and acting as conference chair for the 27th CORS Annual Conference in Halifax in 1985. He went on to serve as president of the Society in 1991 and continued his service with passion up until his passing in 2016.

If you know of anyone who has dedicated their time to CORS and who has a longstanding service record, please consider nominating him or her for the Eldon Gunn Service Award. CORS Council urges all local sections to consider and nominate their best candidates. Nominations should include the candidate's name, activities, positions and corresponding years of service. The Awards Committee will evaluate the submissions and bring forward potential recipients to Council for approval. Nominees will be evaluated based on a point system. As a guideline, winners should have 2000 or more points. Previous winners are not eligible for additional service awards. A list of past recipients can be found at https://www.cors.ca/?q=content/eldon-gunn-service-award-0

To nominate an individual for the award, please email **Mike Pavlin** (vicepresident@cors.ca) by **March 6, 2020** with the nominee's name, affiliation, and a brief statement supporting the nomination. Note that the nominee must be a present or past member of CORS.

Point System

Responsibility	Points	Responsibility	Points
CORS Council		Publications	
President	500	Bulletin Editor	350
Vice-President	350	INFOR Editor	350
Secretary	300	Special Editions	150
Treasurer	300	Others	200
Councillor	250		
Appointed Member	200	Local Council	
Past-President	150	President	350
		Vice-President	250
International Conference		Secretary	200
Conference Chair	350	Treasurer	200
Committee Chair	300	Others	150
Committee Member	200	Past-President	100
National Conference		Miscellaneous	
Conference Chair	300	IFORS Executive	250
Committee Chair	250		
Committee Member	200		



CORS Practice Prize

The Practice Prize Competition recognizes the outstanding application of OR by practitioners in Canada and it attracts quality papers to the CORS Annual Conference.

Award: The Prize Committee will determine, at its discretion, First, Second and Honourable Mention awards and the distribution of up to \$1800 in prize money according to the extent to which the finalists have reported on a completed, practical application with results that had a significant, verifiable and (preferably) quantifiable impact on the performance of the client organization. Every member of the winning teams receives a certificate.

Eligibility: The applicant must be a resident of Canada. The submission must include work completed over the last two years, but the entire project may have taken place over a longer period. The project may include published work, but it cannot have been previously submitted to this competition.

Application Instructions:

By **February 28**, **2020** submit e-copies of the following to **Mikael Rönnqvist**, Chair (mikael.ronnqvist@gmc.ulaval.ca):

- 1. An abstract, not exceeding 500 words, outlining the successful application of OR;
- 2. A letter from an executive of the client organization attesting that the application had an impact and giving permission for the project to be presented at the CORS Annual Conference:
- 3. The names, titles, phone numbers and email addresses of all authors and of at least one executive of the client organization.

By **March 19**, **2020** the judging committee will select up to four finalists according to these criteria:

- 1. The challenge of the application of OR and the significance of the problem.
- 2. The quality of the analysis and modeling, and implementation of the results.
- 3. The impact on the client organization.

By May 22, 2020 the finalists must:

- 1. Submit a detailed written report, not exceeding 25 pages in the body, presenting a "case history" of the project describing its development from start to finish and focussing on the challenges and results.
- 2. Submit a one-page project summary, suitable for publication in the CORS Bulletin and on the CORS website.
- 3. Present the project at the Practice Prize Sessions at the CORS Annual Conference.

On the basis of the written report and the oral presentation, the judges will determine the prizes to be awarded and announced at the banquet. The committee reserves the right not to award any prize.



CORS Student Paper Competition

Each year CORS conducts a student paper competition to recognize the contribution of a paper either directly to the field of operational research through the development of methodology or to another field through the application of operational research. The competition serves to showcase the high quality of OR education in Canada as well as the excellence of the new generation of operational researchers. Prizes are awarded in two categories: Undergraduate and Open. MBA students (and other specialized postgraduate students) are encouraged to participate in the competition in the open category.

Requirements and application instructions will follow online (https://cors.ca/?q=content/student-paper-competition) and in the next Bulletin.

Open Category

Chair: Nadia Lahrichi (nadia.lahrichi@polymtl.ca)

Application deadline: April 1, 2020

Undergraduate Category

Chair: Tamon Stephen (tamon@sfu.ca)

Deadline to indicate your intent to participate: March 1, 2020

Deadline to submit your full paper: April 1, 2020



CORS Special Interest Groups

CORS Council approved a policy on Special Interest Groups (SIGs). 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.

SIGs formed so far include:

CORS Analytics SIG

Gregory Paradis (greg.paradis@ubc.ca)
University of British Columbia
www.cors.ca/SIG/Analytics

CORS Forestry SIG

Maha Ben Ali (maha.ben-ali@polymtl.ca) Polytechnique Montréal www.cors.ca/SIG/Forestry

CORS Health Care Operational Research SIG

Timothy Chan (tcychan@mie.utoronto.ca)
University of Toronto
www.cors.ca/SIG/HCOR

CORS Queueing Theory SIG

David Stanford (stanford@stats.uwo.ca)
Western University
www.cors.ca/SIG/Queueing

If you would like to join a SIG, contact the people listed above, or indicate that you would like to join 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 about SIGs can be found online at www.cors.ca/?q=content/communities

If you are interested in forming a SIG in a particular area, contact:

Mike Pavlin, SIG Committee chair (mpavlin@wlu.ca)



Special Interest Group News

Health Care Operational Research

CHOW 2020 - Waterloo/Toronto

The Health Care Operational Research Special Interest Group (HCOR SIG) of the Canadian Operational Research Society (CORS) is pleased to host the 4th annual Canadian Healthcare Optimization Workshop (CHOW). The workshop connects academics from disciplines such as operations management, operations research, and artificial intelligence/machine learning with healthcare practitioners to discuss innovative solutions, data-driven decision support tools, and best practices to improve the efficiency and effectiveness of healthcare systems. It also promotes the research of young scholars with a common interest in healthcare optimization.

This year, the workshop will feature three plenary and six technical talks. All papers accepted for a technical session will be automatically entered into the inaugural CHOW best paper competition. The winner will be announced at the CHOW reception. The competition is open to faculty (pretenure), graduate and undergraduate students, and post-doctoral fellows.

The plenary workshops cover the three leading areas of healthcare operations:

- Operations Research Plenary Speaker: Professor Oguzhan Alagozz
- Operations Management Plenary Speaker: Professor Diwas KC
- Machine Learning Plenary Speaker: Professor Frank Rudzicz

To submit a paper to present in a technical session, please use the following email address: chow2020toronto@gmail.com

Manuscripts, including the abstract and all references, should be less than 38 pages double-spaced (this is defined as having, at most, 33 lines per page) with size 11 font and one-inch margins on all sides. The deadline for submission is **February 28, 2020**. For additional information, please feel free to contact the workshop chairs at the following emails:

Adam Diamant adiamant@schulich.yorku.ca
Andre A. Cire andre.cire@utoronto.ca

Health Care Operations Research SIG Student Presentation Prize

The CORS Health Care Operations Research SIG oral presentation competition for graduate students emphasizes the importance of presentation skills and provides an opportunity for students to receive formal feedback, learn best practices from their peers, and be recognized for excellence in this area.



The goal is to have students demonstrate mastery of coherent and engaging presentations describing a completed research project on a significant healthcare topic within a five-minute time limit. The competition will involve structured abstract submissions judged on the quality of the research and its practical relevance. Judge-chosen finalists will be invited to present a five-minute presentation at the 62nd Annual CORS Conference in Toronto, ON (June 8–10).

The deadline for abstract submission is **April 1, 2020** with the announcement of finalists expected by **April 30, 2020**. Submission process details will follow on the CORS website and via the CORS email listserv. For further information please contact valerie.belanger@cirrelt.ca

Queueing Theory

Eighth Annual Student Prize Competition

The CORS Queueing Special Interest Group (SIG) is pleased to announce the eighth annual student prize competition, to be awarded at the CORS Annual Conference.

Instructions: Students should submit a copy of their paper, plus a letter from their supervisor attesting to their pivotal role and contributions to the results.

Requirements: The competition is for the best student-led paper submitted to a refereed publication, either a journal or the proceedings of a conference. Papers entered in the competition must have already been submitted by **December 31, 2019**. Papers do not need to be published at the time of submission; however, a letter indicating acceptance or soliciting a revision may be submitted along with the paper, as supplementary evidence of its merit. Papers that have appeared in print prior to 2019 will not be considered. A student may submit only one paper for consideration in any year.

Eligibility: Eligibility is restricted to: (i) full-time students (either at a Canadian institution or a Canadian studying outside of Canada) in good standing who do not yet hold their degree on the application deadline and (ii) students who are not previous recipients of a CORS Queueing SIG student prize.

Application deadline: January 31, 2020

Please send your submission to

Selection committee chair Dr. Douglas Down (downd@mcmaster.ca)

Judging: Work will be judged by a three-member committee chaired by Dr. Douglas Down. All applications and questions should be sent to downd@mcmaster.ca



Meetings and Conferences

CORS Business Meetings

May 29, 2019	CORS Council Meeting, Saskatoon, Sask.
Sep 20, 2019	CORS Council Meeting, Teleconference
Nov 29, 2019	CORS Council Meeting, Teleconference
Jan 24, 2020	CORS Council Meeting, Toronto, Ont.
Mar 20, 2020	CORS Council Meeting, Teleconference
May 8, 2020	CORS Financial Planning Committee Meeting
Jun 7, 2020	CORS Council Meeting, Toronto, Ont.
Jun 8, 2020	CORS Council Meeting, Toronto, Ont.
Jun 9, 2020	CORS Annual General Meeting, Toronto, Ont.

CORS Annual Conferences

Jun 8–10, 2020	CORS Annual Conference, Toronto, Ont.
2021	CORS Annual Conference, Montreal, Que.
2022	CORS Annual Conference joint with
	INFORMS International, TBA

Other Conferences

May 4–6, 2020	Optimization Days, Montreal QC https://symposia.gerad.ca/jopt2020/en
Jun 28–30, 2020	INFORMS/MSOM Conference, Banff, AB http://msom2020.com

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 is scheduled to appear in **February**. Along with the regular features and news from the local sections, it will include more information about the next CORS Annual Conference. Contributions to this issue, especially news on the activities of local sections or CORS members, should be submitted by **January 17, 2020** to:

Andrea Friars
Editor, CORS Bulletin
11 Sawgrass Drive
Oakfield, NS B2T 0G1
Phone: 902-895-8430 ext. 3236

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 ListServ. Direct inquiries to the Editor.

CORS List Serv

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

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

The List Serv is not used for commercial purposes, and all messages are vetted before they are sent out. To submit items to the List Serv, email CORS Membership Services at 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 four 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 fellows)

Website: www.cors.ca

INFOR: www.tandfonline.com/loi/tinf20

LinkedIn: www.linkedin.com/company/canadian-operational-research-society

Twitter: @CORS President