

CANADIAN ASSOCIATION ON WATER QUALITY

2019 ANNUAL REPORT

The Canadian Association on Water Quality (CAWQ) is a non-governmental, non-profit organization for scientists, engineers, technologists, administrators, practitioners, and students engaged in or interested in research on water quality or on the control or treatment of water pollution. The CAWQ was officially incorporated in the province of Ontario in 1992. Federal incorporation as a not for profit corporation was completed in 2012.

In 2019, the Association had 168 memberships, representing private, government and university sectors. These memberships were broken down as follows: 30 individual CAWQ, 4 CAWQ Retired, 34 Individual joint CAWQ and IWA (our parent organization), 74 Young Water Professionals (less than 35 years of age) CAWQ, 3 Retired Joint CAWQ and IWA, 22 Joint CAWQ-IWA Young Water Professionals, and 1 Sustaining Member.

The mission of the Canadian Association on Water Quality (CAWQ) is to foster a nationwide network of people who are dedicated to the preservation and enhancement of water quality through research and development, education and the dissemination of knowledge.

WATER QUALITY RESEARCH JOURNAL

The Water Quality Research Journal (WQRJ) has been published continuously for over 50 years, which makes it one of the oldest such peer-reviewed journals in the field, publishing in English and in French. Starting as proceedings of the annual conference of the CAWQ, the WQRJ has evolved into a quarterly journal which attracts high-level papers from Canada and abroad. In January 2017, the name of the journal changed from *Water Quality Research Journal of Canada* to *Water Quality Research Journal*. It is now indexed/abstracted in: Applied Science & Technology Abstracts, Applied Science & Technology Index, ASFA Indexing, BIOSIS, CAB International, Cambridge Scientific Abstracts, Chemical Abstracts Services, Current Contents, Agriculture, Biology & Environmental Sciences, ISI, Elsevier GeoAbstracts, Engineering Information Inc., and the International Academy at Santa Barbara. The WQRJ has been published by IWA Publishing (IWAP) since 2011 and is provided as a membership service to members of the CAWQ. The new publishing arrangements have led to faster turnaround times (review and publication) and wider international exposure. The WQRJ is now well positioned to be the natural publication route for all CAWQ-hosted conferences.

Dr. Peter Vanrolleghem of Université Laval and Dr. Arash Zamyadi of Water Research Australia are joint Editors of the WQRJ. They are assisted by Emma Gulseven, IWAP.

The journal scope has now been revised to:

- Impact of current and emerging contaminants on aquatic ecosystems
- Aquatic ecology (ecohydrology and ecohydraulics, invasive species, biodiversity, and aquatic species at risk)
- Conservation and protection of aquatic environments

- Responsible resource development and water quality (mining, forestry, hydropower, oil and gas)
- Drinking water, wastewater and stormwater treatment technologies and strategies
- Impacts and solutions of diffuse pollution (urban and agricultural run-off) on water quality
- Industrial water quality
- Used water: Reuse and resource recovery
- equality (management, remediation, fracking, legacy contaminants)
- Assessment of surface and subsurface water quality
- Regulations, economics, strategies and policies related to water quality
- Social science issues in relation to water quality
- Water quality in remote areas
- Water quality in cold climates

A total of 32 papers in Volume 54 of the WQRJ were published in 2019 and distributed to CAWQ and international members.

The abstracts for each paper published as well as authors' instructions, scope of the Journal, subscription and membership information can be accessed on the Journal's web site (see www.cawq.ca or www.acqe.ca). Full issues and individual articles can also be purchased online. For more information about the WQRJ, please refer to the Annual Report produced by the Editors. This report can be viewed on the website at www.cawq.ca.

THE CAWQ AND JOURNAL WEBSITES

Journal articles are now available on-line, giving CAWQ members the option of receiving on-line versions, in addition to or instead of the hardcopy version. A new search engine also allows users to query key words and authors. Furthermore, in collaboration with McGill University, articles from back issues of the Journal (1966 to 2001) are now available free-of-charge at: <http://digital.library.mcgill.ca/wqrj/> Articles from 2002-2012 are also available without charge from the CAWQ website.

On-line membership, journal, and symposium payments are also available through the CAWQ website, which was significantly upgraded in 2011 and went on-line in December, 2011 (statistics on web site use are monitored to tune information delivery – weekly about 250 website accesses occur, with a peak at the time of the Central Canadian Symposium). A secure connection is now available for credit card information to be sent via the site. Please visit the site at www.cawq.ca or www.acqe.ca.

ORGANIZATION OF SYMPOSIA

CAWQ organizes annual regional symposia on water quality research, providing a venue for the presentation of recent research results and the opportunity for the exchange of information and networking. Presenters at the symposia are encouraged to submit their work for peer review and

publication in the *Water Quality Research Journal of Canada*. Some details about these conferences include:

- The 54th *Central Canadian Symposium on Water Quality Research* was held on February 27, 2019, at University of Toronto, Toronto, Ontario. This symposium was chaired by Dr. Ron Hofmann in collaboration with University of Toronto and York University.
- The 11th *Western Symposium on Water Quality* was held on May 10, 2019 in Edmonton, Alberta
- The 6th *WEST (Water and Environment Student Talks)* was held on June 13 -14, 2019 in Vancouver, BC. This symposium was chaired by Dr. Pierre Bérubé.
- The 33rd *Eastern Canadian Symposium on Water Quality Research* was held on Oct 25-28, 2019 at Concordia University, in Montreal, QC.
- The *Atlantic Canadian Symposium on Water Quality* was held on Nov 6-8 in St John's, NL.
- The *Canadian National Water and Wastewater Conference* was held on November 3-6, 2019 in Banff, Alberta. This conference was jointly organized by the Canadian Water and Wastewater Association and the CAWQ.

The CAWQ sponsors a competition for the “best presentation” of a research paper made by a student at each of the regional symposia. Historically only one prize was awarded. Starting in 2012 two awards are issued at each symposium, and Young Professionals (under age 35) were also made eligible for the award. The winners receive the Philip H. Jones Award, which was established in honour of a founding member of the association. The Award winners receive a certificate, a cash prize of \$300 for first place and \$200 for second place, a one-year joint membership in CAWQ and IWA, one-year subscriptions to the *Water Quality Research Journal* and *Water 21*, a mention of their name in an issue of the journal and on the website, and a formal invitation to submit their work for peer review and eventual publication in the WQRJ. The following students were presented the Philip H. Jones Award at symposia held in 2019:

Sam Cherniak
University of Toronto, Toronto, Ontario
54th Central Canadian Symposium on Water Quality Research

Dannelle Bishoff
York University, Toronto, Ontario
54th Central Canadian Symposium on Water Quality Research

Farokh Laqa Kakar
Ryerson University, Toronto, Ontario
11th Western Symposium on Water Quality

Sen Yang
University of Alberta, Edmonton, Alberta
11th Western Symposium on Water Quality

Ehsan Banayan
University of British Columbia, Vancouver, British Columbia
6th WEST Canadian Symposium on Water Quality Research

Lais Periera
University Toronto, Toronto, Ontario
6th WEST Canadian Symposium on Water Quality Research

Xing Song
Memorial University, St John's, Newfoundland
Atlantic Canadian Symposium on Water Quality Research

Jennifer Dubuc
University of Québec Abitibi-Témiscamingue
Atlantic Canadian Symposium on Water Quality Research

Sasan Fazeli
Concordia University, Montreal, Quebec
33rd Eastern Canadian Symposium on Water Quality Research

Tiwari Bhagyashree
ÉTÉ_INRS, Québec, Québec
33rd Eastern Canadian Symposium on Water Quality Research

Gao Mengjiao
University of Alberta, Edmonton, Alberta
National Water and Wastewater Conference

Ben Ethier
University of Calgary, Calgary, Alberta
National Water and Wastewater Conference

SUPPORT OF STUDENTS

As part of its mandate, the Association provides assistance and encouragement to students in the water quality and water pollution fields. Students are encouraged to join CAWQ in the Young Water Professionals (less than 35 years of age) membership category. This includes significant reductions in CAWQ membership fees (by approximately 75% of the regular fee) and in symposia registration fees as well as the awarding of the Philip H. Jones Awards for the “best student presentations” at each of the regional symposia, as mentioned above.

INTERNATIONAL ACTIVITIES

A joint CAWQ-IWA membership is available to CAWQ members. The joint membership fees represent a saving of up to 25% over membership of CAWQ and IWA purchased separately. In addition, joint CAWQ-IWA members may subscribe to any, or all, of the IWA journals which are

available in print or electronic format. Please refer to "IWAPonline" for a complete list of online journals and the Water Reference Library for books and reports. These include the following:

- *Water Quality Research Journal* — The journal is a forum for original research dealing with the aquatic environment and should report new and significant findings that advance the understanding of the field. Critical review articles are especially encouraged.
- *Water Science & Technology* — This journal publishes peer-reviewed papers on all aspects of the science and technology of wastewater treatment and water quality management worldwide.
- *Water Practice & Technology* - The journal presents papers on all practical aspects of water and wastewater treatment and management throughout the water cycle.
- *Water Science & Technology: Water Supply* — This journal publishes peer-reviewed papers on all aspects of water supply.
- *Journal of Hydroinformatics* — A peer-reviewed journal devoted to the application of information technology in the widest sense to problems of the aquatic environment. It promotes Hydroinformatics as a cross-disciplinary field of study, combining technological, human-sociological and more general environmental interests, including an ethical perspective.
- *Journal of Water Supply & Technology (Aqua)* — This journal publishes peer-reviewed scientific and technical, review, and practical papers dealing with research and development in water supply technology and management covering the complete water cycle.
- *Journal of Water and Health* — A peer-reviewed journal devoted to the dissemination of information on the health implications and control of waterborne microorganisms and chemical substances in the broadest sense for developing and developed countries worldwide.
- *Journal of Water and Climate Change* — This journal publishes novel peer-reviewed research and practitioner papers on all aspects of water science, technology, management and innovation in response to climate change, with emphasis on reduction of energy usage. Review papers are particularly encouraged.
- *Hydrology Research* — This journal publishes articles within hydrology in its widest sense, with an emphasis on water quantity and quality aspects of the hydrological cycle.
- *Water, Sanitation and Hygiene for Development* — A peer-reviewed journal devoted to the dissemination of high-quality information on the science, policy and practice of drinking-water supply, sanitation and hygiene at local, national and international levels.
- *Water Policy* - This journal publishes reviews, research papers and progress reports in, among others, the following areas: financial, diplomatic, organizational, legal, administrative and research; organized by country, region or river basin.
- *Journal of Water Reuse and Desalination (JWRD)* — An international open access journal

publishing peer-reviewed papers on the science and technology, policy, regulation, social and economic aspects and applications of sustainable sources of water to cope with water scarcity, including new sources of non-conventional water

- *H₂Open Journal* - A journal that publishes Open Access original, peer-reviewed, internationally relevant articles covering all aspects of 21st century water research.

In association with Elsevier

- *Water Research* — This journal publishes refereed, original research papers on all aspects of the science and technology of water quality and its management worldwide.
- *Water resources and rural development* - This journal publishes papers describing the role of water resources in supporting livelihood activities in rural areas.
- *Water Resources and Economics* - This journal addresses the financial and economic dimensions affecting the use of water resources, be it water extraction, pollution or allocation, across different economic sectors like agriculture, energy, industry and urban water supply as well as between local, regional and transboundary river basins.
- *Water Resources and Industry* - This journal aims to move research to innovation by focusing on the role industry plays in the exploitation, management and treatment of water resources.
- *Sustainability of Water Quality and Ecology* - The journal facilitates the confrontation and integration of scientific knowledge and policy development related to water quality and ecology.

INITIATIVES

The IWA was founded in 1998 by the amalgamation of the International Association on Water Quality (IAWQ) and the International Water Services Association (IWSA) to form the new International Water Association (IWA), with interests and responsibilities being similar to those of its two founding organizations. Before the merger, the CAWQ served as the Canadian National Committee (CNC) of the IAWQ and represented Canada on the IAWQ Governing Board. From 1998 to 2007, the CAWQ was the sole member of the CNC.

The Canadian Water and Wastewater Association (CWWA) is a national association with members from the water services sector, municipalities and regional organizations. This association shares with the CAWQ the common objectives of advancing and implementing knowledge for the provision of safe drinking water and the environmentally sound management of wastewater. After discussions between the CAWQ and CWWA, it was felt that the complementary objectives of the two organizations would be enhanced by establishing a framework for their collaboration. As a result, since 2007, the CWWA and the CAWQ have agreed to become partners of the CNC-IWA to better participate in the activities and promotion of the IWA. **Representing CAWQ in 2019 were Mike Lywood, CAWQ President, Dr Peter Vanrolleghem, CAWQ Vice-President (Eastern Region) and Dr Yves Comeau, CAWQ Secretary.**

In order to improve its ability to represent the interests and views of its members and other

stakeholders across Canada, the CAWQ undertook the following initiatives in 2014:

- The 2014 to 2018 Strategic Plan was developed and approved by the Board of Directors. The plan is available for review on the CAWQ/ACQE website www.cawq.ca.
- Collaborative efforts continue with regional associations such as the Atlantic Canada Water and Wastewater Association, the Water Environment Association of Ontario, the Ontario Water Works Association, British Columbia Water and Waste Association, Réseau Environnement, to create opportunities for all organizations and to raise the profile of the CAWQ.
- Members of the CAWQ were actively engaged in a national effort to develop an agenda on water research priorities in Canada.
- Sponsorship support was provided for international and national specialty conferences related to water quality in Canada.
- Vision and supporting documents of the CAWQ were reviewed and revised.

REVENUE

The CAWQ has implemented a policy that requires students, who are by design significant participants in all CAWQ symposia, to become paid members of the CAWQ in the Young Water Professional membership category for the year as part of their symposium registration fee. This is targeted to increase student membership in the CAWQ with the goal being to retain higher numbers of them as members after they graduate. Young Water Professional members of CAWQ have electronic access to the journal.

The Canadian National Committee (CNC) of IWA (CWWA is the equal joint member of CNC) drafted a letter to IWA requesting that:

- IWA levy a \$20 fee on all Canadian individual IWA memberships and remit those funds to CNC;
- IWA levy a \$40 fee on all Canadian corporate memberships and remit those funds to CNC;
- IWA request that organizers of IWA events in Canada be asked to voluntarily place a levy of \$5 per delegate on all registrations and remit those funds to CNC.

GOVERNANCE & ADMINISTRATION

The Board of Directors of the CAWQ is comprised of the Executive Committee and Regional Directors, as shown below. All individuals are volunteers and are appointed to these positions as per the Bylaws of the CAWQ. These bylaws can be found on the CAWQ website.

Ms. Janet McAvella is in charge of the Administration and Membership office of the CAWQ, located in Burlington, Ontario. Mr. Brad Cutler manages the CAWQ website. In addition, financial administrative services are provided by Ms. Marilyn Crawford, XCG Consultants Ltd., Kitchener,

Ontario. The CAWQ is sincerely grateful to Ms. McAvella, Ms. Crawford and Mr. Cutler for their invaluable assistance and support.