

EDITORIAL

GEOSCIENCE CANADA – FORTY-FIVE YEARS YOUNG

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PREAMBLE

In my four years working as an editor for this journal, I have tried to provide an editorial for each volume, to touch on issues and concerns that publishers and authors alike might need to consider. But it is equally important that I take the time to formally thank many others who share the effort involved in producing *Geoscience Canada* for you each year. To say that the journal would not exist without their efforts is an understatement. First and foremost on that list is our Managing Editor Cindy Murphy, whose role is actually far more demanding than mine. Cindy carefully tracks each article through the publication process and communicates with authors as revisions and layout proceed, and the quality of final products reflects her energy, organizational skills and her keen eye for detail. I simply could not do my job without her massive contribution, not to mention her numerous timely reminders. I also sincerely thank several 'Section Editors' who look after contributions in our thematic series papers. Jarda Dostal (Igneous Rock Associations), Brendan Murphy (Andrew Hynes tectonic series) and Dave Lentz (Economic Geology Models) deserve special mention for working on some interesting papers in 2018. We depend on hard-working and dedicated volunteers to assist with the sometimes tedious copy-editing of manuscripts, and I acknowledge the diligent work of Rob Raeside, Stephen Amor and Lawson Dickson. Jean-Alfred Renaud, who has assisted with French translations for GAC over many years, retired at the end of 2018, and I thank him for his long-term contribution. The eye-catching graphics that appear on the title page of our papers come from the creative 'pen' of Peter Russell, who has also shared his talents with us for many years. Last, but not least, the GAC head office staff (Karen Dawe and Eleanor Penney) assist with many administrative aspects of *Geoscience Canada*, and the support and advice of GAC Book Editor Sandra Barr and former GAC Publications Chair Chris White on several matters have proved invaluable to me. I would also like

to thank the new GAC Publications Chair Roger Paulen for his interest in sustaining the Journal's operations. Last, but certainly not least, I wish to thank the Department of Earth Sciences at Memorial University for providing a home for the journal and for supporting this work as part of my adjunct faculty position.

LOOKING BACK TO SEE AHEAD

My own career path in the Earth Sciences started more-or-less at the same time as *Geoscience Canada* first went to press in 1974. I was in my second year at the University of Southampton and had decided to set aside a program in Environmental Science and study geology instead. The reasons for that choice will be familiar to many - I took an introductory geology course taught by an animated and committed lecturer, and I was hooked for life. That same young lecturer would later persuade me to pursue postgraduate studies in Canada. I owe the late Nick Badham a great deal, and will always feel that I failed to properly thank him. Although I did not come to Canada until 1977, I was already aware of *Geoscience Canada*. Nick had completed his Ph.D. at the University of Alberta, and he used two articles from the very first issue as supplementary reading material for a course on economic natural resources. These two articles, entitled *Trends in the Mineral Industry in the Next Decade* (by Robert J. Uffen and others) and *Energy - Challenge of Man's Future* (by R.E. Follinsbee and A.P. Leech) still make interesting reading. In the mid-1970s, there were dire predictions of the coming exhaustion of all natural resources, and the massive shortages envisioned for the 21st century. That particular version of future history did not come about as predicted, but both papers include prescient observations that are relevant to today's issues. These articles, and the other short papers in Issue 1 of *Geoscience Canada*, demonstrate that scientific and technical research and reasoned speculation from such data, have lasting value almost half a century beyond their publication. The ideas and conclusions that we have will change over time, but there are many smaller steps in that long process.

Our first issue also contained a message from then-president William Watt Hutchinson (1935–1987), a well-known figure whose name is now attached to GAC's most prestigious medal. Appropriately, he commented that "*The first issue of Geoscience Canada is an historic event for our Association; it marks both the start of a bold new venture and the end of an old one.*" He actually said much more than this, although his introduction only occupied a single page, including its French continuation. His intro-

ductory comments resonated deeply with me in terms of the goals that we hold at *Geoscience Canada*, and I think that others might also benefit from reading them. At the end of this editorial, you will find the complete text of Hutchinson's introduction, which is just as relevant in 2019 as it was in 1974.

The first issue of *Geoscience Canada* also contained a short piece by editor Gerry Middleton. It is worth reiterating some key points from his introduction. Gerry noted our natural focus on general-interest articles about Earth Sciences in Canada, but also our interest in reviewing ideas and developments from beyond our shores. Most importantly, he emphasized that articles "*will be written at a technical level that can be understood not only by specialist research workers but also by non-specialists in other branches of the Earth Sciences.*" This is still a key guiding principle for *Geoscience Canada*, but it is also a very difficult objective - which is perhaps why few other technical journals see it as a priority. I think it is even more important in today's environment, in which specialization of research seems to me at times to be a truly blinding obsession. I like to think of *Geoscience Canada* as a journal that bridges the gap between disciplines and specialities, such that geophysicists can learn from glaciologists, and paleontologists from petrologists. Earth Science is amazingly diverse, and there are connections between all of its many facets; the opportunity to learn about new and unfamiliar things is something that we should promote, and not just because it is intrinsically interesting. There are many examples in the history of Earth Science where major advances in one field have come about simply because a far-sighted individual became aware of seemingly unrelated research on another topic.

At this point, a sensible editor would probably conclude that this editorial is already too long, and swiftly bring it to a close. It would be easy to just leave the last words to William Watt Hutchinson, and I admit that I am sorely tempted. However, there are other matters that need to be aired as *Geoscience Canada* approaches its fiftieth anniversary. These topics are not new or unique to us; the world of science publishing is changing rapidly, and most journals are working to adapt and survive in a radically different environment. I see us as a reader- and author-supported scientific journal, and our long-term success depends on the support and participation of our readership, and the wider Canadian geoscience community. In the following short sections, I will quickly touch upon some of these changes and challenges and discuss possible solutions.

IT ALL STARTS WITH A MANUSCRIPT!

Regardless of the mandate or focus of a scientific journal, all have one thing in common - the lifeblood of publishing is *content*. Without the submission of first-draft papers to *Geoscience Canada*, there will not be any published papers. Without submissions to the journal, there will be no journal, period. This may seem self-evident, but it always needs to be repeated. At *Geoscience Canada*, we make a sincere effort to assist authors as they navigate the pipeline - which can be tortuous - and provide them, through the peer-review process, with ideas and suggestions for improvement of their papers. But in the end,

the number of published papers will always be less than the number of submissions received. A major part of my job as editor consists of soliciting contributions and encouraging authors, to ensure that we will have sufficient content for forthcoming issues.

So, if there is one single thing that the readers of the journal can do to help us in our efforts, it is to move from readership to authorship. Consider submitting papers to the journal, or encourage others to write and submit papers. We are always interested in scientific papers that report new research, especially of a regional or interdisciplinary nature, but we are equally interested in review-type papers that have lasting educational value, and in reports connected to geoscience outreach and education activities. If you attended an interesting scientific conference at which topical ideas were discussed, or read a technical book that either impressed you or failed to do so, consider writing us a thoughtful review. We are very much open for business, and our business is also *your* business. If you have published work with us, and had a good experience with that process, please spread the word, and encourage others to contribute. If your experience was less than ideal, then please contact us so we can consider ways to improve things in our system.

THEMATIC SERIES - PAST, PRESENT AND FUTURE

Thematic Series Papers have long been an important part of how *Geoscience Canada* operates. These are papers that share a common theme in Earth Science, or relate to specific regions or periods in Earth History, and many are later published as stand-alone books by the GAC. The well-known *Facies Models* and *Ore Deposit Models* collections, which are widely used in the educational sector, are examples of previous thematic series. Thematic series papers related to the research pioneered by Paul Hoffman and Harold (Hank) Williams are more recent examples of such compilations. Among the current collection of thematic series, we have some that are very active in terms of papers, notably Igneous Rock Associations (Section Editor, Jarda Dostal), the Andrew Hynes Tectonics Papers (Section Editors, Brendan Murphy and Stephen Johnston) and Economic Geology Models (previous Section Editor, David Lentz). Papers have appeared in several other thematic series over the last few years, but some series are effectively dormant. Over the next year or so, we anticipate bringing some of these dormant thematic series to a close, and replacing them with some new initiatives that we hope will attract more paper submissions. In 2018, we initiated the *Classic Rock Tours* series, and we are actively seeking ideas for other new initiatives. We also need Section Editors to take on the work involved in soliciting and handling papers for any new ventures, and also to replace existing Section Editors who are stepping down. Dave Lentz stepped down from his role with the Economic Geology Models series in 2018, and we are especially keen to fill this gap in the near future. The role of Section Editors is a vital one for the journal, and we are very interested to hear from new candidates with new ideas and visions.

RAISING THE PROFILE OF GEOSCIENCE CANADA

Although the Journal carries the name of our country in its title, we aspire to be much more than a regional journal. Raising our profile and establishing an identity as a source of high quality, diverse material that non-specialist readers can understand and assimilate is an important objective for us. In many respects, the challenges noted above with regard to the submission of new manuscripts are related to the wider issue of the profile of the journal in the Earth Sciences community, especially beyond Canada. A higher profile would obviously encourage more submissions, but raising our profile ultimately depends on publishing more articles, so this is not an easy task. Readers can assist by promoting the journal to colleagues and contacts, and by using materials from our papers in the classroom, and in other ways that increase awareness. Ideally, we would like to add another person to the editorial team to directly address the challenges involved in promoting the journal by any means that we can devise. If you like working hard in support of a good cause, with a reasonable chance of some sense of accomplishment at the end, we would really like to hear from you.

IS OPEN ACCESS IN OUR FUTURE?

In 2016, I wrote a discussion about the growing importance of open access in scientific publishing, and the ways in which we might approach this at *Geoscience Canada*. More recently, as part of a wider change in policy by the Erudit publishing consortium, of which we are a part, *Geoscience Canada* took another step along this road. From 2018 onwards, papers published in *Geoscience Canada* become open access only 12 months after their formal publication; with the appearance of this issue, papers published in the March issue of 2018 will become fully open access, and can be freely distributed.

Since 2016, we have offered an option for *immediate* open access to all published papers through modest article processing fees. The move to automatic open access after one year has reduced these fees, and several authors of papers published in 2018 opted to make their work immediately available by paying such charges. The current rate for immediate open access is a flat charge of \$500, and a page charge of \$50 per final published page. So, if you write a paper that ends up being 10 pages long, the total cost is \$1000. These fees are significantly less than those charged for open access by other hybrid journals.

The revenue from these open access charges will likely become increasingly important to *Geoscience Canada* in years to come, should our revenue from subscriptions diminish, which is possible. We encourage authors of papers to consider this option, which will give wider immediate impact to their work, and support the journal in its wider efforts. Many authors and readers will remember 'page charges' from the era of print-only journals, and these still exist for some journals even in this digital age. Page charges were voluntary, and the publication of a given paper was never dependent upon their payment, but authors with adequate support generally made an effort to pay them because they were essential for journals to survive and prosper. Our voluntary open access charges differ

from old-style page charges in that they give you something tangible in return. They allow immediate access to and distribution of your work around the world with the click of a mouse. If you publish papers with us in 2019 and have available funding, please consider supporting *Geoscience Canada* by making these payments. The added revenue will also help us with important initiatives such as trying to raise the profile of the journal.

CLOSING REMARKS

When I took on the role of Scientific Editor for the journal in 2015, following my retirement from the Geological Survey of Newfoundland and Labrador, I was not really sure what to expect. I discovered that working as an editor provides an unparalleled opportunity to learn about new topics and connect topics from different disciplines; as a learning opportunity, there are few things that compare to it. When a paper finally appears in *Geoscience Canada* and I read through the proofs, the ups and downs of the publication process seem worthwhile, and the occasional frustrations are quickly forgotten. If a mere editor is happy to see the final product of work by others, I can only hope that the authors themselves share a greater pleasure, and feel that their much greater efforts were well placed. In conclusion, I hope that 2019 will be another good year for *Geoscience Canada*, and that all involved in every paper will take enjoyment and pride from their accomplishments.

The following message from the GAC Past-President, W.W. Hutchinson, was published in the first issue of Geoscience Canada, V. 1 (1974), No. 1, p. 3.

A Message from the President

This first issue of *Geoscience Canada* is an historic event for our Association; it marks both the start of a bold new venture and the end of an old one. Specifically *Geoscience Canada* replaces our Proceedings which for over 25 years contained formal accounts of scientific studies and of our Association's activities. *Geoscience Canada* will be more broadly based, more topical, will discuss issues and maintain a poise of responsiveness; its appearance is most timely.

The relevance of geology in Canada today is greater than it has ever been. Yet there is substantial polarization of information and views between news media and scientific journals; hopefully *Geoscience Canada* may help fill this gap by providing a forum for informed opinion. But it must do more than this. It must provide for presentation and discussion of concepts which may be ephemeral yet essential to the evolution of science. Perhaps *Geoscience Canada* will even present something of the culture of geology – a rich culture shared by few. It has many elements: love of the outdoors, pioneer spirit of the prospector, disappointment and frustration countered by an underlying enthusiasm and determination for discovery, and the manner in which emotions can be violently stirred as new theories are put forward. *Geoscience Canada* should reflect some of this refreshing vitality but the underlying theme must be the science itself.

Man's evolution is marked by his mastery of minerals and metals; I hope *Geoscience Canada* will convey with impact that geology is not in a backwater but is a rapidly developing science that is exciting, relevant, and well-poised to respond to present and future needs in the world.

Les géologues de l'avenir devront faire face à une carence partielle des richesses naturelles, au souci de protection de l'environnement, ainsi qu'à la complexité croissante des politiques gouvernementales. Espérons qu'ils pourront relever le défi. Leur participation aux débats sur l'actualité et leur contribution

à *Geoscience Canada* se doivent de demeurer purement scientifiques. Souhaitons que *Geoscience Canada* saura véhiculer la pensée géologique et ainsi être utile non seulement aux géologues mais aussi à tous ceux qui vivent dans ce grand milieu qu'est la Terre.

Longue vie à *Geoscience Canada* et bonne chance à son rédacteur, G. V. Middleton.

W. W. Hutchison

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