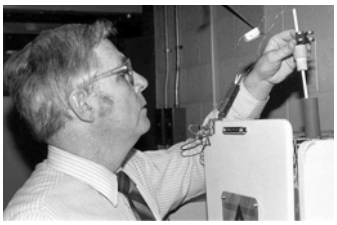
Mineralogical Association of Canada

OBITUARY

Peter L. Roeder (1932–2014)



Peter Roeder working in his experimental petrology laboratory in 1973

Peter L. Roeder died on June 7, 2014, in Kingston, Ontario, Canada, near Queen's University where he spent most of his career. Peter Roeder was admired as a role model by many students and colleagues, and as a teacher of geochemistry, igneous petrology, and optical mineralogy. As a researcher, Peter was best known for his work in experimental petrology. Peter's seminal work on olivine–liquid equilibria, published in 1970[1], was the culmination of his previous work in simpler iron-bearing systems. This paper has been cited more than 2000 times, more than 60 times in 2013, which is remarkable for a paper written 44 years ago. The K_D approach, laid out in that paper as a simple and elegant expression of the forsterite–fayalite melting loop in complex systems, provided a powerful tool to evaluate the origin and evolution of terrestrial and extraterrestrial basaltic magmas. This work led the way for the calibration and utilization of many other crystal–liquid K_D's to unravel the compositional evolution of magmas, including those at Kilauea, in a quantitative and predictive way[2].

Peter won the Past President's Medal for Research Excellence from the Mineralogical Association of Canada in 1987. He was vice-president of MAC from 1990 to 1992 and president from 1992 to 1994. A special issue of *The Canadian Mineralogist* titled "Phase Equilibria in Basaltic Systems: A Tribute to Peter L. Roeder" was published in 2001. Peter continued his interest in geochemistry after becoming an emeritus professor in 1996 and was coauthoring papers as recently as 2006.

Peter grew up in Massachusetts, where his father, Kenneth D. Roeder, was a world-famous biologist at Tufts University and a particularly influential role model. But Peter liked to tell us how at a young age he fancied a future as a professional bait-caster, and fishing remained a lifelong hobby. He also told the story of how, during the Korean conflict, he was stationed in San Francisco, where a local gentlemen's club allowed young soldiers to use its library. Peter, who had recently graduated from Tufts with a BSc in geology, took advantage of this offer and it was there that he discovered Bowen's *The Evolution of the Igneous Rocks*. Entranced by the rigor of Bowen's approach to fractional crystallization, he decided then and there to pursue graduate studies in experimental petrology at the Pennsylvania State University. Professors O. F. Tuttle and E. F. Osborn at Penn State had both worked with Bowen at the Geophysical Laboratory, and Peter started experimental work on phase equilibrium in simple systems under the supervision of E. F. Osborn. After graduating from Penn State in 1960, Peter held a post-doctoral fellowship at the New Mexico Institute of Technology, before joining the faculty at Queen's University in Kingston (Bowen's *alma mater*).

Peter was predeceased by his loving wife Claire Marie in 2001. He is survived by their three children (David, Katherine, and Tina) and four grandchildren, his sister Stephanie, and friend Ann Mackenzie.

Heather Jamieson
Department of Geological Sciences and Geological Engineering
Queen's University, Kingston, Ontario, Canada

1 Roeder PL, Emslie RF (1970) Olivine–liquid equilibrium. Contributions to Mineralogy and Petrology 29: 275-289

2 Roeder P, Gofton E, Thornber C (2006) Cotectic proportions of olivine and spinel in olivine-tholeiitic basalt and evaluation of pre-eruptive processes. Journal of Petrology 47: 883-900

GAC-MAC 2014: "ILLUMINATING THE PAST FOR 175 YEARS"

The annual joint GAC-MAC meeting took place in Fredericton, New Brunswick, on May 23–25, 2014. The meeting was dedicated to Dr. Abraham Pineo Gesner (1797–1864), the first provincial geologist in Canada and the inventor of kerosene. The Mineralogical Association of Canada (MAC) sponsored several topical sessions, listed below. Note that abstracts of all presentations are available on www.mineralogicalassociation.ca by clicking on Meetings and Tutorials.

- SS8. Geoscience and management of radioactive waste in deep geological repositories (Julie Brown and Mostafa Fayek, convenors)
- SS17. The age of the Earth revisited: High-precision U–Th–Pb geochronology of igneous, metamorphic, and sedimentary processes (Sandra Kamo, Mike Hamilton, Larry Heaman, and Paul Sylvester, convenors)
- SS19. Linking metamorphic processes with large-scale geodynamics (David Pattison, Fred Gaidies, and Doug Tinkham, convenors)
- SS20. High-temperature metasomatic processes recorded by trace element and isotopic systematics in major and accessory minerals (Chris McFarlane, Richard Cox, and Jacob Hanley, convenors)
- SS24. Mineralogy of plutonic rocks: From magmas to ores. A tribute in honor of André E. Lalonde (Keiko Hattori and Robert Linnen, convenors)
- SY6. Applied aspects of mineralogy: A tribute to John Leslie Jambor (Tom Al, David Blowes, and Robert Martin, convenors)

I was personally involved in the last two sessions listed. Special session SS24 underscored the impact of André Lalonde in a career cut short by his untimely death in December 2012, at age 57. As I wrote in *Elements*, volume 9, number 1, André was gifted in many ways. He was a born communicator who typically presented a one-hour evening talk aimed at the general public during a GAC-MAC meeting. To hear André talk about some aspect of mineralogy and health issues naturally attracted a broad audience. He was recognized as a gifted teacher at the University of Ottawa and, even before that, at McGill University, in his graduate student days. Graduates and staff members from his home department contributed to session SS24.

From left: Philippe Belley, Robert Linnen, Jennifer Anderson (application specialist at PANalytical), Keiko Hattori, Lesia Zalusky (André Lalonde's wife), Julie Bourdeau, Andy McDonald, and Steven Zhang. All, excluding Jennifer and Lesia, contributed to the special session in honor of André Lalonde, convened by Robert Linnen and Keiko Hattori.

André is totally surprised to receive his own "New Mineral" T-shirt! March 20, 2009

André exuded enthusiasm about the benefits of a solid grounding in optical mineralogy. He had great success in communicating this boundless enthusiasm to benefactors of the university, who helped him establish a world-class teaching facility in that area. Thus there was no question where the Berry Summer School in Optical Mineralogy would be held (see *Elements*, volume 10, number 3, page 31). André would have been thrilled to see students at this MAC–MSA-sponsored activity deriving full benefit from the equipment that he had assembled. As a professor and dean of the Faculty of Science, André was genuinely interested in promoting opportunities for international students, in particular those from the Middle East. I remember André recounting his visit to Iran, where he was received like royalty by former students.

I was also involved in the sessions celebrating the career accomplishments of John Leslie Jambor (1936–2008). John was exceptionally productive throughout his career. Upon graduation from the University of British Columbia (MSc, 1960), he was offered a permanent position with the Geological Survey of Canada. In his first paper (1962), coauthored with R. W. Boyle and published in *The Canadian Mineralogist*, he defined gunningite, $ZnSO_4 \cdot H_2O$, the main product of the oxidation of sphalerite. That was the first of 37 new species in his career. John's research focused on the mineralogy of ore assemblages. He worked on silver mineralization in the Cobalt–Gowganda area of Ontario and the Zr–REE ores of the Strange Lake deposit, Quebec–Labrador, and he defined ten new sulfosalts, which became the topic of his PhD thesis at Carleton University. In 1975, he moved to CANMET and began a sustained effort to characterize mine wastes, again dominated by sulfate minerals. He wrote 136 refereed articles, most of them published in society-run journals, and 200 other publications. He organized MAC short courses on the topic of sulfate minerals and contributed to the RIMG volume (#40) on the same subject. John retired in 1993, only to start a successful career in consulting. He was the second editor of *The Canadian Mineralogist* (1972–1977). From 1989 to 2007, John was the unsung hero responsible for the New Minerals section of *American Mineralogist*.

Group photo of notable participants in the special session dedicated to John Leslie Jambor. In the back row, Prof. Tom Al (University of New Brunswick), Mr. Jay Jambor (John's son), and Dr. Kirk Nordstrom, (U.S. Geological Survey in Denver, keynote speaker). In the front row, Robert F. Martin (McGill University), Lynne Jambor (John's widow), Prof. David Blowes (University of Waterloo), and Dr. Stephen Zajac (John's classmate at the University of British Columbia). Absent from the photo: Prof. Peter C. Burns, University of Notre Dame, keynote speaker. Drs. Al, Blowes, and Martin are guest editors of the thematic issue of *The Canadian Mineralogist* scheduled to appear in 2015 and entitled "Applied Aspects of Mineralogy."

At GAC–MAC 2014, keynote speakers Kirk Nordstrom (U.S. Geological Survey) and Peter Burns (University of Notre Dame) each illustrated fascinating aspects of applied mineralogy. A thematic issue of *The Canadian Mineralogist* is planned to honor John in recognition of his many important contributions to the MAC.

Robert F. Martin, McGill University

AGU–CGU–GAC–MAC JOINT ASSEMBLY 2015

JOINT ASSEMBLY
Montreal, Canada • 3-7 May 2015
AGU-GAC-MAC-CGU

RÉUNION CONJOINTE
Montréal, Canada • 3-7 mai 2015
AGC-AGU-AMC-UGC

The 2015 Joint Assembly cosponsored by the AGU, CGU, GAC, and MAC will be held on 3–7 May 2015 at the Palais des congrès in Montreal. The Joint Assembly will consist of a diverse program covering topics in all areas of the geophysical sciences.

2015 MAC AWARDS
CALL FOR NOMINATIONS

PEACOCK MEDAL

The Peacock Medal is awarded to a scientist who has made outstanding contributions to the mineralogical sciences in Canada. There is no restriction regarding nationality or residency. The medal recognizes the breadth and universality of these contributions in mineralogy, applied mineralogy, petrology, crystallography, geochemistry, or the study of mineral deposits.

YOUNG SCIENTIST AWARD

This award is given to a young scientist who has made a significant international research contribution in a promising start to a scientific career. The scientist must be 40 or younger at the time of the award. He or she must be a Canadian working anywhere in the world or a scientist of any nationality working in Canada. The research areas include mineralogy, crystallography, petrology, geochemistry, mineral deposits, and related fields of study.

BERRY MEDAL

The Leonard G. Berry Medal is awarded annually for distinguished service to the Association. The award recognizes significant service in one or more areas, including leadership and long-term service in an elected or appointed office. The medal is named after Leonard G. Berry (1914–1982), a founding member of MAC, editor for 25 years of *The Canadian Mineralogist* and its predecessor, and first winner of MAC's Past-Presidents' (now Peacock) Medal.

Please submit your nominations by December 31, 2014. Check our website, **www.mineralogicalassociation.ca**, for additional details.