



Mineralogical Association of Canada

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AWARD AND MEDAL WINNERS

The Mineralogical Association of Canada (MAC) is pleased to announce its medal and award winners for 2023.



2023 Medal and Award Winners presented at the GAC-MAC-SGA SUDBURY 2023 MAC Luncheon. (LEFT TO RIGHT) Glenn Poirier, Hawley medalist second author; Paula Piilonen, Hawley medalist first author; Carl Guilmette, Young Scientist Awardee; and David Lentz, Peacock medalist.

Peacock Medal to Dr. David R. Lentz (University of New Brunswick)



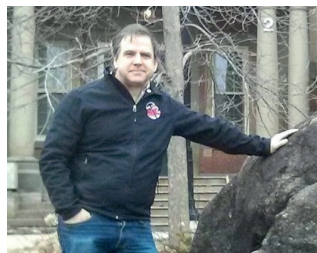
This year's awardee is **Dr. David R. Lentz**, Research Chair in Economic Geology for the Department of Earth Sciences, University of New Brunswick.

David received his BSc Honours (1983) and MSc (1986) degrees in geology from the University of New Brunswick (UNB) in Fredericton. He completed a PhD (1992) at the University of Ottawa with the renowned Professor Ralph Kretz and then worked with the

Geological Survey of Canada for three years with Wayne Goodfellow. In 1994, Lentz joined the New Brunswick Geological Survey as their mineral deposits geologist. Since 2000, he has held the Research Chair in Economic Geology at UNB, with a research focus on the petrogenesis of ore deposits, in particular magmatic hydrothermal systems. He is also an adjunct professor at the University of Maine, USA and Trinity College Dublin, Ireland.

Early on, David received the William Harvey Gross Young Scientist Medal from the Geological Association of Canada (GAC). Later, he was honored with the GAC's Distinguished Service Award; the New Brunswick Association of Professional Engineers & Geoscientists' Loring Bailey Geoscience Award; the Atlantic Geoscience Society's (AGS) Gesner Distinguished Scientist Medal and their Nelly Koziel Award for outstanding contributions to the Atlantic Geoscience Community; the Canadian Institute of Mining, Metallurgy and Petroleum's (CIM) Julian Boldy Award and their Distinguished Lecturer tour; and the International Association on the Genesis of Ore Deposits' (IAGOD) Distinguished Lecturer Award.

David is also a Fellow of Geoscientists Canada. Notably, he has edited several popular ore deposits-related books for the GAC and MAC. He has also published over 300 journal articles in addition to numerous government publications with several awards for best paper with his students. David is well known for his volunteer activities, particularly professional and applied short courses, workshops, and field trips, as well as chairing meetings for CIM, Association of Applied Geochemists (AAG), GAC-MAC, and AGS. He has proudly served on the executive boards for CIM, IAGOD, AAG, GAC, and AGS and as an advisor to *Elements*. He has served as Associate Editor for *The Canadian Mineralogist* (now *The Canadian Journal of Mineralogy and Petrology*), *Mineralium Deposita*, *Ore Geology Reviews*, and *Economic Geology*; and edited special issues in the journals *Economic Geology* and *Exploration & Mining Geology*. Currently, he is Associate Editor for the *Journal of Geochemical Exploration*, *Journal of Earth Science*, and *National Research Council FACETS*. He is a Subject Editor for the Economic Geology section of *Frontiers in Earth Science*.



David Lentz in front of the University of New Brunswick Geology building where he has held the Research Chair in Economic Geology since 2000.

David credits most of his success with building partnerships with provincial, territorial, and federal (GSC) geoscience experts, while cooperating with industry leaders to support student research with important field components on tractable research problems; this helps build each of their careers on a solid foundation.

Young Scientist Award to Dr. Carl Guilmette (Université Laval)



The 2023 Young Scientist Award goes to **Dr. Carl Guilmette**, Bachelor in Geology Programme Chair for the Département de géologie et de génie géologique, Faculté des sciences et de génie, Université Laval.

Carl received his BSc (2002) in geological engineering and his MSc (2005) in metamorphic petrology at Université Laval, followed by a joint ULa-

Memorial PhD on Mesozoic high-pressure granulites of Tibet in 2010. He completed a post-doctoral fellowship in finite element numerical modeling at Dalhousie University between 2010 and 2012, and then worked as Assistant Professor at the University of Waterloo between 2012 and 2014. He joined Université Laval in May 2014 as the Virginia-Gaumont Chair in Tectonics and Structural Geology. Carl's research interests revolve around the investigation of the timing, duration, and rates of tectonometamorphic processes in modern and ancient orogens through geological mapping, phase equilibria modeling, and multi-system petrochronology, and their implications for geodynamics and metallogeny. He teaches metamorphic petrology, structural geology, and field school. At the moment, his research program is mainly focused on the Paleozoic Canadian Appalachian ophiolites, in the Paleoproterozoic Trans-Hudson orogen, and in the Meso- to Neoproterozoic Superior Craton.

Hawley Medal for the best paper published in The Canadian Mineralogist in 2022

The Hawley Medal is awarded to **Drs. Paula C. Piilonen** and **Glenn Poirier** (Canadian Museum of Nature), **William Lechner, Ralph Rowe** (Canadian Museum of Nature), and **R. Peter Richards** (Oberlin College).

The paper is entitled: "ZEOLITE MINERALS FROM WAT OCHENG, TA ANG, RATANAKIRI PROVINCE, CAMBODIA – OCCURRENCE, COMPOSITION, AND PARAGENESIS"

(<https://pubs.geoscienceworld.org/canmin/article/60/1/133/611674/Zelolite-Minerals-from-Wat-Ocheng-Ta-Ang-Ratanakiri>)

The winning paper characterizes the morphology and chemical composition of zeolite species from the Cenozoic Wat Ocheng basaltic flow, which is the first such zeolite occurrence in the Cambodian portion of the Ratanakiri Volcanic Province, which produces cavity assemblages that are of interest to mineral collectors. The paper also underpins an intriguing paragenesis with implications for local and regional heat and fluid sources, which may be responsible for zeolitization. This paper is part of an ongoing effort by the authors to help to discover new and highlight existing mineral localities and increase the knowledge of a country that is relatively unknown to the mineralogical community. Geostatistical modeling software was key to linking the geology to the process metallurgy of the deposit. The success of this holistic geometalurgical approach integrating geochemical, mineralogical, geological,

and geospatial characteristics of the Cigar Lake deposit made this paper an outstanding contribution to *The Canadian Mineralogist* 2022 volume.

Dr. Paula C. Piilonen (Canadian Museum of Nature)



Paula Piilonen is a research scientist in the Mineralogy Section, Research & Collections Division, at the Canadian Museum of Nature. She completed her BSc in geology at Laurentian University (1997), her PhD at the University of Ottawa (2001), and an NSERC post-doctoral fellowship at Université de Marne-la-Vallée in France (2002) before joining the Museum 21 years ago. Her research is focused on the crystal

chemistry, behavior, and geochemistry of rare elements in alkaline systems. She is currently working on alkaline intrusions in southeastern British Columbia (Mount Mather Creek and the Ice River Alkaline Complex), alkaline basalts in Cambodia, and the systematics of various mineral groups from Mont Saint-Hilaire, Quebec. In addition to research, Paula is heavily involved in exhibits and education, and is currently leading the development of a new display focused on the mineralogy and citizen science of Mont Saint-Hilaire. Paula believes strongly in embracing and nurturing collaboration between professional mineralogists and amateur mineral collectors, combining the knowledge and experience of both to fully describe and understand the minerals from these complex deposits. Beyond work, Paula can be found playing squash, kayaking, fishing (mostly unsuccessfully), mountain biking, and relaxing on the deck at her house on the Ottawa River where she lives with her husband, Reni, their 85-lb greyhound, Cormick, and often a handful of young raccoons that they are fostering for the local wildlife rehabilitation centre.

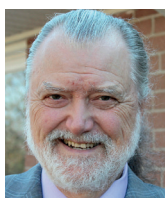
Dr. Glenn Poirier (Canadian Museum of Nature)



Glenn Poirier was born in Prince Edward Island in 1962. Initially intending to study insects, his first exposure to geology in an introductory course at the University of New Brunswick turned his life around. A graduate-level course in electron microscopy in the final year of his BSc in geology set a new direction. After completing his MSc thesis on the structure and metamorphism of the Labrador Trough near Kuujuaq,

Quebec in 1989 at McGill University, Glenn took a position as manager of the department's electron microprobe laboratory. During his time at McGill, Glenn worked on the Saint-Robert-de-Sorel meteorite and developed a passion for planetary geology and meteoritics. In 2002, seeking new challenges, he moved to Ottawa to work in the field of mineral processing at CANMET. In 2006, he took a position in the Mineral Sciences division at the Canadian Museum of Nature. Since then, Glenn has worked in a wide variety of projects; notably, as a co-author of the MAC 2019 special publication on Mont Saint-Hilaire. He has determined the composition of new mineral species from around the world, developed scientific content for exhibits, carried out field work in Canada, Norway, Arizona, Thailand, and Cambodia, and recently took charge of the Canadian Meteorite collection, which was transferred from the Geological Survey of Canada. Since 2011, he has run the University of Ottawa's microanalysis facility as part of an agreement between the Canadian Museum of Nature and the university.

Dr. William Lechner



William Lechner taught high school science, mostly chemistry, for over 30 years, all in the Etobicoke system. He has always been a great fan of chemistry, so interest in mineralogy and mineral collecting came very naturally to him. He "formally" started collecting microminerals in 1993, which was the first time he went collecting at Mont Saint-Hilaire and the

Varennes Quarry in Quebec. Since 1993, Mont Saint-Hilaire has been his chief point of interest, but since then, he has also learned to appreciate minerals from other quarries such as the Varennes Quarry, the Francon Quarry in Montreal, the Ariskop Quarry in Namibia, and the Clara Quarry in Germany. He also likes all pretty and rare minerals. Over the years, he has done a substantial amount of mineral trading with many people all over the world. Bill has also done a considerable amount of photomicrography for himself and for other collectors as well. He incorporated photomicrography into the mineral-related presentations he has done for various mineral clubs over the years. Bill loves attending micromineral symposia, his favorites being the Canadian Micro Mineral Association symposium at Brock University, St. Catharines, Canada and the Northern California Mineral Association symposium in El Dorado, California, USA.

Dr. Ralph Rowe (Canadian Museum of Nature)



Ralph Rowe graduated from the University of Ottawa in 2003 with a BSc in geology. As a co-op student, he gained precious experience in X-ray diffraction and lab techniques at the Geological Survey of Canada and MIT, USA. This experience would dictate his career path leading to a position as a Senior Research Assistant, running the Micro-Diffraction Lab, at the Canadian Museum of Nature (CMN). As part of the Mineralogy Section of the CMN since 2002, Ralph

has spent the last 20 years improving calibration, data correction, and sampling techniques to ensure the best data quality to best serve the projects in which he is involved. This is of utmost importance because this research mainly involves rare, microscopic, and often new mineral species. He thrives on the moments when he realizes that he just analyzed a potentially new species or has results that will please his fellow researchers. Outside of the realm of mineralogy, Ralph is a proud father of two and enjoys various hobbies such as guitar playing, almost every sport on the planet, and researching his Acadian history.

Dr. R. Peter Richards (Oberlin College)



Peter Richards majored in geology at Oberlin College (Ohio, USA), then studied mineralogy and crystallography as an NSF trainee, working with Paul Moore at the University of Chicago. He obtained his PhD in 1970. Since then, Dr. Richards has published more than 60 articles on mineralogy and morphological crystallography and provided crystal drawings and illustrations for dozens more. One paper he

co-authored was chosen Best Paper of the Year (2000) in the *Mineralogical Record*. He has been a long-time Consulting Editor for *Rocks & Minerals* magazine and has often reviewed manuscripts for other journals. He learned to quantify crystal morphology with the two-circle optical goniometer and has conducted many morphological studies, especially of unusual forms of calcite. In connection with his interest in crystal morphology, he developed the Macintosh version of the crystal-drawing program SHAPE and other utilities for converting goniometric measurements into Miller indices. He discovered two new species (carlsonite and huizingite) and two new polytypes of sabieite (2H, 3R). He also helped describe a third new species (almeidaite). Peter is an Affiliate Scholar at Oberlin College and an Honorary Museum Associate of the Cleveland Natural History Museum, USA. He was elected to the Micromounters Hall of Fame in 2010. Richardsite was named in his honor in 2020.