



Association of Applied Geochemists

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COUNCILLORS

Like many professional organizations, the Association of Applied Geochemists (AAG) relies on the contributions of many volunteers. The new AAG councillors for 2019 and 2020 are introduced in this issue.



John Carranza has been a member of the Association of Applied Geochemists since 1991 (when it was known as the Association of Exploration Geochemists), became a Fellow in 2009, and has served twice before as a councillor (2009–2010, 2011–2012). He started his career as an exploration geologist/geochemist in the Bureau of Mines and Geosciences of the Philippines (1983–2001). He then joined the Department of Earth Systems Analysis of

the International Institute of Geo-information Science and Earth Observation (The Netherlands), first as a researcher (2001–2003) then as an associate professor (2003–2012). He became a staff member at the School of Earth and Environmental Sciences of James Cook University (Australia) where he was an associate professor (2013–2016) and is now an adjunct associate professor (2017–present). He has also been a visiting professor (2015–2017) at the Institute of Geosciences of the State University of Campinas (Brazil) and is now Professor of Geological Sciences (2017–present) at the University of KwaZulu-Natal (South Africa).

His fields of expertise are geochemistry (for mineral exploration, ore genesis and geo-environmental studies), spatial mathematics/statistics (for predictive modeling of mineral resources and geological hazards) and remote sensing for geological/mineral exploration. He authored the book *Geochemical Anomaly and Mineral Prospectivity Mapping in GIS* (Elsevier, 2008). He is the Editor-in-Chief of the *Natural Resources Research* journal, and associate editor of the journals *Ore Geology Reviews*, the *Journal of Geochemical Exploration*, and *Geochemistry: Exploration, Environment, Analysis*. John will also be taking over the role of AAG's *Elements* coordinator in 2019.



Tom Meuzelaar holds a BS in geology from the University of Utah (USA) (1991), an MS in economic geology/geochemistry from Washington State University (USA) (1995) and a PhD in economic geology/geochemistry from the Colorado School of Mines (USA) (2015). Since 2011, he has been employed at Golder Associates, Inc. as a senior consultant specialising in geology and geochemistry. He runs a diverse practice, providing technical expertise to clients in the mining, oil and gas, and power sectors through all project life-cycle stages (exploration, production, closure).

Prior to his current position, he was employed at RockWare, Inc. (from 1999 to 2011) as a software consultant, was a manager of the Geochemist's Workbench account, and was a general software marketer and business developer. He has extensive experience as a petrographer, mineralogist, and geologist, and is skilled in statistical evaluation and the reduction of large geochemical datasets. He has also taught or co-taught over 35 geochemical modelling short courses, including courses at Goldschmidt conferences, federal research organizations, multinational energy corporations, environmental and mining consultancies, and major universities. His primary interest in joining the AAG Council is to help direct marketing strategies that will sustain and grow membership of the AAG.



Dave Heberlein has been involved in mineral exploration since 1979. He holds a BSc (Hons) in geology from the University of Southampton (UK) and an MSc from the University of British Columbia (Canada). He has world-wide experience in exploring for both precious- and base-metal deposits. Prior to joining Barrick Gold Corporation in 1994, he worked for several senior mining companies.

From 1995 to 2002, he was Barrick's Exploration Manager for Argentina and Chile. After returning to Canada in 2002, he became Barrick's Chief Geochemist for global exploration. He left Barrick in 2007 and, after a brief stint as vice-president for exploration in a junior company, he set up his own consultancy, Heberlein Geoconsulting. He is currently a consulting exploration geochemist based in North Vancouver (British Columbia, Canada) where he has worked with the quasi-government agency, Geoscience BC, to improve the geochemical aspects of their funded research projects, as well as providing expertise to a range of exploration and mining companies.



Renguang Zuo became an AAG Fellow in 2016. He received his PhD from the China University of Geosciences (CUG) in 2009. As a jointly supervised PhD candidate by CUG and York University (Toronto, Canada), Renguang studied for one year at York University (supervisors: Prof. Qiuming Cheng and Prof. Frits Agrerberg) between 2007 and 2008. He has been working at China's Geological Processes and Mineral Resources Laboratory at CUG since 2009.

At the end of 2012, he was promoted to full professor. In 2014, as a senior visiting scholar, he worked with John Carranza for four months at the James Cook University (Townsville, Australia).

He is currently serving as an associate editor for *Geochemistry: Exploration, Environment, Analysis*, the *Journal of Geochemical Exploration*, the *Natural Resources Research* journal, and *Computers & Geosciences*. As a guest editor, he has organised four special issues on geochemical mineral exploration and mapping mineral prospectivity. Renguang has published more than 70 peer-reviewed papers and was awarded the Kaharaka Award by the International Association of GeoChemistry in 2015 for his contributions to applied geochemistry. Renguang's work centres on geographic information system-based geochemical mineral exploration and is built on international cooperation and collaborations.



Patrice de Caritat's university training is in geology, mineralogy, and geochemistry: he has a Licentiate in Science (BSc Hons equivalent) degree from the University of Louvain (Belgium) and a PhD from the Australian National University (ANU). His research interests include environmental and exploration geochemistry, hydrogeochemistry, isotope geochemistry, and low-density geochemical mapping. More recently, he has become a forensic geochemist

and, between 2017 and 2018, Patrice was seconded as a subject matter expert to the Australian Federal Police to assist in the development of a forensic and intelligence soil provenancing capability. Currently, Patrice is a principal research scientist at Geoscience Australia (GA); an adjunct professor of applied geochemistry at the University of Canberra; and a visiting fellow at the ANU. He was leader of the National Geochemical Survey of Australia project, which successfully completed its mission in June 2011. Between 2007 and 2014, Patrice was a senior researcher in the Otway project of the Cooperative Research Centre for Greenhouse Gas Technologies. Before joining GA in 1997 to be the Program Leader in the Cooperative Research Centre for Landscape Evolution and Mineral Exploration, he was a senior research scientist at the Geological Survey of Norway for several years. Prior to that, he was a post-doctoral fellow in the Department of Geology and Geophysics of the University of Calgary (Canada), and in the Department of Geology and the Research School of Earth Sciences of the ANU in Canberra. Patrice has been a councillor for the International Association of GeoChemistry since 2015 and associate editor for *Applied Geochemistry*. He is a Fellow of the Association of Applied Geochemists (AAG), Associate Editor for *Geochemistry: Exploration, Environment, Analysis*, and was AAG Councillor in two previous terms (2011–2012 and 2013–2014) and society news editor for *Elements* (2011–2015).