



NICHOLAS T. ARNDT was awarded a Ph.D. from the University of Toronto Canada, in 1975. Following a year with an Australian mineral exploration company, he occupied academic positions in the United States, Canada, Australia and Germany before moving to France, and is now an emeritus professor at the University Grenoble Alpes. His research interests include petrology and geochemistry of mafic and ultramafic rocks, the early-Earth environment and magmatic ore deposits.



LLUÍS FONTBOTÉ is full professor at Geneva University, Switzerland, where he leads a research group active worldwide. He has mainly worked on epithermal polymetallic deposits linked to porphyry systems, iron oxide copper gold, and MVT deposits, and he has also published, together with his students, on VHMS and orogenic gold deposits, mainly in the Andes, as well as on acid mining drainage. He has worked in exploration for several commodities.



JEFFREY W. HEDENQUIST was educated in the USA and New Zealand, and has 24 years experience with three national institutes in the USA, New Zealand and Japan. He has conducted research on lunar studies, geothermal energy, volcanic discharges, and the formation of epithermal gold and porphyry copper deposits. Since 1999, Jeff has been an independent geologist working with the mineral exploration industry in over 35 countries worldwide, based in Canada.



STEPHEN E. KESLER was educated in the United States and has taught economic geology for 50 years, principally at the University of Toronto and University of Michigan, where he is currently emeritus professor. He has been directly involved in regional and deposit-focused exploration projects, and in production geology from large operations to campesino mines. He is the author of several books, including Mineral Resources, Economics and the Environment.



JOHN F.H. THOMPSON was educated in the UK and Canada. He has 35 years of global experience in mineral exploration, mining and research. Currently, he is the Wold Professor of Environmental Balance for Human Sustainability at Cornell University, and runs a consulting business from Vancouver BC directed at exploration, mining and sustainability. He is a director of public and private companies and not-for-profit organizations, and has been a member of the World Economic Forum Agenda Council on the Future of Mining and Metals. He Chairs the IUGS Resources for Future Generations 2018 conference.



DAN G. WOOD was educated in Australia, and worked in mineral exploration for 24 years with BHP and 18 years with Newcrest Mining. He led Newcrest's exploration team, judged by Metals Economics Group of Canada as the world's most successful gold explorer, 1992-2005. He has received several international professional awards and in 2015 was appointed an Officer of the Order of Australia for service to the mining and resource industry through his contribution as a geologist, academic and in executive roles; he led discovery teams that defined over \$100B of mineral wealth around the world, most now being mined.

The authors are all Fellows of the Society of Economic Geologists, a non-profit society of 7000+ members from research, academia and industry in over 100 countries that is committed to advancing the science and discovery of mineral resources through research and publication, and by supporting its 2000 student members. Four of the authors are past presidents of this society.