

International Geological Congress: Leveraging Canadian geoscience to accelerate the evolution of low-carbon energy systems

David W. Eaton¹, Katherine Boggs² and Stephen Johnston³

¹ Department of Geoscience, University of Calgary

² Department of Earth & Environmental Sciences, Mount Royal University

³ Department of Earth & Atmospheric Sciences, University of Alberta

Summary

The International Geological Congress (IGC) is a major recurring international conference that is held under the sponsorship of the International Union of Geological Sciences (IUGS), of which Canada is a member country. The IGC occurs on a 4-year cycle and is attended by more than 10,000 geoscientists from around the world. The first IGC was held in Paris in 1878. Only twice has IGC been held in Canada, in Toronto (1913) and Montreal (1972). The next in-person IGC will be in Busan, Korea (August 25-31, 2024). That conference will feature 31 thematic sessions - including sessions such as Sedimentary Geology, Earth History and Stratigraphy, Structural Geology, Seismology, Geophysics, Big Data and Artificial Intelligence (AI) and Energy and Carbon Neutrality, which overlap with geoscientific themes featured at the annual Geoconvention.

The 38th IGC in 2028 was initially awarded to St. Petersburg, but the IUGS withdrew support for that venue due to the war in Ukraine. Canada and other countries have been invited by the IUGS to submit an Expression of Interest to host the conference in 2028. Through a competitive process with other Canadian cities, Calgary has been selected to submit a national bid to host the 38th IGC at the new BMO Centre at Stampede Park in August 2028. This proposed international conference aims to accelerate the evolution of energy systems as a critical pathway to achieve Canada's goal of net-zero greenhouse gas (GHG) emissions by 2050. In addition to the technical conference and exhibition, we envision field trips within nine distinct themes: Climate Change Through Time; Energy Future, Present and Past; Critical Minerals; Tectonics; Sedimentary Basins; Water Resources; Natural Hazards; Paleontology; and Petroleum Resources of Western Canada. If Calgary's bid is successful, hosting the 38th IGC will provide Canada with a tremendous opportunity to showcase the excellence of our geoscientific associations, industry and academic community.