CANADIAN FEDERATION OF EARTH SCIENCES UNITES GEOSCIENCE ORGANIZATIONS

Rachel Newrick and Imad Alainachi

The Canadian Federation of Earth Sciences (CFES) is funded, in part, by a small contribution from your CGS membership fees. This article by Rachel Newrick and Imad Alainachi provides a bit of information on what the CFES is, what it does, and how the CGS and CGS members benefit.

"Being an active CFES member society sends a strong message that the Canadian Geotechnical Society is fully invested in the spectrum of Canadian earth science issues and opportunities."

Introduction

What do geologists, geophysicists and geotechnical professionals have in common? (No, this is not the start of a bad joke.) They all sit on the board or council of the Canadian Federation of Earth Sciences (CFES), an umbrella organization of Canadian earth science societies. Thirteen technical and professional societies comprise CFES and, along with seven observer organizations, come together to address common issues and to further geoscience in Canada. Each member society has a voice through its representative on the CFES Council. For the Canadian Geotechnical Society (CGS), Imad Alainachi fills this role, following in the footsteps of Mamadou Fall in 2021.



CFES Member Societies

Atlantic Geoscience Society

Canadian Association of Geographers

Canadian Quaternary Association

Council of Chairs of Canadian Earth Science Departments

Canadian Geotechnical Society

Canadian Institute of Mining Metallurgy and Petroleum Canadian National Chapter of the International Association of Hydrogeologists

Canadian Permafrost Association

Canadian Society of Exploration Geophysicists

Geological Association of Canada

Mineralogical Association of Canada

Committee of Provincial and Territorial Geologists

Prospectors and Developers Association of Canada

In 2006, the Canadian Federation of Earth Sciences was the new name given to the former Canadian Geoscience Council, which was formed in 1972. Since 1972, the CGS has been a strong contributor to both organizations. Over the years, CGS members Jacques Locat, John Gartner, and Doug Stead served as Presidents, Bill Eden and Doug VanDine served in the position of Secretary-Treasurer, and Norbert Morgenstern served as Executive Member-at-Large.

CFES Observer Organizations

Alliance of Natural History Museums of Canada Canadian Geological Foundation Canadian Association of Science Centres Canadian Society of Petroleum Geologists Geoscientists Canada Geological Survey of Canada

International Association for Promoting Geoethics

Mission and Programs

The CFES mission is to be the coordinated voice of Canada's earth science community and to ensure that decision makers and the public understand the contributions of earth science to Canadian society and its economy. Six strategic objectives guide the work of CFES.

- · provide coordinating role and common voice for member societies and the earth science community in Canada
- · coordinate public policy advocacy on behalf of earth science in Canada
- facilitate public awareness of earth science and earth science literacy
- represent and promote Canadian earth science internationally
- provide service to member societies in particular, and to the earth science community in general
- coordinate support for professional and academic organizations in Canada.

These objectives lead to a series of initiatives and goals that are outlined in a 3-year rolling plan. At any time, member societies can bring forward ideas and initiatives to CFES.

All CFES initiatives are carried out by working committees and task forces. There are many projects currently in progress including: 1) summarizing the recent CFES statement on climate change; 2) refreshing the CFES website with a focus on careers in geoscience and 3) revitalizing the Canada Prize in Earth and Environmental Science. CFES is in a position to coordinate overlapping efforts amongst member societies to maximize efficiency and effect. One example is mentorship within the geosciences that the Canadian Society of Exploration Geophysicists is working on with other member societies and observer organizations.

Nationally, CFES works towards and supports initiatives benefitting the geoscience community and the public. This past summer, "Geoscientists in Canadian National Parks", an innovative collaborative project between CFES and Parks Canada was unveiled at Pukaskwa National Park (along the east shore of Lake Superior).

Advocacy for the importance of earth science to all Canadians is undertaken through CFES's membership in the Ottawa-based "Partnership Group for Science and Engineering" (PAGSE). This group informs federal Parliamentarians, decision makers and other federal leaders on the importance and significance of Canadian research and innovation to economic development, and society as a whole. Recent PAGSE talks presented on behalf of CFES include "On the path to a net-zero carbon economy: carbon capture, utilization and storage" and "Metals and sustainability - Earth's odd couple".

Important to many member societies, education advocacy is provided by the Canadian Geoscience Education Network (CGEN), the education arm of CFES. CGEN has a national network of volunteers that focuses on increasing public awareness of geoscience and increasing science literacy. Recently, CGEN published an Educational Outreach and Public Engagement Guidebook (in both English and French) that can be freely downloaded from the CFES website.

Two other important publications that CFES has been involved with are: Four Billion Years and Counting -Canada's Geological Heritage (www.fbycbook.com) and Geoscience and Canada - Understanding our Earth: The vital role of Canada's geoscientists. Both were written for a general audience and much of the material can be downloaded, in both English and French, freely from either the CFES or CGEN websites.



The scar on Turtle Mountain and the debris field of the Frank Slide, southwestern Alberta. The debris lobe is now crossed by a highway and a railway. (Photo by Ray Price, used with permission)

Internationally, CFES interacts with the International Union of Geological Sciences (IUGS) both as an affiliate member, and on the Canadian National Committee (CNC-IUGS). CFES has also been key to the development of Canadian Geoparks that forms part of the UNESCO Global Geoparks Network.

CFES and CGS

Imad Alainachi, CGS's representative, has been an active participant in CFES, and has seen the benefits of the CGS being a CFES member society. For example, members of CGS were offered free access to CFES's "Geologize - Practical Geocommunication", a course to better communicate geoscience to the public. CGS members can still access the course at https://training.geologize.org/courses/gc, courtesy of Geoscientists Canada through the CGS members' provincial/territorial geoscience regulating body.

Imad was recently part of the discussion on how to better promote CFES, and geoscience in general, to the public, and suggested presenting material to the CGS local sections.

By disseminating the work of CFES to member society members, CFES hopes to raise the general awareness of various initiatives and provide material that can be passed along to the public.

Imad also highlighted the perception that careers in geoscience are not seen as favorably or valued as other disciplines, such as engineering. The lack of public recognition of the importance of geoscience is an area of concern to all CFES member societies. This has resulted in CFES initiatives to better promote geoscience to the public and to revamp the CFES career website, to get more high school/university students on a geoscience career path.

At the most recent CFES AGM, held in Ottawa, Imad summarized CGS's past year, including details about GeoNiagara 2021, the first post-COVID conference in Canada that was successfully held in hybrid mode (mixed in-person and virtual), and shared news of upcoming CGS events to other CFES member societies. This sharing of knowledge is critical to the success of CFES.

Being an active CFES member society sends a strong message that the CGS is fully invested in the spectrum of Canadian earth science issues and opportunities. CFES is what the member societies make of it, and CGS is a strong participant.

There are many opportunities for individual CGS members to participate in CFES. If you would like to find out more about CFES, or become involved, please reach out to us at GeoCalgary 2022, contact Imad or the CFES directly at www.cfes-fcst.ca.



Rachel Newrick

Rachel Newrick, PhD (rachel@racian.ca) is immediate Past President of CFES. She is a self-employed exploration geophysicist and seismic interpretation instructor, with a love for new ventures.

Imad Alainachi, PhD (ialainachi@gmail.com), besides being the CGS representative at the CFES and Vice Chair of the Ottawa Geotechnical Group (OGG), he is a senior engineering geologist with WSP Canada and a part-time professor at the University of Ottawa.



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