



Association of Applied Geochemists

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IN MEMORIAM – AGNETE STEENFELT

On Sunday, September 29th, 2024, my good friend Agnete Steenfelt died. Agnete was the Chief Geochemist for the Geological Survey of Denmark and Greenland (GEUS), where she worked for her entire career—more than forty years. When she started working for GEUS in 1972, Agnete was one of very few female field geologists employed by the survey. Early in her career, she led a program of airborne gamma spectral surveying in east Greenland to address the EU's then-new interest in finding sources of uranium for future nuclear power generation in Europe. Flying those surveys involved sitting next to the pilot of a small fixed wing aircraft, navigating and route-finding using printed aerial photographs, while speaking into a tape recorder to note when the aircraft passed pre-determined waypoints, identified visually by looking out of the window at landmarks (like cliffs and glacier fronts), and directing an assistant to manually mark the gamma spectra as it printed from the spectrometer onto computer paper in the back of the aircraft.



Agnete had a passion for geochemistry and was responsible for introducing modern geochemical prospecting to Greenland. In the 1980s, she instigated a campaign of continental-scale stream sediment sampling of Greenland. Over the ensuing more than three decades, she oversaw the collection of over 20,000 stream sediment samples, many of which she collected, and in the first decades without the aid of GPS. Latterly, she personally harmonized the western Greenland datasets to produce a stunning seamless geochemical product encompassing more than seven thousand samples stretching around 2000 kilometres of coastline from north of Upernavik in the northwest to Kap Farvel in the south and into southeastern Greenland. Agnete was an old-school geochemist in the best sense—focused first and foremost on quality control of the data, selection of the most reliable analytical data, and elimination of analytical bias. For Agnete, science started and ended with the data. No shortcuts. Her work could always be relied on to have the strongest foundation in data quality. From her extensive work, Agnete was instrumental in determining that geochemical provinces occur on continental scale, and that South Greenland—in particular—is one such province, strikingly geochemically enriched in gold, uranium, niobium, tantalum, rare earth elements, and zinc.

While her scientific work undoubtedly contributed to major advances in understanding the continental-scale geology of Greenland, and in drawing international interest in mineral exploration, Agnete was never one to talk-up her own achievements. I was lucky to convince her to speak about some of her work (reluctantly and, I am quite sure, largely because she wanted to support me) on Polar Podcasts in 2020. As a result, I am grateful to be able to still listen to her voice and to the passionate way she spoke about her years of work in Greenland.

After she retired, despite declining health, she continued to work as an Emeritus senior scientist for GEUS for many years, continuing to share her enormous wealth of knowledge of the geology and geochemistry of Greenland with younger generations, with exploration companies, and with her many academic colleagues. Even in this last year of her life, she continued to work when she could and to co-author new academic papers on the geology of Greenland.

Agnete leaves behind an enormous body of data and knowledge of the geochemistry of Greenland. She also leaves behind a gaping hole. Agnete was my friend, the kind of friend you hope to have. To the young geologist I was at the time I joined GEUS, alone in a new country, Agnete was immediately kind and welcoming. Throughout our long friendship, she shared her insight, new perspectives and ideas, and she never (sorry Agnete, you probably wouldn't like the language) took any shit from anyone, including me. When I was thoughtless, or superficial, or wrong, she told me straight, and I am glad she did.

When we said our final goodbyes, we both remembered one perfect day of fieldwork we spent together almost twenty years ago, high up near the Inland Ice in west Greenland, an evening that was almost warm, the blue sky stretching westward toward the Davis Strait. After dinner, we sat side-by-side in our camp chairs in the still air, not a mosquito, not a sound, our stomachs full, dessert wine in our camp mugs, and looked toward the horizon.

from LinkedIn by **Julie Hollis**
Secretary General, EuroGeoSurveys

NEW EDITOR-IN-CHIEF OF GEOCHEMISTRY: EXPLORATION, ENVIRONMENT, ANALYSIS



Matthew Leybourne, Professor of Geochemistry and Analytical Geochemistry at the Department of Geological Sciences and Geological Engineering, Queen's University, Kingston, Canada. Matthew is a long-time contributor to *Geochemistry: Exploration, Environment, Analysis (GEEA)*, having published in some of the earliest issues of the journal, and will take up the position of Editor-in-Chief

starting in January 2025. He brings a wealth of enthusiasm and understanding to the role, including his broad knowledge of fields covered by the journal and practical editorial experience.

The Geological Society and the Association of Applied Geochemists would like to thank Scott Wood, as outgoing Editor-in-Chief, for his excellent stewardship of *GEEA* over the last six years. *GEEA* continues to welcome submission of papers across geochemistry as applied to exploration and associated environmental issues. Submit your paper here: <https://www.editorialmanager.com/geochem/default.aspx>.

Bethan Littley
Journal Manager