



Irish Geological Association Lecture

“Investigating Archaean Terrane Boundaries in Scotland”

By Dr Eszter Badenzski (iCRAG, University College Dublin)

Abstract: Establishing terrain boundaries within what remains of Archaean lithosphere is challenging: they all tend to look quite similar. So, how might we tell them apart and see if there really are truly ancient terranes preserved in today’s crust? As a test case, we looked in detail at several units within the Lewisian Complex of Scotland and then compared the results from those with Archaean units from Greenland. The method we used was analysing the lead (Pb) isotopic compositions from K-feldspars and plagioclase feldspars taken from onshore Lewisian rocks and from offshore drill cores from the Hebridean Shelf. When compared to analogous lead isotope results and field studies from the Nagssugtoqidian terrane in southeast Greenland, the results suggest that there were likely two terranes, but possibly three, revealed in the Archaean Scottish rocks.

Date and Time: Wednesday, 13th December 2023, between 19:00 and 20:00 via Zoom *and* in-person as part of IGA Member’s Night at the Rooftop Bar, Hyde Dublin, 9 Lemon Street, Dublin 2.

To Register: send an e-mail to info@geology.ie

A Zoom link will be sent on the day to those who have registered.