

Earth Sciences

Colloquium Series

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Formation of Archean Anorthosites at Convergent Plate Margins: Examples from Greenland and Canada



Date: Friday, September 26, 2025

Time: 1:30 PM

Location: BGS 0153

This presentation by Prof. Ali Polat explores the formation of Archean anorthosites, which are plagioclase-rich igneous rocks found in both oceanic and continental settings. The study focuses on examples from the Superior Province of Canada and the Greenland Craton, two regions with the most significant occurrences of Archean anorthosites. These rocks, spanning in age from 3950 to 2500 Ma, are critical to understanding Earth's crustal growth, magmatic processes, and geodynamic evolution. Dr. Polat highlights the unique mineralogical, geochemical, and structural characteristics of Archean anorthosites, suggesting their formation in subduction-zone settings at convergent plate margins.