## DIRT SEMINAR 26 October 2018, 4 PM, Milligan Room

## Hot legacy of Dalhousie's deep drilling in Iceland 40 years ago

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Forty years ago, when the concept of seafloor spreading was still being debated, there was a need to better understand the oceanic crust, generally too deep for conventional drilling. An alternative was to bore into oceanic islands. In 1978 Dalhousie's geoscientists spearheaded the epic drilling of a 2 km deep hole into a mafic dike swarm in Reydarfjordur, eastern Iceland. The results were surprising and led to much scientific enquiry. I have since learned about dikes that intrude sideways, sub-ice volcanos (tuyas and tindar), inflationary cones (tumuli), and pseudo-craters. My recent visit to Reyðarfjörður revealed that the local inhabitants remember the project not so much for the science, but because the abandoned hole is still producing hot water for the community, from an area previously considered devoid of geothermal potential.

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Dalhousie Geology's IRDP drilling rig in Reyðarfjörður, Iceland, June 1978