

## Past Honours Thesis Titles in SEOS

### 2024

**ARNDT, Graham** (Supervisor – Dante Canil and Rebecca Morris)

CO<sub>2</sub> degassing and metal enrichments during magma-carbonate interactions in the Jurassic Bonanza Arc

**BEALE, Susan** (Supervisor – Adam Monahan)

A deep learning method to predict significant wave height

**DOUVILLE, Georgia** (Supervisors – Blake Dyer and Kim Poole)

Geochemical analysis of mineral licks used by mountain goats (*Oreamnos americanus*) in Mount Revelstoke & Glacier National Parks

**HARDCASTLE, Noa** (Supervisor – Anne-Sofie Ahm)

Evaporation and carbonate chemistry disequilibrium in alkaline lakes

**KUIJT, Anja** (Supervisor – Ruohong Jiao)

Aridification of central Yukon, south

(Supervisor – Anne-Sofie Ahm)

Geochemistry and microbial mats of Caribou Plateau alkaline

(Supervisor – Dante Canil and Rebecca Morris)

Pressure for arc magma-carbonate interaction timescales - the Bonanza Arc, Canada

### 2023

(Supervisor – Laurence Coogan)

Hydrothermal plume particles at the Endeavour mid-ocean ridge

(Supervisors – Ruohong Jiao and Moynihan)

Geology of the Big Salmon mountain range, south-central Yukon

(Supervisors – Michael Eby and Andrew Weaver)

Characterization of widespread ocean thermal energy conversion

(Supervisors – Michael Eby and Andrew Weaver)

Feasibility of direct air capture of carbon emissions

(Supervisor – Roberta Hamme)

Hydrodynamics of Inlet through the lens of the spring/neap tidal cycle

(Supervisor – Varela)

Phytoplankton-derived carbon gels in the north-east Pacific

(Supervisor – Roberta Hamme)

Development of optical dissolved oxygen sensors

(Supervisor – Husson)

Methods to measure the amount of dolomitization within

**VALCOURT, Andrea** (Supervisors – Victoria Arbour and Andy Fraass)

**2020**

**DEKKER, Isaac** (Supervisor – Jon Husson)

High-resolution isotopic characterization of the Upper Miette Group (Byng Formation): Mt. Fitzwilliam, British Columbia

**KOCAY, Brandi** (Supervisor – Laurence Coogan)

Iodine in calcite as a tracer of the redox evolution during seawater-seafloor reaction

**2019**

**FITZ-GERALD, Wylee** (Supervisor – Robert J. 0.493g (r)2.33,(o)-3 (b)-5.1 (b)-5.1 (b4 (, W)-sdiu3g 19.219 -1.224m8 ID 2 )-5

The interplanetary magnetic field in the inner Heliosphere: dependence on heliospheric distance

**OWEN, Erica** (Supervisors – Randy Enkin and Stan Dosso)

Methods for testing the conductivity and chargeability of rocks

**RAFTERY, Erinn** (Supervisor – Laurence Coogan)

Developing a Rb/Sr technique to date celadonites, with applications to the oceanic potassium

**FAJBER, Robert** (Supervisor – Adam Monahan)

A sequential unscented Kalman filter approach to dynamical sea surface wind modelling

**GOSELIN, Jeremy** (Supervisors – Stan Dosso and John Cassidy)

Shear-wave velocity structure beneath Haida Gwaii from inversion of teleseismic data

**GRONDAHL, Carter** (Supervisor – Dante Canil)

Trace elements in magnetite from porphyry deposits: applications in mineral exploration

**LUO, Fei** (Supervisors – Adam Monahan and Knut von Salzen)

High precision estimation of modeled aerosol radiative forcing

**ZHANG, Wenbo** (Supervisor – Kristin Morell)

Testing the oroclinal hypothesis for the Olympic Mountains, Washington State, USA

### 2013

**GRAHAM, Audrey** (Supervisor – Jan Dettmer and Stan Dosso)

Inference of shear-wave velocity structure for seismic hazard assessment

**JASECHKO, Glenn** (Supervisor – Jay Cullen)

Methods for the detection of silver nanoparticles

**KAVANAGH, Lucas** (Supervisor – Colin Goldblatt)

The use of lithified raindrop imprints in constraining past atmospheric density

**LUCK, Pearce** (Supervisor – Laurence Coogan)

Trace element evidence of a subduction initiation setting with variable melt conditions at the Troodos ophiolite, Cyprus

**McEWEN, Gerri** (Supervisor – Stephen Johnston)

Structural analysis of the Harney Basin, Oregon  
rdJ)0hen-3epo42Tjs uo d3La(S)-6.5 (t)0.7(ep)-6.1 (h)-0.6 (en)-6.1 (J)-4.4 (o)-4 (h)-0.6 (n)0.7(e).7oen9 (r)-0.7e224RTj1 (n

2011

**AMBROSE, Tyler** (Supervisor – Stephen Johnston)

The composition of impurities in placer gold nuggets and the distribution of lode gold: elucidating the source of placer gold in the ATLIN placer camp

**HARRICHHAUSEN, Nicolas** (Supervisor – Stephen Johnston)

Structural geology of the SPN property: south central British Columbia

**KOESSLER, Matthew** (Supervisor – Ross Chapman)

In-situ estimation of the thermal properties of seafloor sediment in a gas hydrate field

**MOUNTJOY, Danielle** (Supervisor – Dante Canil)

Granitoid-hosted magnetite as an indicator mineral for porphyry Cu ore deposits

**RAHEMTULLA, Shehin** (Supervisor – Ross Chapman)

The acoustic tracking of marine mammals with the VENUS hydrophone array

**STAMMERS, Liana** (Supervisor – Dante Canil) - E 1 (0) 37 (7. 3. 5 (0 8) 0. 5) (7 6 - 4) 10 11 2 7 0 0 0 9 2 6 2 6 0 5 1 5 0 0 1 7 3. 0 3 0 0 1 0

Copepod eggs: a discussion on morphology, abundance, and distribution in British Columbian marine sediments

**PATERSON, Brenna** (Supervisors – Eileen Van der Flier-Keller and Brian Bornhold)

Sensitivity of coastal areas to sea level change and erosion associated with predicted climate change: application of shorezone data in the Sitka Area, southeast Alaska

**PATERSON, Kevin** (Supervisors – Kevin Telmer and Ray Lett)

Lithogeochemical study of the Spanish Mountain gold deposit, British Columbia (NTS 093A/11W)

**SAWATZKY, Matt** (Supervisors – Stephen Johnston and Jack Stevens)

Structural controls on auriferous mineralization of the Aurbel zone, Val D'Or mining district, Abitibi, Quebec

**VAN DEN BERGHE, Martin** (Supervisor – Dante Canil)

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2000

**BICHLER, Ahren Johannes** (Supervisors – Peter Bobrowsky and Stephen Johnston)

A review of coastal zone sciences: management and mapping

**CANHAM, Emma** (Supervisor – Stephen Johnston)

Stratigraphy, structure and lithogeochemistry of the Finlayson Arm region of the Pacific Rim terrane, Vancouver Island

**HUMPHRIES, Stefan** (Supervisor – Kevin Telmer)

The geochemical characterization of groundwater in the province of British Columbia, Canada

Hydrothermal and emplacement metamorphism of the Metchosin Igneous Complex, Vancouver Island, British Columbia

**NEVOKSHONOFF, Glen** (Supervisor – Dante Canil)

The petrology and geochemistry of the Metchosin Igneous Complex

**WATSON, Michelle** (Supervisor – Dante Canil)

Clinopyroxene dissolution: an experimental study with implications for kimberlite emplacement

#### 1998

**CONEYS, Anna** (Supervisor – Jim Bishop)

The geochemistry of Vancouver Island natural waters. Case Study: Sooke Lake Reservoir

**HOBDAY, Jennifer** (Supervisor – Victor Levson)

Glacial dispersal curves: a method of mineral exploration in the Babine Copper Porphyry Belt, British Columbia

**MODELAND, Sheldon** (Supervisor – Dante Canil)

Geology of volcanic rocks on southern Vancouver Island

**ROBERTS, Michael** (Supervisor – Kathryn Gillis)

The role of magmatic fluids and phase separation at the sheet dike-plutonic transition: a fluid

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**1996**

**WHITSETT, Jeff** (Supervisor – George Spence)

Seismic modelling of methane hydrates found in the northern Cascadia accretionary prism off Vancouver Island

**WIEBE, Edward** (Supervisors – Andrew Weaver and Gregory Flato)

The circulation of the Greenland Sea as obtained from hydrographic and ice drift data

**1995**

**JENNINGS, Barbara** (Supervisors – Paul Schiarizza and Eileen Van der Flier-Keller)

Sedimentology and stratigraphy of Callovian strata in the Mt. Nemaia Range, southeastern coast belt, southwestern British Columbia, and the implications of timing of terrane accretion.

**MANSON, Gavin** (Supervisors – Peter Bobrowsky and Eileen Van der Flier-Keller)

Modeling sand and gravel deposits and aggregate resource potential, Vancouver Island, B.C.