



Geological Workshop Geology of Svalbard Basement

3-9 September, 2024, Svalbard

SVALGEOBASE II: TECTONO-THERMAL EVOLUTION OF SVALBARD – FROM METAMORPHIC AND MAGMATIC PROCESSES TO GEOTHERMAL ENERGY

Detailed plan of scientific sessions:

Opening session (3 September 2024) – Longyearbyen, UNIS, Lassegrotta

- 16:00–16:10: Invitation (SvalGeoBase II team)
- 16:10-16:35: Svalbard Integrated Arctic Earth Observing System – SIOS (Daan Kivits)
- 16:35-17:00: Svalbard Science Forum (Lena Cappelen)
- 17:00-17:25: Caledonian Basement of Svalbard (Jarek Majka)
- 17:25-17:50: Post-Caledonian evolution of Svalbard (Anna Sartell)
- 17:50–18:00: Safety instruction (Krzysztof Michalski)

Session I – oral presentations (4 September 2024) – Horyzont II

- 16:00–16:30: The Eureka West Spitsbergen Fold-and-Thrust Belt on Brøggerhalvøya (Karsten Piepjohn)
- 16:30–17:00: An alternative hypothesis for forming the West Spitsbergen Fold and Thrust Belt (Geoffrey Manby)
- 17:00–17:30: Tectonic evolution of the Wandel Sea Basin (eastern North Greenland): insight from structural data, mineralogy, fluid inclusions, vitrinite reflectance and conodont color alteration index (Pierpaolo Guarnieri)
- 17:30–18:00: The Caledonian Wilson Cycle from a North Atlantic perspective (Jarek Majka)
- 18:00–18:30: Architecture of the Caledonian foldbelt in the Western Part of the Nordaustlandet Terrane (Karsten Piepjohn)
- 18:30-19:00: Current paleomagnetic database of Svalbard (Krzysztof Michalski)

Session II – oral presentations (6 September 2024) – Horyzont II

- 9:00-9:30: Arctic Tectonics (Victoria Pease)
- 9:30-10:00: A global full-plate model for the past 2 billion years (Yebo Liu)

10:00-10:30: Palaeomagnetic data obtained from recent deglacial sediments in the Baltic Sea: modern analogues may be the key to understanding (much) older records (Ian Snowball)

10:30-11:00: Magnetic mineralogy vs. rock-magnetic properties of rock samples - toward filling the gap between these data sources (Krzysztof Nejbert)

11:00-11:30: Neoproterozoic tillites of Polarisbreen Group (Nordauslandet, Svalbard) - paleomagnetic and petrographic investigations (Szczepan Bal)

11:30-12:00: Exploring Neogene – Quaternary magmatism and thermal springs: data acquisition in Woodfjorden 2022 – 2023 (Rafael Kenji Horota)

Session III – oral presentations (7 September 2024) – Horyzont II

16:00–16:30: The Hadean: was it really Hell-like? (Simon Wilde)

16:30–17:00: Geological constraints on claims for Earth's earliest life in the Eoarchean of Greenland and Labrador (Martin Whitehouse)

17:00–17:30: Remnants of Eoarchean crust in the Napier Complex, East Antarctica (Monika Kusiak)

17:30–18:00: In situ beta decay dating and the potential for regional geology studies (Thomas Zack)

18:00–18:30: Arctic nanogranitoids and what we can learn from them (Alessia Borghini)

18:30-19:00: Diabasodden and its Suite - the High Arctic Large Igneous Province on Svalbard and its type locality (Anna Sartell)

Session IV – oral presentations (8 September 2024) – Horyzont II

16:00–16:30: Large Igneous Provinces and the crustal filter: what happens when magma plays with sedimentary rocks? (Sara Callegaro)

16:30–17:00: Can lamprophyres in LIPs constrain upper mantle plume dynamics? (Lars Elvind Auglund)

17:00–19:00: Summary and recommendations from the workshop

() Only the names of the speakers are revealed in the program. Names of co-authors will be presented in the abstract book.*

*(**) The time frame of the scientific sessions can be subjected to changes due to weather and sea conditions.*