



SOCIETY OF ECONOMIC GEOLOGISTS, INC.

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Student Chapter Annual Report Cover Page

Submission Deadline: September 30th

Submit to: studentprograms@segweb.org

Month/Year Reported: From 10/2022 (mm/yyyy) – To 09/2023 (mm/yyyy)

STUDENT CHAPTER:

Check if update needed at segweb.org

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University Affiliation: Montanuniversität Leoben

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Website: _____

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Chapter Executive Committee (*in office during the time frame captured on this report*) (type "Vacant" if position not filled):
The new committee is reported on the Student Chapter Membership Information form (SCMIF).

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Members of the SEG Student Chapter Leoben 2022/23

*Viktor Bertrandsson Erlandsson

*Florian Altenberger

*Anna Bauer

*Veronika Gartner

*Sandra Niederl

*Jasmin Hiller

*Stefan Bernegger

*David Schönherr

*Eileen Göbel

*Dominik Kumertz

*Serhii Lytvynov

*Sophia Müller

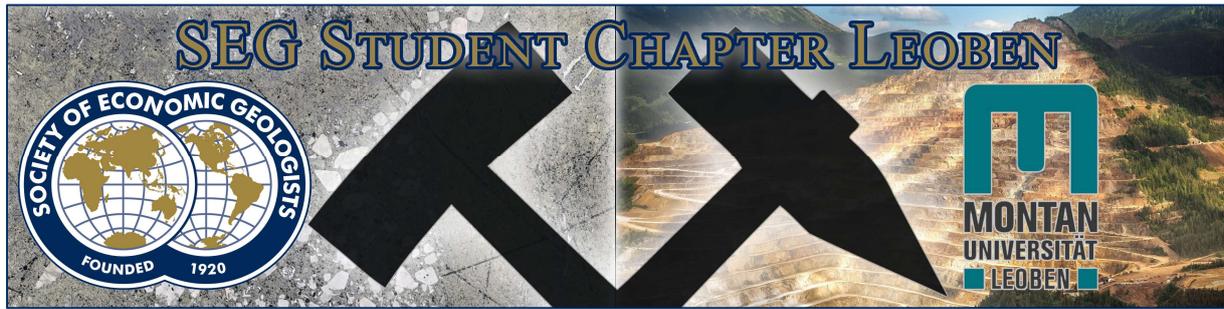
*Florian Schipflinger

*Ruben Winstel

*Marcel Zahrl

*Oliver Zöhrer

*SEG Student Members



SEG Student Chapter Montanuniversität Leoben

Annual Report 2022/23

October 2022 – September 2023

**Department Applied Geosciences and Geophysics
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1.) Regular meetings, lectures and workshops

- October 25, 2022 **First regular meeting.** Detailed discussion of the following:
- Getting the new Executive Committee up to date and introduced to the chapter. Discussing member ideas and future visions for the chapter.
- November 7, 2022 **Mini Symposium on the geology and ore deposits of Cyprus**
- Students that went on our Cyprus field trip in September 2022 were talking about different aspects of the geology and different geological features they saw like the Troodos ophiolite and recent VMS mining
- November 15, 2022 **Regular meeting.** Topics of this meeting were:
- Discussing the recent Cyprus talk
 - Coming up with new possible activities and lecturers for the chapter
- December 6, 2022 **Regular meeting.** Topics of this meeting were:
- Discussing more options for a workshop and deciding on Sphalerite as the topic
 - Brainstorming for Pb-Zn excursion locations in reachable distance
- January 16, 2023 **Regular meeting.** Topics of this meeting were:
- Discussing ways to get students more motivated in the chapter
 - Talking about possible speakers for our workshop
- February 6, 2023 **Meeting for workshop organization.** Topics of this meeting were:
- Planning of the scheduled talks
 - Organization of the transport, route, and catering options as well as financial aspects
- February 27, 2023 **Regular meeting.** Topics of the meeting were:
- Organizing a location for the workshop and group dinner
 - Planning the hybrid event with the SC Aachen

- March 7, 2023 **Hybrid-lecture collaboration with the RWTH Aachen**
- “Halogens as tracers for ore deposit fluids” by Tobias Fusswinkel (RWTH Aachen)
 - “Trace elements in sulfide deposits from the Eastern Alps” by Frank Melcher (Montanuniversität Leoben)
- March 13, 2023 **Regular meeting.** Topics of this meeting were:
- Discussion of the recent talk
 - Flyer design for the workshop
 - Discussing final financial details
- April 2023 **No meeting due to easter holidays**
- May 22, 2023 **Regular meeting.** Topics of this meeting were:
- Finalizing last details for the workshop
 - Organizing hotels for the lecturers
 - Renting the buses for the excursion
- June 8-9, 2023 **Sphalerite workshop**
- Sphalerite themed talks and excursion
 - Talks from Max Frenzel (Helmholtz Institute Freiberg) Aleš Šoster (University of Ljubljana) and Frank Melcher (Montanuniversität Leoben), Speed talk session for students
 - Excursion to Bleiberg Pb-Zn mine (Austria)
- June 19, 2023 **Regular meeting.** Topics of this meeting were:
- Discussion of the previous workshop
 - Discussion of new possible nominees to the Executive Committee
- July-September 2023 **No meetings due to summer holidays**

2.) Field trips and Workshops

During the period 2022/2023 the SEG Student Chapter Leoben organized one workshop and one field trip. The workshop in June 2023 was focused on sphalerite mineralogy with an excursion to the historic Bleiberg Pb-Zn mine in Austria. For the field trip in July 2023, the Student Chapter planned a trip to the Western Alps together with professors from the Montanuniversität Leoben and University of Bern to visit the regional geology as well as local ore deposits.

A) Sphalerite Workshop (field trip to the Bleiberg Pb-Zn mine, Austria)

On **June 8-9, 2023**, the Student Chapter organized a two-day workshop focused on the important Zn-sulfide sphalerite. The workshop was designed in two parts with a lecture and an excursion day. The lectures about “Mineral Trace-Element Data”, “Data Analysis”, “Application of UV-light for Sphalerite Characterization” and “Trace Element Distribution in Sphalerite from the Eastern Alps” were held by Max Frenzel (Helmholtz-Institute Freiberg for Resource Technology), Aleš Šoster (University of Ljubljana) and Frank Melcher (Montanuniversität Leoben). 29 international participants were able to learn more about different aspects of sphalerite (trace elements, UV). The second day was an excursion to the historic Bleiberg Pb-Zn mine in southern Austria where we could see high-grade ore bodies with banded sphalerite and galena. Participants were able to see different mineralization styles and could take many samples. The day ended with a short hike over the mine’s tailings and a visit to medieval adits on the “Stollen Wanderweg”.



Figure 1: Sphalerite Workshop including a field trip to the Bleiberg Pb-Zn mine in June 2023.

B) Western Alps excursion

The field trip to the Western Alps (northern Italy and southern Switzerland) took place from **July 21 to 31, 2023** and was guided by SEG Fellow Frank Melcher and joined by our academic advisor Johann Raith from Montanuniversität Leoben. Nine students (including 7 SEG Student Members) took the chance to explore the part of the Alps that is rarely visited when studying in Austria. With the professional expertise of Alfons Berger and Larryn Diamond from the University of Bern the participants could see a variety of interesting geological features during this trip. Interesting and exciting stops included for example the Bergell Pluton, the Falotta Mn-mine in ophiolites, the Ivrea zone, the Brusson orogenic gold deposit, the La Servette VMS deposit, eclogites, and pillow basalts at the Pfulwe pass and the Grimsel hydrothermal mineralization. With this interesting excursion we could motivate several students to join our Student Chapter and become SEG members. The detailed program can be found in the Western Alps field trip report 2023.



Figure 2: Group photo from the Maloja pass during the Western Alps excursion in July 2023.

3.) Financial use of the Wallace fund

The SEG Student Chapter Leoben applied for the Stewart R. Wallace Funding (Round I 2023) and was awarded \$956 (EUR 873.15 – EUR 10.00 incoming fees = EUR 863.15) by the SEG to support attendance of 7 student members (i.e., EUR 120 per person) to cover parts of costs (fuel and accommodations) for the Western Alps field trip.

4.) Lectures and talks

The Student Chapter organized the following talks and mini-symposiums:

November 7, 2022: The participants of our Cyprus excursion from last year held a mini-symposium about their experiences and geological observations during the excursion. A total of seven presentations covered various aspects of the geology and mineral deposits of Cyprus. The following topics were presented and discussed: „Geodynamic evolution of the Eastern Mediterranean”, “Regional geology and tectonics of Cyprus”, “Troodos ophiolite – Upper and lower sections”, “VMS deposits (incl. historic and recent mining in Cyprus)”, “Ore deposits in the lower ophiolite section”, “Geology of the Mamonnia terrane” and “Circum-Troodos sedimentary succession”.

March 7, 2023: In collaboration with the SEG SC RWTH Aachen a hybrid talk on “Geochemistry of hydrothermal ore deposits” was organized. Tobias Fusswinkel gave his talk on “Halogens as tracers for ore deposit fluids” and Frank Melcher followed with his lecture on “Trace elements in sulfide deposits from the Eastern Alps”. People were able to join either in person or online via Zoom. This was a great opportunity to get in touch with SEG members from other Student Chapters and to learn more about the research focused on hydrothermal deposits applying modern methods.

5.) Participation in conferences, field trips and workshops

From July 28 to August 1, 2023, three SEG student members went to the SGA conference in Zürich, Switzerland to present the progress and data of their Master’s and PhD projects. It was a great opportunity to make new connections.

Two student members took the opportunity to take part in the MinWien2023 conference in Vienna from September 17-21, 2023 and present their ongoing PhD projects in the session “Economic Geology and Ore Deposits”. The joined conference of the mineralogical societies of Austria, Germany and Slovakia was a great way to connect with national and international colleagues from other universities.

6.) Future plans

The SEG Student Chapter of the Montanuniversität Leoben had numerous successful activities in the current reporting period and we are committed to remain motivated and continue with the following plans in the future.

A) Invited Lecturers

We are currently discussing which persons we could ask to come to Leoben for the coming semesters to hold talks for our chapter. Although online talks made it easier to invite people from everywhere, in-person talks make it easier to connect and they have a more comfortable atmosphere which makes it easier for students to ask questions.

B) WORKSHOP 2024

Our Sphalerite Workshop in June 2023 was a great success and we received a lot of positive feedback from the students. Therefore, the new Executive Committee for 2024 is discussing the possibility of another workshop related to the mineralogy and geology of bauxite deposits.

C) Local Austrian excursions

Since Austria has a long history of mining and a plethora of mineralizations, we will discuss with the members what deposits would be interesting to visit. Several destinations can be planned as weekend trips or combined for longer excursions. We still think a trip to one of the scheelite deposits would make an excellent excursion, as we give the student members a nice opportunity to receive an impression about night-time exploration for scheelite using UV-lamping.

Glück Auf!



SEG Student Chapter Leoben

September 26, 2023 | Leoben

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