PANGEO

MONTAN UNIVERSITÄT LEOBEN

PANGEO AUSTRIA

Beyond Earth Science Frontiers

PROGRAM

10th-13th SEPTEMBER 2022

IMPRESSUM

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PANGEO 2022

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Welcome to PANGEO Austria 2022!

The PANGEO 2022 conference is to be held from 10th–13th September 2022 at Montanuniversität Leoben. Under the heading “Beyond Earth Science Frontiers” this conference provides a platform for presenting actual research carried out at Austrian universities, organisations and companies.

PANGEO has evolved into a forum where scientists from academia can meet with colleagues working in industry and public services. Participation of students presenting results of their Master and PhD projects is strongly encouraged and we hope the conference is not only a place for science transfer and knowledge exchange but also for networking.

The scope of the sessions and contributions gives an excellent overview about the wide spectrum of research covered. It ranges from fundamental research in the different disciplines of earth sciences and geophysics to the various fields of applied research with sessions for example on Economic Geology, Geo-Energy, Technical Geology, Hydrogeology and Applied Mineralogy. Two special sessions are dedicated to the geological services in the federal states (Landesgeologie) and to Geology@School; the latter especially adapted for teachers.

Altogether, there are 130 oral and 75 poster presentations. The abstracts are published in a volume of „Berichte der Geologischen Bundesanstalt“. The scientific program is accompanied by the social program and pre- and post-conference excursions. Excursion guidebooks are also published in the issue of „Berichte der Geologischen Bundesanstalt“.

Our sincere thanks go to our sponsors and supporters, to the session convenors, and especially to the staff of the Department of Applied Geosciences and Geophysics who have made it possible to organise this conference. Montanuniversität Leoben is thanked for hosting this conference on its premises.

The organisation team wishes you a successful meeting!

Preface President of ÖGG

On behalf of the Austrian Geological Society, I would like to welcome you to PANGEO Austria 2022 at Leoben. PANGEO takes place every two years and is the Austrian showcase of geoscientific research and its applications. Originally planned for 2020, it had to be postponed by two years due to the pandemic. I would like to thank the organizers for all their double efforts and hard work.

PANGEO is quite unique, as it brings together all areas of earth sciences at one conference. Accordingly, the Austrian Geological Society, the Austrian Paleontological Society, the Austrian Mineralogical Society, the Austrian Geophysical Society and the Austrian Association for Hydrogeology are co-organizers of this event. PANGEO has always understood itself as a networking platform, where academia and industry meet and where students, undergraduates and graduates in earth sciences can interact with potential employers. Oral and poster presentations will offer a wide spectrum of high-quality research covering applied, theoretical, and regional themes and will also look „Beyond Earth Science Frontiers“. The opening keynote address by Mike Simmons asks “Who needs geoscientists?” and his answer is a very positive one. Geoscientists will play an essential role in supporting our society during energy transition and transformation. However, we need to give this message to society at large and cast a wide net. PANGEO also offers a Geology@School workshop for teachers. Taking geosciences to school is essential to educate society, and to (re)gain public acceptance and support for our activities.

I wish you all an exciting conference, interesting excursions, lively discussions, and successful networking with real people in a non-virtual environment.

Peter Krois

President of the
Austrian Geological Society

Preface Rector

Our society faces major challenges, such as population growth, climate change, the increasing consumption of resources, whether raw materials or energy, the stable development of our economy or the preservation of social peace. Especially the dependence of the availability of raw materials and energy is made clear to us in the current global political situation. We will need new technologies to secure our raw material and energy needs in an environmentally sound manner. New sources of resources need to be developed, as well as gentle processes for the use and recycling of resources.

In this context, the geosciences make an important contribution in research and teaching. Events like PANGEO bring science and industry together to exchange ideas.
I wish you a successful conference.

Glück auf!

Wilfried Eichlseder

Rector Montanuniversität Leoben

Preface Mayor of Leoben

Dear participants!

I'm delighted to welcome you at PANGEO Austria 2022 and I'm very pleased that Leoben is hosting the conference for the second time after 2010.

Over the past few years, Leoben has implemented numerous projects to reposition itself as the thriving center of upper Styria. Combining tradition with innovation, we have managed to establish both economic power as well as a high degree of quality of life. The montanistic University of Leoben is one of our most valued partners and played an important part in this positive development.

I hope that you will enjoy this conference and take back knowledge, experiences, contacts and happy memories of the city of Leoben.

Sincerely,

Kurt Wallner

Mayor of Leoben

WHO NEEDS GEOSCIENTISTS?

Career options in a time of energy transition

Historically, many geoscientists have been employed in searching for and extracting resources, either hydrocarbons, minerals, or water. Concerns about the environmental sustainability of geological vocations appear to be reducing the number of students studying geoscience, at least in many developed western nations. What then are the options for those wishing to pursue a career in geology? The need for geoscientists is paramount in a time of energy transition, be that in traditional spheres of employment or in what may be termed "sustainable geoscience," although these are not mutually exclusive. Growing global population and economic growth are likely to drive an ongoing rise in energy demand as the century progresses. Despite the growth in renewables, the energy mix for the next few decades is likely to continue to include a significant contribution from natural gas, oil, and, to a lesser extent, coal. The challenge is to be as efficient as possible in the exploration for these resources and to locate those with the lowest carbon footprint created by their exploitation ("green oil"). This means a focus on reservoir geology so that well placements and trajectories are optimized.

These skills will also allow geoscientists to contribute to solutions that may help achieve carbon neutrality targets. Carbon capture and sequestration (CCS) is likely to grow in importance and requires geoscientists who can model subsurface repositories and the behaviour of fluids injected into those repositories. Other avenues exist in engineering geology in relation to the challenges of installing new wind farms and for the construction of measures to mitigate the impacts of climate change that are already inevitable. A growing number of geologists are engaged in investigating the potential of geothermal energy.

The global improvement of living standards and society's ongoing appetite for technology places a demand on the supply of raw materials (e.g., copper and rare earth elements) that could quickly outpace our known reserves. Geoscientists are needed to locate new deposits, including those in the oceans. As the global population continues to expand towards 11 billion people, water supply is likely to be one of the major challenges society faces as the century progresses. Hydrogeologists are needed to locate and manage aquifers as climate evolves and to protect them from pollutants.

Academic geologists can provide support to all of these industrial activities, but there is also much fundamental research to be carried out. It is now over 50 years since the advent of the last major paradigm shift in geoscience – plate tectonics – another is surely overdue. We still have much to learn about processes operating in and on Earth today and in the past, and the evolution of life. Holistic Earth systems science approaches can be useful, for example, by using the past to model climate evolution. One exciting avenue is the impact of the digital revolution on geoscience. Data science is providing new scientific insights and is transforming all resource industries, contributing to efficiency and associated environmental benefits. The future geoscientist needs to be technology and data science literate, but with an underpinning of sound geoscience knowledge. We do not know where this exciting phase of technology and data science change will take geoscience, but it is clear that geoscientists will be needed to support society as it enters a period of unprecedented change.

Mike Simmons

Conference Office/ Registration

Opening Hours :

Saturday	17:00-20:00
Sunday	08:00-17:00
Monday	08:00-17:00
Tuesday	08:00-14:00

Conference Office
+43 3842 402 7720

Alexandra Schellich
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pangeo@unileoben.ac.at

Only cash payments are possible at the conference office.

An **ATM** is located on the ground-floor of the venue area (see map p.15).

WLAN Access

WLAN access codes are available at the conference office.

Catering

The catering is served on the first floor (see map p. 15). Catering is included in the participation fee.

Coffee Breaks:

Sunday	11:00-13:00 14:20-15:00
Monday	10:00-10:20 14:20-15:00
Tuesday	10:00-10:20

Lunch Breaks:

Sunday	12:00-13:00
Monday	12:00-13:00

Icebreaker Party:

Saturday	19:00-22:00

Conference Dinner:

Monday	19:15-22:00

Parking

Public parking spaces are reserved for participants in two areas close to the venue area (see map p. 14). Parking permissions are available at the conference office. These parking spaces are free of charge.

Further parking spaces are available throughout the city, but be careful in **blue** areas parking is only possible up to 3h. In **green** areas there is no time limit.

The fee is 0.80€/h or 4.40€/day.

Fees Apply

Monday to Friday:	08:00 – 18:00
Saturday:	08:00 – 12:00

There are also parking garages available at the railway station, the Asia spa & the main square. All of them are in walking distance to the venue area.

For further information visit the website of Leoben & the Stadtwerke Leoben.

Company Stands

Company stands are located on the first floor, close to the catering. (p.14)

Emergency

In a case of emergency, please follow the emergency exit signs to the meeting point and follow the instructions of persons in charge.

Covid Regulations

According to the current Covid status “green”, no FFP2 masks are required at the venue and in the lecture rooms. However, mandatory mask wearing may be decided in the case of a change in Covid status.

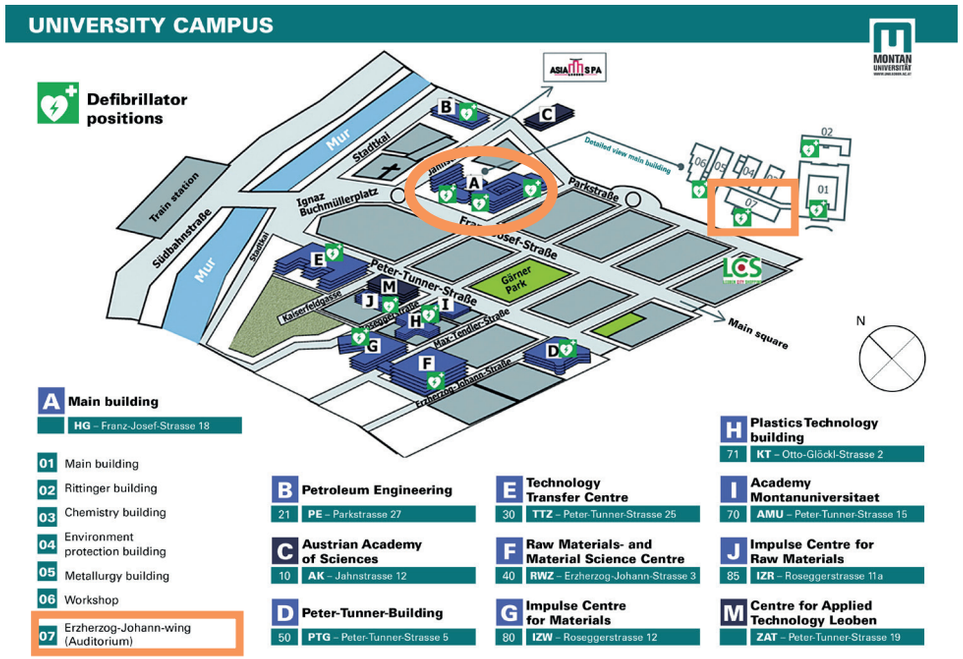
All participants are advised to take a voluntary Covid self-test to ensure maximum safety for all attendees. Please follow the usual Covid rules (e.g., avoid grouping in enclosed spaces) throughout the event.

Further regulations may be announced during the event.

Safety Regulations

If you have any questions regarding your safety, contact the conference office.

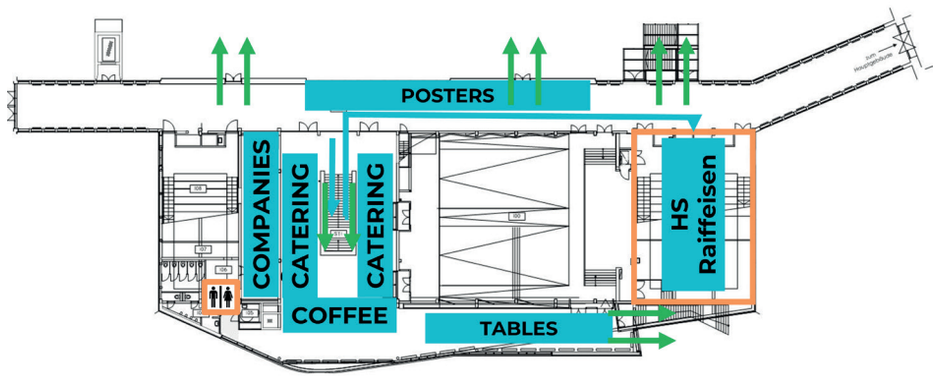
Location & Venue



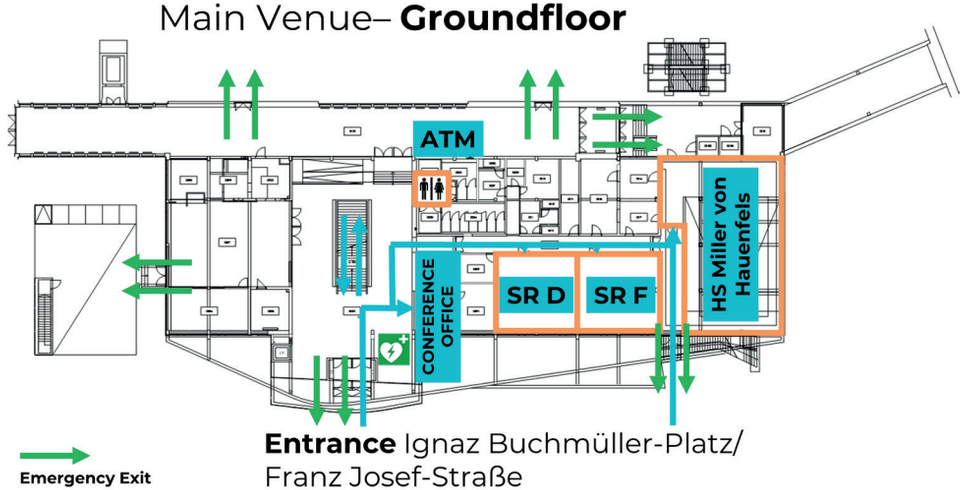
Parking Areas are marked in orange

Lecture Rooms

Main Venue– **First Floor**



Main Venue– **Groundfloor**



CONFERENCE TEAM

Sabrina Dollinger

Heinrich Mali

Brigitte Mang

Frank Melcher

David Misch
Overall coordinator // Main convener

Johann G. Raith

Gerd Rantitsch
Program coordinator

Reinhard Sachsenhofer

Alexandra Schellich

Robert Scholger

Xiangyun Shi

Lukas Skerbisch

AWARDS

ÖGG

HONORARY MEMBERS

Maria Heinrich

Walter Pohl

Christoph Spötl

Harald Lobitzer

OTTO AMPFERER AWARD

Chiara Költringer

HANS HÖFER VON HEIMHALT AWARD

Matthias Kranner

ÖMG

FELIX MACHATSCHKI AWARD

Andre Baldermann

Pre-Conference Excursions

Excursion 1
Sat 10/09/2022 09:00

Erzberg

Iron ore has been mined at the “Steirischer Erzberg” for more than 1300 years. Today, VA Erzberg produces about 3 million tonnes of siderite concentrate annually. The metallogenetic evolution of this giant ore system continues to be a matter of debate. During the excursion, we will visit key outcrops in the active mine area to discuss the evolution of the mineralization in the framework of the regional geology of the Erzberg.

Excursion 2
Sat 10/09/2022 09:00

Aflenzer Bürgeralm Panorama Road -
A spectacular section through the rocks of the Triassic at the southern rim of the Mürzalpen nappe

The one-day excursion will start in the stratigraphically youngest parts of the Noric nappe, leading along the panorama road to the Aflenzer Bürgeralm and afterwards to the Schönleitenhaus. Following an introduction to the regional geology and tectonics of the area, the rocks at the southern edge of the juvavic Mürzalpen nappe, which are best exposed along the Panoramastraße, will be presented. The focus will be set on the facies and stratigraphic position of these rocks, as well as the temporal-spatial development of their depositional environment in the forefront of the Triassic carbonate platforms.

Post-Conference Excursions

Excursion 3
Tue 13/09/2022 13:00

Styromag Magnesite Oberndorf

The Upper Austroalpine nappe system of Austria hosts several magnesite deposits of the Veitsch type of which seven deposits are still in mining operation. Metasomatic deposits of the Veitsch type are hosted by Palaeozoic carbonates, form coarsely crystalline stratiform lenses, layers, and irregular bodies. All of them are overprinted by Alpine metamorphism. Pinolitic magnesite structure, several generations of dolomite and secondary talc formation are some characteristics of these deposits. The excursion will visit one of the deposits mined by Styromag GmbH at Oberdorf, Wald or Hohentauern which are hosted by the Carboniferous Veitsch nappe of the Austroalpine Veitsch-Silbersberg nappe system.

Excursion 4
Wed 14/09/2022 09:00

Spodumene (Lithium) Project Wolfsberg

European Lithium´s Wolfsberg Project is targeting spodumene-bearing pegmatites within the Koralpe-Wölz nappe system. The company successfully completed a positive pre-feasibility study (PFS) in Q2 2018. The PFS was based only on current measured and indicated resources of 6.3 Mt at 1.17% Li_2O. Additional exploration work within the framework of a detailed feasibility study revealed the available resources more realistically. The excursion participants will have the possibility to visit the underground exploration adit as well as the core shed within the city of Wolfsberg.

Icebreaker Party

Saturday 19:00-22:00
(Main Venue)

Poster Sessions

Sunday 14:20-15:00
Monday 10:00-10:20, 14:20-15:00 & 17:00-17:45
Tuesday 10:00-10:20
@ corridors of the lecture rooms, Main Venue

Historical Walk

Sunday 17:00-19:00
Meeting point in front of the main entrance to the venue

Public Lecture

Monday 18:00-19:00
Kurt Stüwe: **Zur Geschichte der Steirischen Landschaft**
@ HS Raiffeisen, Main Venue

Conference Dinner

Monday 19:15-22:00
(Main Venue)

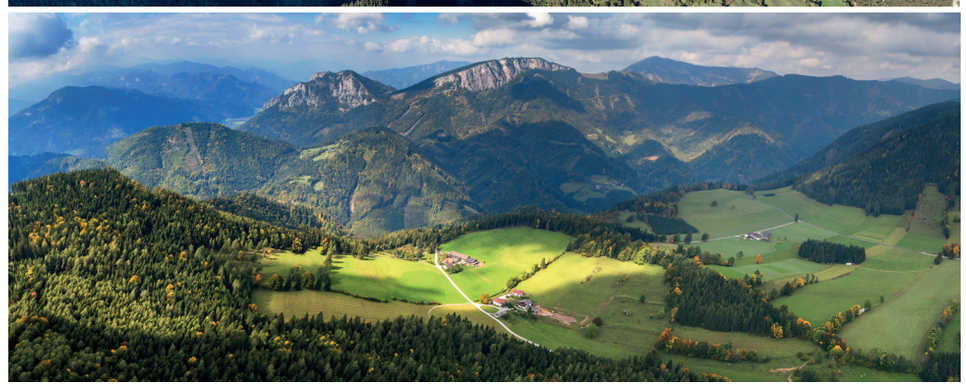
MONTANSTADT Leoben

Zur Geschichte der Steirischen Landschaft

Die Landschaft der Steiermark mit ihren Bergen, Tälern und Ebenen formte sich zwar über geologische Zeiträume, aber dennoch gab es erstaunlich große Veränderungen auch innerhalb der relativ kurzen Entwicklungszeit der Hominiden in den letzten fünf Millionen Jahren. Die ursprünglich über den Semmering ins Wiener Becken fließende Mur änderte ihren Verlauf allmählich nach Graz, die Enns floss noch über den Schoberpass in die Mur, viele der steirischen Vulkane existierten noch nicht und der Schöckl oder der Hochschwab waren noch keine Berge, sondern erhoben sich kaum merklich über das flach-wellige Hügelland. Der Vortrag illustriert Aspekte dieser verblüffenden Landschaftsentwicklung mittels spektakulärer Luftaufnahmen.

Kurt Stüwe

www.alpengeologie.org



Saturday 10/09/2022

09:00	**Departure Field Trips 1 & 2:** Erzberg & Aflenzer Bürgeralm Panorama Road
17:00-18:30	Registration
19:00-22:00	Icebreaker Party

Sunday 11/09/2022

08:00-10:00	Registration + Coffee			
	HS Raiffeisen	SR D		
08:00	Opening, Awards & Keynote	Geology@School		
12:00-13:00	Lunch Break			
	HS Raiffeisen	SR D	HS Miller v. H.	SR F
13:00	Landesgeologie	Geology @School (Start 13:20)	Sedimentology	Adv. Charact. of Geomaterials
14:00			IGCP710	
14:20-15:00	Coffee Break + Poster			
15:00	Landesgeologie	Geology @School	Archeology	Adv. Charact. of Geomaterials
15:40	Integrated Stratigraphy			
17:00	Historical Walk			

Monday 12/09/2022

08:00-09:00	Registration			
	HS Raiffeisen	SR D	HS Miller v. H.	SR F
08:20	Integrated Stratigraphy	Economic Geology	Geophysics	Adv. Charact. of Geomaterials
08:40				Applied Mineralogy
10:00-10:20	Coffee Break + Poster			
10:20	Integrated Stratigraphy	Economic Geology	Geophysics	Reservoir Engineering
11:20	Regional Geology			
12:00-13:00	Lunch Break			
13:00	Regional Geology	Structural Geology	Geophysics	MRI_SEDEXPOT Workshop
14:20-15:00	Coffee Break+ Poster			
15:00	Regional Geology	Paleontology	Geo-Energy	MRI_SEDEXPOT Workshop
15:20	Earth Surface Dynamics			
15:40	Petrology			
17:00-17:45	Poster Session			
18:00-19:00	Public Lecture			
19:15-22:00	Conference Dinner			

Tuesday 13/09/2022

08:00-09:00	Registration			
	HS Raiffeisen	SR D	HS Miller v. H.	SR F
08:20	Petrology	Engineering Geology	Geo-Energy	Seismology
09:00	Hydrogeology			
10:00-10:20	Coffee Break + Poster			
10:20	Hydrogeology	Engineering Geology	Young Sediments	Seismology
12:00-12:45	Poster Award & Closing			
13:00	**Departure Field Trip 3:** Styromag Magnesite Oberndorf			

Wednesday 14/09/2022

09:00	**Departure Field Trip 4:** Spodumene Project Wolfsberg

RAG – Renewables and Gas

Die RAG Austria AG ist das größte Energiespeicherunternehmen Österreichs und gehört zu den führenden technischen Speicherbetreibern Europas.

Unser zentraler Unternehmensschwerpunkt ist die Speicherung, Umwandlung und bedarfsgerechte Konditionierung von Energie in Form gasförmiger Energieträger. Mit Speicherkapazitäten von mehr als 6,2 Milliarden Kubikmeter Erdgas betreiben wir rund 6% aller EU-europäischen Gasspeicheranlagen. Ein großer Teil der RAG Gaslagerstätten wurde bereits in Speicher umgewandelt, die mit hoher Leistung die gespeicherte Energie zur Verfügung stellen können. Damit lebt die RAG die Vision eines „nachhaltigen Energiebergbaus“ und stärkt so entscheidend die Versorgungssicherheit Österreichs und Europas.

Wir arbeiten seit Jahren intensiv an neuen Technologien, um erneuerbare Energie effizient und in großen Mengen speicherbar und nutzbar zu machen. Seit 2013 entwickeln wir Projekte in der saisonalen Wasserstoffspeicherung sowie für Energietechnologien rund um Grünes Gas. Dank unserer jahrzehntelangen Erfahrung in der Nutzung, Förderung und vor allem Speicherung von Gas sowie unserer Innovationskraft konnten wir uns zu einem nachhaltig agierenden Technologieführer in der europäischen Energiespeicherung und bereitstellung entwickeln.

RAG AUSTRIA AG
Renewables and Gas

8:00-10:00	Registration + Coffee		
	HS Raiffeisen		SR D
Session Chair	Opening		Geology@School B. Hubmann, R. Scholger.
10:00	Opening & Awards	10:00	Welcome & Introduction: Hubmann, B.
11:15	Simmons, M.: **Who needs geoscientists? Career options in a time of energy transition**	10:20	Fritz, I.: **Erdwissenschaftliche Angebote für Schulen im Schuljahr 2022/2023**
		10:40	Hilberg, S.: **Digitale Lernspiele als interaktiver Einstieg in den Geologie-Unterricht**
		11:00	Schreilechner, M.: **99% der Erde sind heißer als 1000°C – Nutzen wir diese Energie**
		11:20	Kulturgeologische Exkursion durch Leoben

12:00-13:00	Lunch Break			
	HS Raiffeisen	SR D	HS Miller v. H.	SR F
Session Chair	Landesgeologie M. Konrad	Geology @School B. Hubmann, R. Scholger	Sedimentology D. Le Heron, C. Kettler	Adv. Charact. of Geomaterials D. Misch, P. Gopon
13:00 (Geol.@School 13:20)	Konrad, H.M. & Schmölzer, K.: **Der Felssturz von Pürgg – vom Ereignis bis zur Sicherung**	Melcher, A. & Unterweger, U.: **Steinreiche Steiermark – Erdgeschichte begreifbar machen**	Wohlschlägl, R.; Le Heron, D..; Kettler, C.: **From ice streams to meltwater channels: Detailed study of a vast ancient ice sheet of the LPIA in the Ennedi Plateau, Chad**	Gopon, P.; Douglas, J.; Jenkins, B.; Bertrandsson Erlandsson, V.; Xie, Z.; Felfer, P.: **Hidden in plain sight: using Atom Probe Tomography to understand the formation of invisible gold deposits in North America, China, and Europe**
13:20	Mair, V.: **Wissen um zu schützen – die Bedeutung einer detaillierten geologischen Karte für Gefahrenzonenplanung und Risikomanagement im alpinen Raum**	Leitner, S.: **Fachfremder Unterricht in der Induktionsphase: Eine Herausforderung für den Eintritt in den Lehrberuf?**	Harzhauser, M.; Borzi, A.; Piller, W.E.; Strauss, P.; Siedl, W.; Dellmour,R.: **Rise and demise of the Paleo-Danube Delta during the late Miocene (Vienna Basin, Austria)**	Niederl, S.; Felfer, P.; Bertrandsson Erlandsson, V.; Mottram, C.;Raith, J.G.; Gopon, P.: **Invisible metals for a green future: Au associated critical elements in historic mining districts Murtal (Styria)**

	HS Raiffeisen	SR D	HS Miller v. H.	SR F
Session Chair	Landesgeologie M. Konrad	Geology @School B. Hubmann, R. Scholger	Sedimentology D. Le Heron, C. Kettler	Adv. Charact. of Geomaterials D. Misch, P. Gopon
13:40	Fritz, I.; Habacher, M.; Mauritsch, H.; Paar, S.: **Pharos, ein Einstiegsportal in das Datenarchiv des Geologisch-Mineralogischen Landesdienstes Steiermark**	Melcher, F.: **Blutdiamanten und Blutcoltan – der Handel mit Konfliktrohstoffen**	Jamaluddin; Wagreich M.; Xinxuan X.; Umar, E.P.: **Organic geochemical characterization of Miocene shale in the Lower Kutai Basin, East Kalimantan, Indonesia**	Skerbisch, L.; Misch D.; Drews, M.; Stollhofen, H.; Sachsenhofer, R.F.; Arnberger, K.; Schuller, V.; Zamolyi, A.: **Regional mudstone compaction trends in the Vienna Basin: Implications for potential geological storage leakage**
Session Chair			IGCP710 M. Krobicki, H.-J. Gawlick	
14:00	Eder, T.: **Erdwärmenutzung am Beispiel von Erdwärmesonden in der Steiermark**	Misch, D.: **Erdöl: Umweltgefahr oder wertvoller Rohstoff?**	Krobicki, M.: **Jurassic and Cretaceous phosphatic events and their palaeoceanographic significance during geotectonic evolution of the Pieniny Klippen Basin (Carpathians)**	Shi, X.; Misch, D.; Zak, S.; Cordill, M.; Kiener, D.: **Nanoindentation mapping for determining representative mechanical parameters of clay matrix in mudstones: A new tool for top seal characterization**

14:20-15:00	Coffee Break + Poster			
Session Chair			Archeology W. Prochaska, E. Draganits	
15:00	Tanner, D.: **Data Mining – Rohstoffe der Zukunft!**	Hubmann, B.: **Die Klientel der BIUK-Studierenden: einige Querschnittsbetrachtungen**	Harzhauser, M.; Weber, G.; Lukeneder, A.; Mitteroecker, P.; Wurm, L.; Hollaus, L.M.; Haack, F.; Antl-Weiser, W.; Kern, A.: **The oolite of the Venus from Willendorf – microstructure and provenance**	Bakker, R.J.: **Fluid immiscibility at metamorphic conditions: experimental evidence of fluid inclusions**

	HS Raiffeisen	SR D	HS Miller v. H.	SR F
Session Chair	**Landesgeologie** M. Konrad	**Geology @School** B. Hubmann, R. Scholger	**Archeology** W. Prochaska, E. Draganits	**Adv. Charact. of Geomaterials** D. Misch, P. Gopon
15:20	Schröttner, M.: **Vom Altbergbau zur Altlast, Blei-Zinkvererzung Schrems bei Frohnleiten**	Discussion	Sterba J.H.: **Combining NAA and best relative fit factors for Provenancing**	Bensing, J.P.; Misch, D.; Skerbisch, L.; Hujer, W.; Sachsenhofer, R.F.: **What's old is new again: can old, unpreserved core be used for modern seal rock characterisation?**
Session Chair	**Integrated Stratigraphy** W. Piller, C. Iglseder			
15:40	Ajuaba, S.; Sachsenhofer, R.F.; Bechtel, A.; Galasso, F.; Gross, D.; Misch, D.; Schneebeli-Hermann, E.: **Controls on biomarker and carbon isotope patterns during the Toarcian anoxic event (Dormettingen section; Swabian Alb)**		Oettel, L.; Eß, L.M.; Tropper, P.; Trebsche, P.: **Mineralchemische Provenienzuntersuchungen an Fahlerzen am prähistorischen Verhüttungsareal Kundl (Unterinntal, Tirol)**	
17:00	**Historical Walk** – R. Sachsenhofer			

08:00-09:00	Registration			
	HS Raiffeisen	**SR D**	**HS Miller v. H.**	**SR F**
Session Chair	**Integrated Stratigraphy** W. Piller, C. Iglseder	**Economic Geology** F. Melcher, H. Paulick	**Geophysics** F. Bleibinhaus, R. Scholger	**Adv. Charact. of Geomaterials** D. Misch, P. Gopon
08:20	Piller, W.E.: **News from the International Commission on Stratigraphy**	Melcher, F.: **Alpine metallogensis - reloaded**	Banasiak, N. & Bleibinhaus, F.: **High resolution seismic surveying of the Cheb Basin**	Hassler, J.; Groß, D.; Guedes de la Cruz, G.; Piribauer, C.; Schubert, C.: **Analysis of alteration effects of lignite-containing soil samples**
Session Chair				**Applied Mineralogy** J. Raith, M. Dietzel
08:40	Hörfarter, C.: **Stratigraphy in Web 3.0 - Advantages of a Controlled Vocabulary for Stratigraphic Units**	Altenberger, F.; Wintzer, N.E.; Krause, J.; Iglseder, C.; Raith, J.G.: **The Mallnock tungsten mineralization – Trace element evolution and geochronology (Gurktal Alps, Carinthia/Austria)**	Eichkitz, C.G.; Schreilechner, M.G.; Heine, E.; Hauer, C.; Golja, M.: **Anwendung von hochauflösenden Sub-Bottom Profiling Daten zur Darstellung seichtliegender Sedimente in Flüssen und Staubecken**	Baldermann A.; Han S.; Abbott, A. N.; Farkaš J.; Rafiei M.; Löhr S.C.: **A novel quantitative approach to sedimentary petrography: Next-generation SEM-EDS-based automated mineral mapping**
09:00	Iglseder, C. & Reiser, M.: **Lithostratigraphy and lithodemy in metasedimentary rocks of the Austroalpine - New insights from the Stangalm-Brenner Mesozoics (Ötztal-Bundschuh Nappe System / Austria)**	Weilbold, J.; Altenberger, F.; Raith, J.G.; Auer, C.; Knoll, T.; Paulick, H.; Schedl, A.; Aupers, K.; Schmidt, S.; Krause, J.; Berndt, J.; Neinavaie, H.: **A new tool for tungsten exploration – Application of scheelite fingerprinting to assess tungsten mineralization in the Eastern Alps, Austria**	Greenwood, A.; Hetényi, G.; Pasieczni k, D.; Baron, L.; Banasiak, N.; Bleibinhaus, F.; Scholger, R.; Caspari, E.; The MicrO-SEIZE field team; DIVE PIs; 2022 MSc IGFW-Field course: **Applied geophysics in Phase 1 of the Drilling the Ivrea-Verbano zonE (DIVE) project**	Eichinger, S.; Boch, R.; Leis, A.; Dietzel, M.: **Formation processes and prevention strategies of scale deposits in tunnel drainage systems**

	HS Raiffeisen	SR D	HS Miller v. H.	SR F
Session Chair	**Integrated Stratigraphy** W. Piller, C. Iglseder	**Economic Geology** F. Melcher, H. Paulick	**Geophysics** F. Bleibinhaus, R. Scholger	**Applied Mineralogy** J. Raith, M. Dietzel
09:20	Huet, B.; Iglseder, C.; Schuster, R.: **A lithostratigraphic model for the Western Greywacke Zone and the Innsbruck Quarzphyllite Zone (Eastern Alps, Tirol, Salzburg, Austria)**	Dollinger, S.; Melcher, F.; Marousek, L.; Elmer, S.; Nußbacher, H.: **Sekundärminerale in Pb-Zn-Lagerstätten und Ermittlung der Elementgehalte am Beispiel der Halden in Bleiberg, Kärnten**	Pasiecznik, D.; Greenwood, A.; Bleibinhaus, F.; HeténYi, G.: **A high-resolution seismic survey across the Balmuccia Peridotite, Ivrea Zone, Italy – Project DIVE**	Sammer, T.; Ravi, K.; Raith, J.G.: **A fundamentals mineralogical investigation of downhole cements within the context of underground hydrogen storage**
09:40	Piller, W.E.; Friebe, J.G.; Gross, M.; Harzhauser, M.; van Husen, D.; Koukal, V.; Krenmayr, H.G.; Krois, P.; Nebelsick, J.H.; Ortner, H.; Reitner, J.M.; Roetzel, R.; Rögl, F.; Rupp, C.; Stingl, V.; Wagner, L.; Wagreich M.: **Cenozoic Lithostratigraphic Units of Austria (sedimentary successions)**	Bertrandsson Erlandsson, V.; Gopon, P.; Foltyn, K.; Šoster, A.; Ellmies, R.; Melcher, F.: **More than meets the eye: investigating critical elements in sulfides from different ore deposit types**	Zhou, Z.; Caspari, E.; Barbosa, N.D.; Greenwood, A.; Holliger, K.: **Fracture compliance estimation in crystalline rock masses from full-waveform sonic data**	Wedenig M.; Baldermann A.; Eder S.; Dietzel M.: **The CaO-MgO-CO_2-H_2O-organo system revisited: New insights from thermodynamic modelling of mineral phase transformations**
10:00-10:20	**Coffee Break + Poster**			
Session Chair				**Reservoir Engineering** H. Ott, R. Kharrat
10:20	Harzhauser, M.; Kranner, M.; Piller, W.E.; Strauss, P.; Siedl, W.: **Integrated stratigraphy of the Vienna Basin – data, concepts, paradigms**	Hutter, F. & Raith, J.G.: **Tungsten Mineralisation and Intrusive Rocks at Lienzer Schlossberg, East Tyrol**	Trabi, B. & Bleibinhaus, F.: **Blast Vibration Prediction**	Burmester, G.; Zekiri, F.; Jurcic, H.; Jones, A.; Arnold, P.; Ott, H.: **A novel upscaling workflow of multiphase flow properties for water-, and mixed-wet reservoirs – applications for conventional hydrocarbon field developments and low-carbon business**
10:40	Gebhardt, H.; Schenk, B.; Enge, A.; Ćorić, S.; Ranftl, E.; Heinz, P.: **The Lower - Middle Miocene transition (Karpatian – Badenian) in the Krems Embayment (Central Paratet)**	Gartner, V.; Melcher, F.; Bertrandsson Erlandsson, V.: **Spurenelemente in Zinkblenden aus der Blei-Zink-Lagerstätte Raibl**	Bleibinhaus, F. & Trabi, B.: **Source Time Functions and Interference from Blast Arrays**	Gruber, W.: **Rock typing for reservoir prediction – a frequently misunderstood concept**
11:00	Moser, M. & Wagreich, M.: **The stratotype of the Gutenstein Formation**	Mali, H.; Bertrandsson Erlandsson, V.; Onuk, P.: **Spodumene Pegmatite Resource Potential of Austria**	Behm, M.; Cheng, F.; Kusnirak, D.: **MASW imaging from shallow seismic reflection data**	Wan, C.; Song, Y.; Zhang, C.; Jiang, Z.: **A study on the prediction of critical water saturation of shale when it has sealing capacity**
Session Chair	**Regional Geology** G. Rantitsch, R. Schuster			
11:20	Fritz, H.; Nievoll, J.; Gallhofer, D.; Hauzenberger, C.; Gritsch, B.; Pfatschbacher, M.; Krenn, K.; Karner-Rühl, K.; Haas, I.; Eichinger, S.: **The Eastern Greywacke Zone – a 400 Ma Story from Gondwana Decay to Alpine Assembly**	Rabeder, J.; Peresson, M.; Reitner, H.: **Tonrohstoffforschung an der Geologischen Bundesanstalt**	Akhverdiev, A.: **Geostatistical approaches of sandy reservoir facies predictions based on analysis of elastic inversion results**	Bauer, H.; Wolfmayr, M.; Decker, K.: **Phi_K Hautpdolomit: tiefenabhängige Porositäts- und Permeabilitätswerte eines bedeutenden Reservoirs für Kohlenwasserstoff- und geothermische Energiegewinnung**
11:40	Iglseder, C.; Rantitsch, G.; Stumpf, S.; Skrzypek, E.; Schuster, R.; Huet, B.: **An adapted tectonic model for the "Central and Eastern Greywacke Zone" – new geochronological and RSCM-data (Styria / Austria)**	Dietrich, V. & Melcher F.: **Towards an analytical proof of origin for natural graphite**	Schnepp, E.; Engbers, Y.A.; Arneitz, P.; Egli, R.; Scholger, R.; Ganerød, M.; Leonhardt, R.; Biggin, A.J.: **A Miocene polarity transition recorded in a volcanic section on St. Helena, South Atlantic**	Krishna, S.; Thonhauser, G.; Irfan, S.A.; Keshavarz, S.: **A Robust Technique to Predict Formation Fracture Pressure of North Sea-Volve Oil Field Using Petrophysical Log Data**

12:00-13:00	Lunch Break			
	HS Raiffeisen	**SR D**	**HS Miller v. H.**	**SR F**
Session Chair	**Regional Geology** G. Rantitsch, R. Schuster	**Structural Geology** N. Levi, V. Schuller	**Geophysics** F. Bleibinhaus, R. Scholger	**MRI_SEDEXPOT Workshop** F. Melcher
13:00	Fernandez, O.; Ortner, H.; Sanders, D.; Grasemann, B.; Leitner, T.: **A new proposal for the Middle-Late Triassic paleogeography and tectonic evolution of the central Northern Calcareous Alps (Austria)**	Schuller, V.; Zamolyi, A.; Dunkl, I.; Schleder, Z.: **Tectonic History of Hoop Fault Complex – Implications on Fault Transmissibility, Barents Sea/Norway**	Schnepp, E.; Arneitz, P.; Ganerød, M.; Scholger, R.; Egli, R.; Fritz, I.; Leonhardt, R.: **Intermediate Field Directions Recorded in Pliocene Basalts in Styria (Austria): Evidence for cryptochron C2r.2r-1**	Weber, L.: **Die SEDEX Lagerstätten des Grazer Paläozoikums**
13:20	Dax, F.; Sachsenhofer, R.F.; Tari, G.: **The central Styrian Basin (Gnas Subbasin): Structure and stratigraphy revealed by seismic and borehole data**	Ortner, H.; Kilian, S.; Gruber, A.: **Minibasins upside down – Salt tectonics in the Karwendel mountains, Northern Calcareous Alps of western Austria**	Schlögel, I.; Hinterleitner, A.; Honic, M.: **Materialbestimmung von Gebäudeteilen mittels Ground Penetrating Radar**	Hubmann, B.: **Stratigraphie des Grazer Paläozoikums und insbesondere der sulfiderz- führenden Schönberg Formation**
13:40	Schreilechner, M.G.; Wagner, T.; Dax, F.; Binder, H.; Brandstätter, J.; Winkler, G.; Ferstl, M.: **Aktueller Wissenstand zum Aufbau des Weststeirischen Beckens**	Hintersberger, E. & HIKE Team: **The HIKE European Fault Data Base: The interplay of structured data with Linked Data**	**Keyence Company Presentation**	Melcher, F.: **Spurenelemente in den Sulfiderzlagerstätten des Grazer Paläozoikums**
14:00	von Hagke, C. & Frings, K.: **Uplift and exhumation of the Alpine foreland**	Levi, N.; Weissl, M.; Decker, K.: **Geodynamic remarks in the deep borehole TH1 (Vienna Basin)**	**Geo 5 Company Presentation**	
14:20-15:00	Coffee Break + Poster			

	HS Raiffeisen	**SR D**	**HS Miller v. H.**	**SR F**
Session Chair	**Regional Geology** G. Rantitsch, R. Schuster	**Paleontology** M. Harzhauser, M. Gross	**Geo-Energy** J. Goldbrunner, R. Sachsenhofer, G. Tari	**MRI_SEDEXPOT Workshop** F. Melcher
15:00	Hörfarter, C. & Haider, V.: **Digital Dissemination of Geological Information – Recent Insights into the Geoinformation Bubble**	Kranner, M.; Harzhauser, M.; Mandic, O.; Piller, W.E.; Strauss, P.; Siedl, W.: **Paleoenvironmental evolution of the Vienna Basin during the Miocene**	Nachtmann, W.: **Fossil Fuels - Or: There`s Life in the Old Dogs Yet, Isn`t It?**	Large, D.: **SEDEX Deposits: Nomenclature, Global Distribution, Characteristics, 50 years of Genetic Concepts**
Session Chair	**Earth Surface Dynamics** J.-C. Otto, J. Robl			
15:20	Robl, J.; Stüwe, K.; Dremel, F.; Wetzlinger, K.; Liebl, M.; von Hagke, C.; Fabel, D.: **Landscape Rejuvenation in the Bohemian Massif**	Feichtinger, I.; Guinot, G.; Pollerspöck, J.; Auer, G.; Coric, S.; Kranner, M.; Harzhauser, M.: **Shark diversity at the K/Pg boundary in Austria – A tale of extinction and hidden survival**	Tari, G.: **Geo-Energy exploration along the Austrian-Hungarian border in the western Pannonian Basin**	Paulick, H.: **Hydrothermale Alteration und Proximitätsindikatoren zum Erz bei Sulfiderzlagerstätten**
Session Chair	**Petrology** B. Huet, P. Tropper			
15:40	Haas, I.; Kurz, W.; Gallhofer, D.; Hauzenberger, C.; Skrzypek, E.: **The Austroalpine Schladming Nappe – a key area revealing the pre-Alpine evolution of the Eastern Alps**	Lukeneder, A. & Lukeneder P.: **Polzberg – Trias Konservat-Lagerstätte von Weltruf**	Aghayeva, V.; Sachsenhofer, R.F.; van Baak, C.G.C.; Bazyramova, S.; Coric, S.; Vincent, S.J.: **Chemostratigraphy of the Cenozoic succession in Azerbaijan: Implications for petroleum systems in the Caspian Basin**	

	HS Raiffeisen	SR D	HS Miller v. H.
Session Chair	**Petrology** B. Huet, P. Tropper	**Paleontology** M. Harzhauser, M. Gross	**Geo-Energy** J. Goldbrunner, R. Sachsenhofer, G. Tari
16:00	Wagner, S.; Faßmer, K.; Tropper, P.; Hauzenberger, C.; Zerobin, B.; Goldenberg, G.; Gilg, H.A.: **New P-T-t constraints on the metamorphic evolution of the garnet-chlorite schists from the Roßrugg (Zillertal core, Tauern Window, Tyrol): home of the Zillertal jewellery garnets**	Lukeneder, P.; Lukeneder, A.; Fuchs, D.: **Taphonomy of the total belemnoid fauna from the Polzberg Konservat-Lagerstätte (Upper Triassic, Northern Calcareous Alps, Austria)**	Yan, Y., Misch, D.; Wang, M.; Shi, X.; Skerbisch, L.; Sachsenhofer, R.F.: **Artifical maturation experiments on Qingshankou Formation shale: Porosity changes and implications for hydrocarbon expulsion behavior**
16:20	Huet, B.; Schneider, D.A.; Rantitsch, G.; Frank, W.: **Coupling in situ U-Th-Pb REE-epidote geochronology and thermodynamic forward modelling of main and REE-bearing phases: An example from the Tauern Window**	Weinmann, A.E.; Koukousioura, O.; Triantaphyllou, M.V., Langer, M.R.: **Cenozoic mass occurrences of Larger Benthic Foraminifera in the Mediterranean region: What can we learn from the current range expansion of Amphistegina lobifera?**	
16:40	Tropper, P.; Strasser, M.; Hasler, T.: **High-grade fluid/rock interactions in metapelites: theoretical and observed phase relations and the behavior of accessory phosphate phases in the Kottavattam charnockites (S-India)**	Wagensommer, A.; Tomelleri, I.; Baumgarten, B.; Kustatscher, E.: **Die Fossiliensammlung des Bozner Privatgelehrten Georg Gasser (1857-1931): Ziele und Aufbau einer historischen Sammlung**	
17:00-17:45	**Poster Session**		
18:00-19:00	**Public Lecture** – K. Stüwe **Zur Geschichte der Steirischen Landschaft**		
19:15-22:00	**Conference Dinner**		

	HS Raiffeisen	SR D	HS Miller v. H.	SR F
08:00-09:00	**Registration**			
Session Chair	**Petrology** B. Huet, P. Tropper	**Engineering Geology** M. Villeneuve, S. Kieffer	**Geo-Energy** J. Goldbrunner, R. Sachsenhofer, G. Tari	**Seismology** W. Lenhardt, G. Bokelmann
08:20	Rogowitz, A.; Schorn, S.; Huet, B.: **Interaction of metamorphic and deformation processes in the Hohl eclogite body (Koralpe, Eastern Alps, Austria)**	Tropper, P.; Krenn, K.; Weidinger, J.; Sanders, D.: **Evidence for decreasing impact-evoked pressure (UHP) conditions during frictional fusion along different shear planes in the Tsergo Ri (Langtang Himal, Nepal) rockslide**	Bensing, J.P.; Misch, D.; Skerbisch, L.; Sachsenhofer, R.F.: **Calcite dissolution in claystones treated with brine and hydrogen: implications for underground hydrogen storage caprock integrity**	Bokelmann, G.; Meier, T.; Kolínský, P.; Lenhardt, W.; Jia, Y.: **The AdriaArray project**
08:40	Skrzypek E.; Gallhofer D.; Hauzenberger C.; Haas I.: **U-Th-Pb geochronology and initial Pb composition of magmatic allanite by LA-MC-ICP-MS**	Plinninger, R.; Frühwirt, T.; Mutschler, T.: **Empfehlungen und Empfehlungsarbeit des AK 3.3 „Versuchstechnik Fels“ der Deutschen Gesellschaft für Geotechnik e.V.**	Schreilechner, M.G.; Eichkitz, C.G.; Binder, H.; Hasni, M.; Neuhold, C.; Jara, C.; Jud, M.; Schön, J.; Wessely, G.; Lüschen, E.; Sperl, H.; Garden, M.; Keglovic, P.: **Tiefe Geothermie Wien**	Dangwal, D.; Behm, M.; Chen, X.; Soreghan, G.: **Passive seismic imaging of bedrock depth and sediment fill of an alpine valley in the Colorado Plateau (US)**
Session Chair	**Hydrogeology** S. Birk, S. Hilberg			
09:00	Soto Bravo, F. & Zhang, C.: **Investigating pore coupling effects in near-surface environments using nuclear magnetic resonance**	Plinninger, R. & Alber, M.: **Praxisorientierte Untersuchung und Klassifizierung anisotroper Festigkeitseigenschaften von Festgesteinen**	Levi, N.; Diessl, J.; Bruno, M.; Nazari, F.; Roters, B.; Young, J.: **Preliminary results of the InStRikE project: risk-assessment of induced seismicity in geothermal fields**	Apoloner, M.-T.: **Seismic Monitoring for Deep Geothermal Projects in Austria**
09:20	Zhang, C.: **The role of low-field nuclear magnetic resonance in critical zone research**	Schmidbauer, J.; Wenighofer, R.; Schwager, P.; Amtmann, J.; Gegenhuber, N.: **Forschungsprojekt GeoDrone: Geotechnische und petrophysikalische Aspekte**	Cheng, F.; Xia, J.; Ajo-Franklin, J.B.; Behm, M.; Zhou, C.; Dai T.; Xi, C.; Pang, J.; Zhou, C.: **Passive seismic methods for geothermal exploration: A case study from the Jinqu Basin (China)**	Strasser, M.; Moernaut, J.; Daxer, C.; Oswald, P.; Fabbri, S.; Hammerl, C.; Skapski, J.; Weginger, S.: **Updates from Lake Paleoseismology as contribution to improve seismic hazard assessment and awareness of secondary earthquake effects in Austria**
09:40	Rinder T. & Hilberg S.: **Forum Bergbau und Wasser – Hydrogeologische Begleitforschung zum Ende des Deutschen Steinkohlebergbaus – Hydrogeochemische Aspekte am Beispiel Anthrazitbergbau Ibbenbüren**	Amtmann, J.; Schmidbauer, J.; Wenighofer, R.; Kink, D.; Gegenhuber, N.: **Forschungsprojekt GeoDrone: AI Workflow**		
10:00-10:20	**Coffee Break + Poster**			
Session Chair			**Young Sediments** S. Neuhuber, M. Wagreich, B. Salcher	
10:20	Haas, J.; Birk, S.; Retter, A.; Griebler, C.: **Ein integrativer Überblick über die Grundwasserqualität im Murtal: Von der Quelle bis zur Slowenischen Grenze**	Schünemann, V. & Villeneuve, M.: **Development of a demonstration project for the construction of a compressed air storage in existing disused mining galleries based on geonumerical modelling**	Jawecki, C.; Weil, J.; Bauer, M.; Lappé, K.: **3D Ground Model of Vienna: from geological concept to geotechnical application**	Akhverdiev, A.; Afanasenkov, A.; Lavrik, A.: **Pore-pressure and geomechanical parameters prediction based on elastic inversion results**

Session Chair	Hydrogeology S. Birk, S. Hilberg	Engineering Geology M. Villeneuve, S. Kieffer	Young Sediments S. Neuhuber, M. Wagreich, B. Salcher	Seismology W. Lenhardt, G. Bokelmann
10:40	Kokimova, A.; Collenteur, R.; Birk, S.: **Identification of recharge components and unknown stresses in alluvial aquifers using time series modelling**	Maier T. & Villeneuve M.: **Physical and Geomechanical Characterization of Volcanic Rocks from Styria**	Schmalfuss, C.; Firla, G.; Lüthgens, C.; Neuhuber, S.; Fiebig, M.: **Early results from the ICDP project DOVE (Drilling Overdeepened Alpine Valleys): Revisiting the Hole of Bad Aussee**	Fuchs, F. et al.: **Distributed acoustic sensing: opportunities, challenges, and data highlights from railway installations in Austria**
11:00	Seelig, M.; Kainz, S.; Hausleber, M.; Obwegs, M.; Eybl, J.; Winkler, G.: **Time Series and Trend Analysis of Austrian Springs**		Miesebner, L.; Müller, M.; Friedl, M.; Dietzel, M.; Hippler D.: **The Weissensee – A natural carbonate mineral factory**	
11:20	Kainz, S.; Wagner, T.; Krainer, K.; Avian, M.; Olefs, M.; Haslinger, K.; Winkler, G.: **A thermokarst-related debris flow event at an active rock glacier in the Ötztal Alps (Tyrol, Austria)**		Wagreich, M.: **Stratigraphy of the Anthropocene**	
12:00-12:45	**Poster Award & Closing**			

Advanced Structural and Geochemical Characterization of Geomaterials

(1) Epov, A.; Chernonozhkin, S. M.; Puschenreiter, M.; Tognacchini, A.; Meisel, T. C.; Prohaska, T.; Irrgeher, J.
Assessing analytical methods for high precision Ni isotopic analysis in rhizosphere samples from Ni hyperaccumulating plants

(2) Hiller, J. M.; Gopon, P.; Bertrandsson Erlandsson, V.
A green future from a contenious past: gold and critical metals in a historic arsenic mining district Strassegg (Styria)

(3) Moser, U.; Čeplak, B.; Aldrian, A.; Hočevar, S.; Kralj, P.; Šala, M.; Vollprecht, D.; Žibret, G.; Irrgeher, J.
MURmap - Holistic geochemical tracking of elements and their sources in the Mur/Mura River Catchment

(4) Müller, S.; Misch, D.; Skerbisch, L.; Shi, X.
Porosity – depth trends for Vienna Basin mudstones: Validation of broad ion beam – scanning electron microscopy as a seal prediction tool

(5) Nasiri, A.; Ravi, K.; Prohaska, M.
Mono-energetic Micro-computed tomography(µCT): A reliable potential alternative to mineral Investigation of formation rock

(6) Neuschitzer, D.; Scheiblehner, D.; Sprung, A.; Wibner, S.; Gross, D.; Antrekowitsch, H. **Formation of intermediate decomposition products (PAHs) during methane pyrolysis in a liquid metal bubble column reactor**

Applied Mineralogy

(7) Baumann, C.; Galan, I.; Sakoparnig, M.; Dietzel, M.;
Growth of brucite on portlandite crystal surfaces

(8) Grengg, C.; Rudic, O.; Hofrichter, M.; Steindl, F.; Wohlmuth, D.; Dietzel, M.; Mittermayr, F.
Metallurgic slag-based geopolymer materials in the circular economy

(9) Kojic, I.; Dojcinovic, B.; Stojanovic, K.
Preliminary study of copper (II) ions removal from wastewater using solid residue obtained by co-pyrolysis of lignite and high-density polyethylene mixture

(10) Lontschar, K.; Mittermayr, F.; Perez, G.; Dietzel, M.; Galan, I.
Vanadium leaching from thermochromic cement

(11) Ratz, B.; Baldermann, A.; Stamm, F. M.
Formation and environmental significance of short-range order allophanehisingerite solid solutions

(12) Sammer, T.; Nasiri, A.; Feichter, M.; Ravi, K.
Tackling challenges concerning the integrity of downhole cement/rock during underground gas storage: an interdisciplinary approach

(13) Stamm, F. M.; Balderman, A.; Dietzel, M.
Silicon isotope fractionation during the formation of amorphous (alumino)silicate phases

(14) Zoegl, I.; Grengg, C.; Mueller, B.; Wedenig, M.; Kluge, T.; Boch, R.; Dietzel, M.
High-resolution spatiotemporal pH monitoring of coupled CO2 degassing and CaCO3 precipitation dynamics

Aspects of Seismology

(15) Nasir, A.; Hintersberger, E.; Decker, K.
The temporal evolution of seismicity and variability of Gutenberg-Richter b-values along the Vienna Basin Transfer Fault System

Economic Geology

(16) Baumann, C.; Raith, J. G.; Paulick, H.; Weilbold, J.; Auer, C.; Stranzl, C.; Dietzel, M.; Ebner, F.
Magnesite deposits in the Eastern Alps – integrative approaches

(17) Geringer, A.; Rohrhofer, S.; Melcher, F.; Reitner, H.; Benold, C.; Schuster, R.; Auer, C.; Paulick, H.; Grasemann, B.; Hubmann, B.; Large, D.
SEDEX deposits in the Graz Paleozoic – investigations to the exploration potential with the Arzberg deposit as calibration region

(18) Pittarello, L.; Fanesi, E.; Kolitsch, U.; Giuli, G.
The natural occurrence of native iron in basalt from Bühl near Weimar, Kassel, Germany: a new study based on historical samples

(19) Schubert-Hlavac, G.; Mali, H.; Schuster, R.; Steiner, R.; Rohrhofer, S.; Zahrl, M. A.; Sweda, M.; Horvat, C.; Knoll, T.
Prospecting for spodumene pegmatites by statistical evaluation of trace elements in magmatic muscovite

(20) Wallner, D.; Bertrandsson Erlandsson, V.; Raith, J. G.; Rantitsch, G.; Melcher, F.; Ellmies, R.
Mineralogical and Geochemical Characterization of the Dolostone Ore Formation, Kunene Region, Namibia

(21) Werdenich, M.; Reitner, H.; Schuster, R.; Melcher, F.; Rantitsch, G.; Mali, H.
Investigation of occurrences of high-quality quartz mineral resources in south-eastern Austria: First results from the Rittis quartzite

Geo-Energy

(22) Aghayeva, V.; Sachsenhofer, R. F.; van Baak, C., G., C.; Bazyramova, S.; Coric, S.; Vincent, S. J.
Chemostratigraphy of the Cenozoic succession in Azerbaijan: Implications for petroleum systems in the Caspian Basin

(23) Ajuaba, S.; Sachsenhofer, R. F.; Meier, V.; Gross, D.; Omodeo Sale, S.; Schnyder, J.
Hydrocarbon potential of Permo-Carboniferous rocks (Weiach, Switzerland)

(24) Schreilechner M. G.; Eichkitz, C. G.; Binder, H.; Hasni, M.; Neuhold, C.; Schön, J.; Wessely, G.; Keglovic, P.; Eckerstorfer, H.; Kulich, J.; Götzl, G.; Leusbrock, I.; Tugores, C. R.; O'Donovan, K.; Falay, B.; Haslinger, E.; Auer, R.; Friedrich, R.; Heinemann, G.
Aquifer Thermal Energy Storage Vienna

(25) Weissl, M.; Flores Orozco, A.; Decker, K.
Mapping active faults in the region of Vienna to minimize seismic risks associated with geothermal energy production

Geophysics

(26) Akhverdiev, A.;
Prediction of reservoir properties in carbonate and clastic sediments on the South Ural Foreland based on the results of elastic inversion

(27) Akhverdiev, A. & Aleynikov, I.
Seismic data Quality Control based on analysis of Semblance and Envelope attribute

(28) Eichkitz, C. G.; Schreilechner, M. G.; Arndt, D.; Madritsch, H.; Spillmann, T.; Merz, K.; Hölker, A.
Unterschiede in der Störungskartierung von potentiellen Endlagern aufgrund alternativer seismischer Processingvolumen

(29) Jud, M.; Eichkitz, C. G.; Schreilechner, M. G.; Binder, H.
Festgesteinsseismik in Metamorphiten

(30) Schattauer, I.; Hintersberger, E.; Ullrich, C.; Supper, R.; Motschka, K.
The usage of GIS edge-approximation tools on vintage aerogeophysical data with focus on fault interpretation

(31) Schlögel, I.; Apoloner, M.-T.; Weginger, S.
Die „Geräusche der Erde" rund um und im Traunsee – Projekt TiefenRausch

(32) Scholger, R., Fritz, I., Nell, O.
Geophysical prospection of the Pliocene volcanic massif Königsberg-Klöch in Southeast Styria (Austria)

(33) Scholger R.; Sarc, R.; Lorber, K.; Reiselhuber, K.
Geoelectric monitoring of irrigation experiments at the Rautenweg landfill (Vienna)

Geoscience and Archeology

(34) Oettel, L.; Degenhart, G.; Tropper, P.
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