



Second Circular

Basalt 2025

The meeting takes place
from 28. September to 2. October 2025
in
Kapfenstein / Styria / Austria in the *Steirisches Vulkanland*.

Venue

The *Steirisches Vulkanland* is located in the southeast of Austria in the center of Europe. The foundation stone for the *Steirisches Vulkanland* was laid with the vision of transforming the (former) border region into an innovative and livable region. In 1999, the association for the promotion of the *Steirisches Vulkanland* was founded,

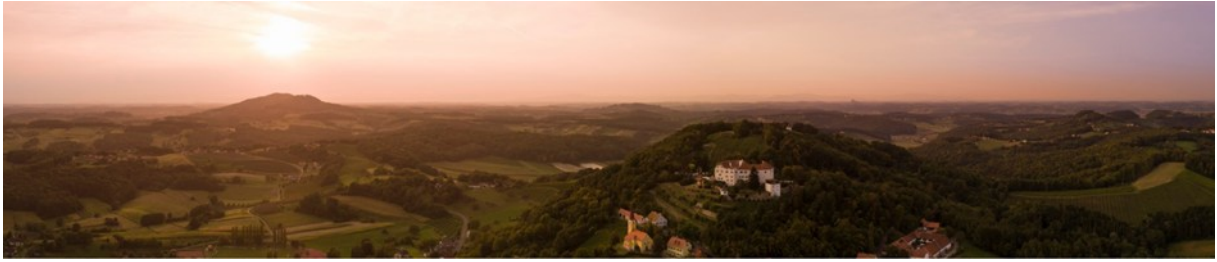


and with it the name "Vulkanland" was officially adopted. The decision behind this is to bundle all activities in the region and make them visible using the regional brand "Steirisches Vulkanland". With the vision of human, ecological and economic sustainability, the Styrian Volcanic Land is on the way to becoming the most livable region in Europe.

Since 2022, making geology and volcanism visible has been a focus of regional projects supported by the federal government, the state and the European Union.



The Styrian Basin is a marginal bay of the Pannonian Basin on the eastern edge of the Alpine arc. Crystalline rocks and paleozoic carbonate rocks form the mountainous frame in the southwest, west and north as well as the geological base of this basin. The Styrian Basin is divided by north-south swells - in the transition to the western Hungarian area this is the South Burgenland Swell. Palaeogeographically, the Styrian Basin is part of the Central Paratethys. The formation of the basin and the associated simultaneous filling began around 18 million years ago. Deposits of limestone, gravel, sand and clay with individual coal layers up to 4000 m thick document a change in the landscape in – form a geological point of view - short periods of time. A characteristic of the Styrian Basin is the former strong volcanic activity. This volcanism, which is part of a volcanic arc that stretches from Slovenia to the Carpathian arc, is assigned to two temporally, chemically and genetically different periods. Calc-alkaline and alkaline magmatism is discussed to be closely related to subduction, rollback, collision and extension. The remains of volcanic structures from two volcanic phases of recent Earth history characterize the landscape, are unique for Austria and form the foundation of the region's regional development.



Content

Following the successful Basalt meetings in Görlitz (2013) and Kadan (2017), Basalt 2025 will also address Cenozoic magmatism throughout Europe from a multifaceted perspective across all relevant geoscience disciplines. In addition to facilitating expert exchanges, we aim to make these topics accessible to the general public through accessible presentations. The goal is to present new discoveries, insights, and developments for the understanding and social relevance of this important period in European geological history.



Eruption of the Klöcher volcanic complex in a short period of time about 2.51 million years ago (view to the north); Fritz Messner 2024, oil on linen 160 x 100 cm.

Meeting schedule

28. Sept.	8330 Feldbach, Rathausplatz 1 "Come together" in the Rathaus	18:30 - 21:00		
29. Sept.	Transfer to Kapfenstein* 8353 Kapfenstein, 123 - community center Welcome and opening Lectures	from 08:15 09:00 - 09:15 09:15 - 09:30 09:30 - 10:00 10:00 - 10:30 10:30 - 11:00 11:00 - 11:30	Josef Ober Martin Gross Ingomar Fritz Coffee break Robert Scholger et al.	Departure locations and times will be announced <i>Presentation of the Steirisches Vulkanland</i> The Styrian Basin Volcanic Remnants in the Styrian Basin Paleomagnetic results from Pliocene basalts in Styria (Austria) indicate intermediate field directions recorded during the Matuyama chron
		11:30 - 12:00	Vladislav Rapprich et al.	Submarine volcanism associated with incipient rifting on the Gondwanan periphery – Silurian volcanic rocks of the Prague Basin
	Poster presentation	12:00 - 12:30	Martin Kasing et al. Tomáš Magna et al. Stephan Karl Robert Scholger et al. Anna Knaus-Maurer et al.	Almost eroded but still there: Oldest diatreme volcanoes of pre-Quaternary age in the eastern Bohemian Massif, Czechia Contrasting lithium isotope signature during weathering of submarine ocean island basalts and mid-ocean ridge basalts The Exploitation of Trachyandesite in Roman Times – Millstone Quarries at the Gleichenberger Kogel, Styria (Austria) Geophysical prospection of the Pliocene volcanic massif Königsberg-Klöch in Southeast Styria (Austria) "The regional rock box" for the Steirisches Vulkanland
	Lunch	12:30 - 13:30		
	Lectures	13:30 - 14:00	John M. Hora et al.	A clue to the origin of the Common Mantle Reservoir? Unaltered minerals from Teschenite Association Rocks provide a snapshot of Early Cretaceous mantle isotopic compositions beneath the northern margin of the Tethys
		14:00 - 14:30	Kai-Uwe Hess et al.	Limits of imitation: volatile loss in lunar mare simulants and fresh volcanic analogues
		14:30 - 15:00	Olaf Tietz et al.	Pre-rift diatremes in the Lusatian volcanic field: Mapping of two complex volcanic structures provides first data on the Campanian-Maastrichtian paleogeography of the northern Bohemian Massif
		15:00 - 15:30	Maria Heinrich	Do rocks make the wine?
	Guided hike Kapfensteiner Kogel	15:30 - 18:00	Ingomar Fritz Maria Heinrich	Museum Geo-Info Kapfenstein and part of the Geotrail Kapfenstein Visit to the exhibition <i>Struktur und Textur - Skulpturen aus Stein</i> (Maria Heinrich & Gerhard Koch) in the "Langen Keller", Weingut Winkler-Hermaden.
	Dinner at the Kapfensteinerhof, Kapfenstein (then transfer)	18:00 - 20:00		

30. Sept.	Transfer to Kapfenstein*	from 08:15		Departure locations and times will be announced
	8353 Kapfenstein, 123 - community center			
	Lectures	08:45 - 09:15	Kai-Uwe Hess et al.	Cooling rates of lunar orange glass beads
		09:15 - 09:45	Froukje M. van der Zwan et al.	Magmatic processes in distributed basalt volcanism at the young intraplate Harrat volcanoes, Saudi Arabia
		09:45 - 10:15	Károly Németh et al.	Basalts of the harrats as heritage stone for Saudi Arabia
		10:15 - 10:45	Coffee break	
		10:45 - 11:15	Károly Németh et al.	The role of geoheritage and geodiversity of Saudi Arabia in the light of sustainable development and natural resource management within geosystem services concept
		11:15 - 11:45	Mathias Steinbichler et al.	GeoSphere Maps and other public available geological data in the Vulkanland
	Lunch at Gasthof Höfler, Kapfenstein	12:00 - 13:00		
	Fieldtrip Steirisches Vulkanland (Northern part)	13:00 - 18:00		Clay pit Mataschen - Basalt quarry Steinberg / Feldbach - Riegersburg - Altenmarkt /Riegersburg
1. Oct.	Dinner (cold) at the Buschenschank Bernhart in Riegersburg (then transfer)	18:00 - 20:00		
	Transfer to Kapfenstein*	from 08:15		Departure locations and times will be announced
	8353 Kapfenstein, 123 - community center			
		08:45 - 09:15	Vladislav Rapprich et al.	Recurrent growth of maar-hosted pyroclastic cone – case of Pleistocene Bažina maar, Western Bohemia
		09:15 - 09:45	Mátyás Hencz et al.	Paleogeographic control on eruption style changes in a Miocene maar-diatreme: rock componentry analysis and detailed field work (Bakony-Balaton Highland Volcanic Field, Hungary)
		09:45 - 10:15	Robert Scholger et al.	Geophysical prospection of the Pliocene volcanic massif Königsberg-Klöch in Southeast Styria (Austria)
		10:15 - 10:45	Coffee break	
		10:45 - 11:15	Heimo Ecker-Eckhofen	Energy project Weitendorf quarry
		11:15 - 11:45	Ioan Seghedi et al.	Reconstruction of eroded Pliocene Klöch monogenetic volcanic field in south eastern Austria, Styrian basin
	Lunch at Gasthof Höfler, Kapfenstein	12:00 - 13:00		
2. Oct.	Fieldtrip Steirisches Vulkanland (Southern part)	13:00 - 18:00		Stradnerkogel (basalt quarry) - Königsberg-Klöcher volcanic field
	Galadinner in Schloss Kapfenstein (then transfer)	18:00 - 21:00		
	Fieldtrip Steirisches Vulkanland - off/on Graz, (off/on Feldbach)	08:00 (09:00) - 17:00 (18:00)		Riegersburg (point of view) - Steinberg / Feldbach (former basalt quarry "Nordbruch") - Burgfeld / Fehring (former clay pit) - Kapfenstein (museum - lunch break) - St. Anna am Aigen (point of view) – Strad ner Kogel (basalt quarry) - Klöch (basalt quarry) - Weitendorf (basalt quarry)

(possibility of transfer to the main station and airport in Graz)

* We offer a daily transfer from a central location of the accommodation to the conference venue in Kapfenstein, which will be coordinated with the participants.



Eruption of the Riegersburg volcano with the Altenmarkt Maar lake in the foreground, 3.71 million years ago (view to the northeast); Fritz Messner 2024; oil on linen, 160 x 100 cm.

The conference language is English. Conference documents with abstracts of all presentations and an excursion guide will be available at the meeting (abstracts are in English and German). A subsequent publication with expanded contributions is planned for 2026.

Conference office:

The conference venue is the community center in **8353 Kapfenstein 123**.
Further information on the website: <https://www.vulkanland.at/basalt2025/>

Tanja Gradwohl, tanja.gradwohl@kapfenstein.at
Anna Knaus-Maurer, knaus-maurer@vulkanland.at

Please send any inquiries to both addresses

We look forward to your visit to the “Land of Diatremes”!



Image sources: Steirisches Vulkanland. Impressions of the landscape: Geology can be seen and experienced / Bergmann & Flor