



basalt 2013

Cenozoic Magmatism of Central Europe

Program of oral and poster presentations

Thursday 25th April 2013

9:00	Welcome	Olaf Tietz Mattias Jackisch Jörg Büchner	Opening "The sound of Basalt" Introduction
Session 2a		Tectonic & age control on magmatism	
Chairs: Karoly Neméth & Zoltan Pécskey			
9:15	Key note	Pécskey & Birkenmajer	Insight into the Geochronology of Cenozoic alkaline basaltic volcanic activity in Lower Silesia (SW Poland) and adjacent areas
9:45		Pécskey et al. Badura & Aleksandrowski	Geochemistry of Na-alkalic Tertiary volcanics in Lower Silesia, Poland; a geodynamic analysis On the northern termination of the Eger (Ohře) Graben
10:00		Büchner et al.	The Lusatian Volcanic Field – link between the Ohře Rift and the Eastern European Volcanoes
10:15		Harangi et al.	Origin and geodynamic relationships of the Late Miocene-Quaternary alkaline basalt volcanism in the Pannonian Basin, eastern-central Europe
10:30			
10:45-11:00	Break		
11:00		Schreiber & Berberich	New Findings on Gas Migration and Active Tectonics in the East Eifel Volcanic Field
11:15		Cramer et al.	Understanding ⁴⁰ Ar/ ³⁹ Ar age variations in basalt lavas: A combined geochemical, petrographic and X-ray computed tomographic study
11:30		Brož et al.	Basalt dyke swarm patterning in extensional rift systems: insight from scaled analogue modeling
11:45		Upton et al.	Intraplate basaltic magmatism of the British Isles during the late Palaeozoic
12:00		Lustrino et al.	Leucitites and leucitites within and around the Mediterranean
12:15	Key note	Sheth	The intrusive substructure of the Deccan Traps volcanic province
12:45-13:45	Lunch		

Session 2b**Documents of magma ascent, storage and melt evolution: fluids, seismology, phenocrysts, petrology****Chairs: Horst Kämpf, Wolfram Geissler**

13:45	Key note	Fischer	Earthquake swarms in West Bohemia/Vogtland as a swansong of recent volcanism?
14:15		Mullick et al.	Reflection seismic investigation of the geodynamically active West -Bohemia/Vogtland region
14:30	Key note	Bräuer et al.	Active magmatic processes traced by fluid migration through the crust in Central Europe
15:00		Alexandrakis et al.	Velocity structure of the West Bohemia Seismic Zone
15:15-15:30		Break	
15:30	Key note	Holtz et al.	Determination of magma storage conditions: contribution and limitations of petrological approaches
16:00		Yücel et al.	Clinopyroxene mineral chemistry and thermobarometry of Tertiary alkaline volcanics in the Trabzon-Giresun areas, NE Turkey: Implications for shallow to deep crustal magma chamber processes
16:15		Abratis et al.	Magma mixing with basanitic melt is the source for peridotites in the Heldburg phonolite
16:30		Nejbert et al.	Mineral chemistry of chevkinite group minerals from andesitic rocks of the Western Outer Carpathians
16:45		Demko & Bazarnik	Geochemistry and petrology of the Neogene rhyolites from the Central Slovakia volcanic field, Western Carpathians
17:00-17:15		Break	

Session 4**K.H. Scheumann and the ultramafic rocks****Chairs: Vladislav Rapprich & Antonin Paluska**

17:15		Paluska et al.	Type and important localities of ultramafic and associated dyke rocks in northern Bohemia
17:30		Paluska & Büchner	Significant mineral composition of ultramafic and associated dyke rocks in northern Bohemia and their variations
17:45		Paluska et al.	Age and time mode of ultramafic and associated dyke rocks in northern Bohemia

18:30 Poster presentation of all Sessions (1 – 2 hours)**19:30-20:30 Dinner**

Friday 26th April 2013

Session 1

The Upper mantle beneath Central Europe - physical, mineralogical, and chemical characteristics

Chairs: Thomas Meier, Jacek Puziewicz & Lothar Viereck

Part 1.1

Geophysical characterization of current structure of upper mantle beneath Central Europe

9:00 **Review talk** Achauer et al. **What is the lithosphere-asthenosphere boundary? - a quest for information: the LABPAX project**

9:30 **Key note** Meier et al. **A shear-wave velocity model of the European upper mantle from automated inversion of seismic shear and surface waveforms**

10:00 Plomerova et al. Seismic imaging the lithosphere-asthenosphere system beneath the Bohemian Massif to better understand the structural setting of the Cenozoic volcanism

10:15 Babuška et al. Rejuvenated Variscan boundaries of mantle lithosphere domains as major paths of Cenozoic volcanism

Part 1.2

Petrological and geochemical characterization of mantle lava sources by studies of volcanic rocks

10:30 **Key note** Lustrino **Scientific delirium vs. scientific dogma in basalt petrogenesis**

11:00-11:15 Break

11:15 Sagi & Harangi Origin of the magmas in the Late Miocene to Quaternary Nógrád-Selmeč monogenetic alkali basalt volcanic field, southern-central Slovakia

11:30 White et al. Petrologic constraints on melting conditions in the Strait of Sicily Rift Zone

11:45 Rosca et al. New geochemical constraints on mafic volcanism in the French Massif Central from Sr-Nd-Hf-Pb isotope analyses

12:00 Viereck & Abratis Compositional variations of magmas in volcanic fields of the Central European Cenozoic Igneous Province reflect the topography of the lithosphere-asthenosphere-boundary

12:15 Ntaflos et al. Insights into Cenozoic alkaline basalts from SW Poland: high mantle potential temperatures as an evidence for local thermal anomalies ("finger plume"?)

12:30 Conference Photo

12:45-13:45 Lunch

Part 1.3		Petrological and geochemical characterization of lithospheric mantle by xenolith studies	
13:45	Key note	Downes	Mantle formation – ancient and modern
14:15		Renno	Light elements in mantle minerals – what we are talking about
14:30		Magna et al.	Lithium isotope evidence for pervasive metasomatism of subcontinental lithospheric mantle in peridotitic xenoliths from the Upper Palatinate, Germany
14:45	Key note	Puziewicz et al.	Lithospheric mantle beneath Central Europe: Lithology beyond standard?
15:15		Špaček et al.	Garnet breakdown in basanite-hosted peridotite xenoliths from southern Eger Rift (Zinst, Bavaria)
15:30-15:45	Break		
15:45		Medaris et al.	Chemical and physical properties of central European lithospheric mantle from the Moho to a depth of 83 km: evidence from Kozákov spinel peridotite xenoliths
16:00		Matusiak-Małek et al.	The fluid and melt metasomatism of lithospheric mantle beneath SW Poland: the Krzeniów basanite case
16:15		Ackerman et al.	Petrology and geochemistry of mantle xenoliths from České Středohoří Mts. and Lusatia, Bohemian Massif
16:30		Mundl et al.	Major element whole rock and mineral chemistry of Southern Patagonian Mantle Xenoliths
16:45		Cina & Meshi	Later chromitites from ophiolites of Albania
18:00 Sightseeing: guided tour through the Görlitz Old Town			
19:00 Conference Dinner			

Saturday 27th April 2013

Session 3a

Volcanism & landscape evolution

Chairs: Jörg Büchner, Vladimir Cajz & Vladislav Rapprich

9:00	Key note	Németh	New advances in understanding the role of internal versus external forces on the eruption mechanisms, growth and destruction of monogenetic volcanoes
9:30		Pedrazzi et al.	La Crosa de Sant Dalmai: an example of a quaternary maar in a mixed setting
9:45		Lorenz	Phreatomagmatic basaltic volcanism in Central and Western Europe and its relevance
10:00		Seghedi et al.	The Perşani Mountains Na-alkalic basaltic volcanic field-revised volcanology
10:15		Szakács & Soós	Locating phreatomagmatic eruptive centers by "inverse ballistics": A new methodological approach applied in the Persani Mts., Romania
10:30		Soós & Szakács	Tentative location of maar-type phreatomagmatic alkali-basaltic volcanic centers in the Mateias area (Persani Mts., Romania)
10:45-11:00		Break	
11:00		Suhr & Goth	The Maar of Hammerunterwiesenthal - a "Complex Monogenetic Volcano", Saxony
11:15	Key note	Szakács	Volcano instability: causes, processes and consequences
11:45		Rapprich et al.	Sector spreading of eastern part of the Doupovské hory Volcanic Complex caused by heterogeneous substrata
12:00		Schindler & Wuttke	Volcanically influenced terrestrial ecosystems of the Westerwald Basin (Upper Oligocene, W Germany)
12:15		Uhl	The Westerwald Volcanic Field and its fossil floras – important taphonomic windows into Late Oligocene vegetation and climate
12:30		Lutz	The extinct volcanoes of Central France – Nicolas Demarest's famous volcanological map in a so far unrecorded copy printed in his lifetime in 1811
12:45-13:45		Lunch	

Session 3b**Volcanology & Geophysics****Chairs: Jan Mrlina & Peter Suhr**

13:45	Key note	Mrlina	Search for volcanoes based on constraining geophysics and geomorphology
14:15		Klarner & Klarner	Identification of Paleo-Volcanic Rocks on Seismic Data
14:30		Cajz et al.	First paleomagnetic results from Cenozoic volcanics of Lusatian region, Saxony/Bohemia
14:45		Skácelová et al.	Magnetic investigation of the volcanic intrusions and maar-diatreme volcanoes in the Czech Republic in the years 2009–2012
15:00		Torres et al.	Reconstruction of the great episodes of destabilization of Stromboli volcano (Italy) by coupling methods of electrical resistivity tomography, diffusion of gases in the soil and bathymetry survey
15:15		Krentz & Horna	Is the structure of Börnersdorf a possible maar diatreme volcano?
15:30-15:45		Break	

Session 3c**Volcanism and society - geotourism, hazards, resources****Chairs: Michael Abratis & Olaf Tietz**

15:45		Moufti & Németh	The establishment of a volcanic geopark in the Kingdom of Saudi Arabia: Harrat Al Madinah Volcanic Geopark
16:00		Harangi	The role of volcanic heritage in the geotourism of Hungary: perspectives and limitations
16:15		Fritz & Scholger	The basalt quarry Klösch – a geological fundament for the region and trademark “Styrian volcano land”, Austria
16:30		Bitschene	Basalts and Volcanoes – Edutainment in the West Eifel Volcanic Field (Vulkaneifel European Geopark)
16:45		Scholle	Geotourism at the basalt of Stolpen in Saxony

17:30 Poster presentation of all Sessions (1 – 2 hours)**19:00 Final statements and price awards****19:45-20:45 Dinner**

Poster contributions presented on 25th and 27th April respectively

Poster-session 1		The Upper mantle beneath Central Europe - physical, mineralogical, and chemical characteristics
Poster 1-1	Kukuła et al.	Preliminary data on mantle xenoliths from Steinberg (Upper Lusatia, SE Germany)
Poster 1-2	Ćwiek et al.	Preliminary data on mantle xenoliths from the Pilchowice basanite (SW Poland)
Poster 1-3	Geissler et al.	Lithospheric structure beneath the Lusatian and Silesian Volcanic Fields – constraints from teleseismic receiver functions
Poster 1-4	Lipa et al.	Diopside megacrysts from the Cenozoic Ostrzyca Proboszczowicka basanite (SW Poland)
Poster 1-5	Estrada & Henjes-Kunst	Cretaceous intra-continental basalt volcanism on north-east Ellesmere Island, Canadian High Arctic
Poster 1-6	Blümel et al.	Low temperature fertile mantle xenoliths from Sikhote-Alin, Far East Russia
Poster 1-7	Asan & Francis	Trace element and Sr-Nd isotopic characteristics of basalts from the Elmadağ Volcanic Complex, Turkey
Poster 1-8	Litvin	Ultrabasic-basic evolution of primary mantle magma by evidence of physicochemical experiments
Poster 1-9	Nowak et al.	Testing validity of geochemical mantle domains mixing theory (EM, DM, HIMU-FOZO) for the metasomatized, Cenozoic, lava-driven lithospheric mantle rocks from the Złotoryja Volcanic Field (SW Poland)
Poster 1-10	Ashchepkov et al.	Structure of mantle column beneath Bartoy volcanoes (South-East Khamar-Daban, Transbaikal) and the factors of it's evolution
Poster 1-11	Ashchepkov et al.	Mantle xenoliths from Primorie (Russian Far East)
Poster-session 2a		Tectonic & age control on magmatism
Poster 2a-1	Kovacs et al.	Firiza basalts - the final stage of the Neogene calc-alkaline volcanic activity from Gutâi Volcanic Zone, Eastern Carpathians, Romania
Poster 2a-2	Obst et al.	Early Eocene basaltic ashes ('cement stones') in north-eastern Germany
Poster 2a-3	Kouankap Nono et al.	Petrochemical analyses and Ar/Ar dating of doleritic basalts from Banefo-Mvoutsaha area (ENE Bafoussam) Cameroon Evidence of Mesozoic volcanism within the Cameroon volcanic line and it interpretation in the Gondwana evolution
Poster 2a-4	Bartók	Basic magmatic formations within the eastern part of the Bükk Mountains, Hungary
Poster-session 2b		Documents of magma ascent - storage and melt evolution: fluids, seismology, phenocrysts, petrology
Poster 2b-1	Deniz & Kadioğlu	Nature of the Pseudoleucite within the Alkaline Basalts, Akçakent, Central Anatolia, Turkey
Poster 2b-2	Rudenko & Derevska	Composition of gas phase in rocks and minerals of Neoproterozoic flood basalts in western part of East European Platform
Poster 2b-3	Jankovics et al.	Origin and ascent history of unusually crystal-rich alkaline basaltic magmas from the western Pannonian Basin
Poster 2b-4	Goleń et al.	The deep origin of cores of clinopyroxene phenocrysts from the Księginki (SW Poland) nephelinite
Poster 2b-5	Tietz et al.	Zircon megacrysts associated with alkaline volcanic rocks from Saxony and Northern Bohemia – new aspects of typology, chemistry and mineral inclusions

Poster session 2b continued

Poster 2b-6	Pöllmann	Tertiary volcanism in the western part of the Eger rift and their secondary minerals
Poster 2b-7	Loges et al.	Geochemical and petrographical investigation of basanite from the northern margin of the Eger Graben
Poster 2b-8	Heinicke et al.	Geophysical and geological survey of the inner and outer structure of the Mýtina maar, western Eger Rift
Poster 2b-9	Brandl et al.	Quaternary volcanism in Central Europe: new results from Železná Hůrka/Eisenbühl (Czech Republic)
Poster 2b-10	Nickschick et al.	Tracing and quantifying magmatic gas discharge in the diffuse degassing area of Hartoušov (western Eger Rift), based on combined CO ₂ soil gas flux studies and geophysical surveys
Poster 2b-11	Funke et al.	Local seismicity in Saxony – Swarm earthquakes and (magmatic?) fluids
Poster 2b-12	Nickschick et al.	The "Triasscholle" near Greiz, E Germany - A volcanic origin?
Poster 2b-13	Schmidt et al.	Investigations on the origin of the magnetic anomalies at the Ebersbrunn diatreme (W Saxony, Germany)
Poster 2b-14	Schüller et al.	Juvenile fragments in the diatreme breccia of the Ebersbrunn diatreme (West Saxony, Germany)
Poster 2b-15	Campagnola et al.	San Venanzo intrappenninic volcanic complex, Part I: textural constraints and preliminary definition of volatiles in kamafugitic magmas
Poster 2b-16	Lucci et al.	San Venanzo intrappenninic volcanic complex, Part II: mineral chemistry evolution related to volatiles in kamafugitic magmas
Poster 2b-17	Huber et al.	Geochemical characteristic of vein –rocks from the central part of Khibina massive, (Kola pen., Baltic Shield)
Poster-session 3a		Volcanism & landscape evolution
Poster 3a-1	Kereszturi et al.	Response of eruption style on changing external controls during monogenetic volcanism – New insights of spatial location of vent on the Bakony-Balaton Highland Volcanic Field (Hungary)
Poster 3a-2	Gacki	Lava Tubes – presence on the Earth and Solar System, origin and morphology
Poster 3a-3	Goth & Suhr	Oligocene maars and scoria cones in East Saxony, the Gutttau Volcano Group
Poster 3a-4	R. Lobst	On the deposits and structure of the Großschönau Tertiary basin (southeastern Saxony, Germany)
Poster 3a-5	Büchner & Tietz	The landscape evolution of the Lausitz Massif – results from neovolcanic edifices from the Lausitz Volcano Field (Eastern Germany)
Poster 3a-6	Rapprich & Skácelová	Phreatomagmatic volcanism in the Bruntál Volcanic Field
Poster 3a-7	Németh & Kereszturi	On the variety of Mio-Pleistocene root zones of monogenetic volcanoes of the Pannonian Basin
Poster 3a-8	Kereszturi et al.	Eruptive volume estimate of the Nógrád-Gömör/Novohrad-Gemer Volcanic Field (Slovakia-Hungary)
Poster 3a-9	Németh et al.	Episodically rejuvenating Cenozoic subaqueous mafic monogenetic volcanism in the Chatham Island (SW-Pacific)
Poster 3a-10	Agustin-Flores et al.	Volcanic construction of North Head (Auckland Volcanic Field, New Zealand) a scenario for emergent volcanism in the Auckland Harbour
Poster 3a-11	Murcia et al.	Complex isolated-to-nested pyroclastic cones and cone rafting in the AD 1256 Al-Madinah fissure eruption in the Kingdom of Saudi Arabia

Poster session 3a continued

Poster 3a-12	Jacoby	Three abundant types of Icelandic basalt
Poster 3a-13	Opp	Rock Glacier, Block Field or Block Slope? A Periglacial Block Accumulation on the Basaltic Schafstein (Rhoen Mountains, Germany)
Poster 3a-14	Onuzi & Shallo	Basalt in Albania
Poster 3a-15	Kaza et al.	Geological and physical-mechanical characteristics of basalts in Central Mirdita, Albania
Poster 3a-16	Rani et al.	Deccan Traps associated obsidian glass: a nuclear waste containment
Poster 3a-17	Herrero-Hernández et al.	Small-volume monogenetic volcanism in Argamasilla and Calzada-Moral basins (Campo de Calatrava Volcanic Field, Spain)
Poster-session 3b		Volcanology & Geophysics
Poster 3b-1	Schnabl et al.	Comparison of Cenozoic and Silurian basalts in magnetomineralogic properties and implication for Silurian paleogeography
Poster 3b-2	Pathak et al.	Palaeomagnetic, low field AMS and rock magnetic evidences from the lower part of the lava flow sequence from the Mandla lobe of the eastern Deccan volcanic province, India
Poster 3b-3	Bolós	Structural control on volcanic activity in the Garrotxa Volcanic Field inferred from geophysical methods
Poster-session 3c		Volcanism and society - geotourism, hazards, resources
Poster 3c-1	Jawecki et al.	Mines in the landscape of Strzelin County – native rock materials in local architecture
Poster 3c-2	Bolós et al.	The Study of ephemeral outcrops: the example of the Garrotxa Volcanic Field
Poster 3c-3	Tokarczyk-Dorociak et al.	Basalt in Strzegom – Landscape changes of Szeroka Mountain
Poster 3c-4	Kuşoğlu et al.	Physicochemical properties of rock fiber, Basalts from Turkey
Poster 3c-5	Rapprich et al.	Revision of potentially hazardous volcanic areas in southern Ethiopia
Poster 3c-6	Abratis et al.	The German Volcano Route – concept model for a geotouristic project interconnecting geosites of Cenozoic volcanism across Germany
Poster 3c-7	Bär et al.	Volcanism of the Vogelsberg and its touristic valorization
Poster-session 4		K.H. Scheumann and the ultramafic rocks
Poster 4-1	Ulrych et al.	Ultramafic pre-rift volcanism of the Osečná Complex, northern Bohemia
Poster 4-2	Paluska et al.	Karl Hermann Scheumann, a geologist and petrologist in the area of the Czech-German border
Poster 4-3	Abratis et al.	More melilitites in the Saxonian Vogtland, Germany
Poster 4-4	Paluska	Tectonic framework of ultramafic and associated dyke rocks in northern Bohemia
Poster 4-5	Paluska et al.	A project of new protected areas with ultramafic and associated dyke rocks in northern Bohemia