

Thursday, 12.11.09

08:30 - 09:00 **Opening**

Session I: Societies and Landscape in Prehistory

Chair: Ulrike Töchterle & Franziska Würfel

09:00 - 09:30 J. Müller (Keynote Talk)
Late Neolithic and Early Chalcolithic settlement patterns in Southeast Europe

09:30 - 09:50 D. Brandherm, A. Maass
Copper mining, settlement and society in the Early Bronze Age of southeast Spain

09:50 - 10:10 P. Della Casa
Intensification or expansion? - Driving forces in the Copper and Bronze Ages colonization of the Central Alps

10:10 - 10:30 R. Krause
Settlement structures and social hierarchies in Bronze Age mining communities in the Alps

10:30 - 11:00 **Coffee Break**

11:00 - 11:20 J. Dular
Economic background and social structure of the Hallstatt group in southeastern Slovenia

11:20 - 11:40 **Discussion**

Session IV: From Ore to Trade (Part 1)

Chair: Matthias Krismer

11:40 - 12:10 G. Artioli, I. Giunti, I. Angelini, P. Omenetto, P. Nimis, S. Recchia, B. Giussani, M. Marelli, I. Villa, B. Baumgarten (Keynote Talk)
Tracing the prehistoric copper sources in the Italian Alps: results and perspectives

12:10 - 12:30 N. Trampuž Orel, Rafko Urankar
Caput Adriae and the Eastern Alps: possibilities for metal connections during the transition from the final Late Bronze Age to the Early Iron Age

12:30 - 14:00 **Lunch Break**

14:00 - 14:20 A. Hauptmann
Sinai, Nile Delta an Southern Levant: Ore sources and metal trade

14:20 - 14:40 M. Krismer, U. Töchterle, G. Goldenberg, F. Vavtar, P. Tropper, J. Lutz, E. Pernicka
A mineralogical and petrological view at early Bronze Age copper slags from the Kiechlberg (North Tyrol, Austria)

14:40 - 15:00 **Discussion**

Session III: The Palaeo-Ecology of Prehistoric Ore Mining

Chair: Stefan Schwarz

15:00 - 15:30 W. Shotyk, M. Krachler, J. Zheng (Keynote Talk)
Atmospheric Contamination by Heavy Metals in Antiquity: Comparison of Evidence from Ombrotrophic Peat Bogs in Europe with Arctic Ice from Canada

15:30	-	15:50	I. Jouffroy-Bapicot, F. Monna, B. Forel, C. Leuvrey, C. Petit, C. Rambeau, S. Black <i>Palaeo-ecological and geochemical evidences of early metallurgy in Burgundy (Morvan and Nivernais - France)</i>
15:50	-	16:20	Coffee Break + Snack
16:20	-	16:40	D. Galop, F. Monna, A. Beyrie, E. Kammentaler, D. Rius <i>Five thousand years of metallurgical activities recorded in peat bogs from the western Pyrénées (France)</i>
16:40	-	17:00	T. Mighall, S. Timberlake, S. Singh, E. Krupp, I. Foster <i>Ancient pollution and vegetation change in the mining areas of the British Isles</i>
17:00	-	17:20	E. Breitenlechner, M. Hilber, J. Lutz, Y. Kathrein, A. Unterkircher, K. Oegg <i>The environmental impact of ancient mining evidenced by a multi-proxy analysis</i>
17:20	-	17:40	K. Koinig, R. Psenner, R. Tessadri <i>Early atmospheric pollution recorded in the sediments of high mountain lakes in the vicinity of mining areas</i>
17:40	-	18:00	Discussion
18:00	-	18:10	Break
18:10	-	19:00	Poster Presentations
19:00	-	21:00	Dinner & Poster

Friday, 13.11.09

Session V: Subsistence and Nutrition in Mining Areas

Chair:	Barbara Stopp & Thomas Pichler		
08:30	-	09:00	S. Shennan (Keynote Talk) <i>Early mining and subsistence: some theoretical considerations</i>
09:00	-	09:20	S. Schwarz <i>The natural environment round the Kiechlberg during Early Bronze Age</i>
09:20	-	09:40	M. Grabner, A. Klein, H. Reschreiter, F.-E. Barth <i>Wood supply of the Bronze Age salt mining site at Hallstatt, Austria</i>
09:40	-	10:00	O. Nelle <i>Wood and charcoal supply for prehistoric and medieval mining activities in the Eisenerzer Ramsau, Styria, Austria</i>
10:00	-	10:20	T. Ludemann <i>Fuel wood economy of historical mining in the Southern Black Forest (SW Germany)</i>
10:20	-	10:40	S. Klemm <i>Remains of charcoal production from the Middle Ages to the Modern Period - New types of archaeological monuments in the Eastern Alps</i>
10:40	-	11:10	Coffee Break

11:10	-	11:30	N. Boenke <i>Inside and Outside - First archaeobotanical evidences for the supply of the Bronze Age Mining area near Bischofshofen (Mitterberg region)</i>
11:30	-	11:50	E. Pucher <i>Hallstatt and Dürrnberg - two salt-mining sites, two different meat supply strategies</i>
11:50	-	12:10	K. Kowarik, H. Reschreiter, G. Wurzer <i>Modeling a mine - Agentbased modeling, system dynamics and experimental archaeology applied to the Bronze Age salt mines of Hallstatt</i>
12:10	-	12:30	Discussion

12:30 - 14:00 **Lunch Break**

Session VI: Prehistoric Mining – Primary Production and Reflection in Landscape

Chair: Erica Hanning

14:00	-	14:30	W. O'Brien <i>Stone axes, copper axes: mining, production and exchange networks in the Chalcolithic of Atlantic Europe</i>
14:30	-	14:50	C. Groer <i>Early copper mining in Western Europe</i>
14:50	-	15:10	F. Larocca <i>Grotta della Monaca: a copper and iron pre-protolithic mine in the Calabria region (Italy)</i>
15:10	-	15:30	S. Klemm <i>Bronze Age copper mining - landscape conditions and land-use in the Eisenerzer Alps, Styria (Austria)</i>
15:30	-	15:50	A. Jockenhövel, H. Popov <i>Late Bronze Age and Early Iron Age Gold Mining in the Eastern Rhodopes (Bulgaria)</i>

15:50 - 16:20 **Coffee Break + Snack**

16:20	-	16:40	F. Nicolis, M. Bassetti, P. Bellintani, N. Cappellozza, E. Mottes, E. Silvestri, L. Stefan <i>New evidence of archaeometallurgical activities during the Bronze Age in Trentino</i>
16:40	-	17:00	R. Maggi, M. Pearce <i>Changing subsistence structures and the origins of mining in the Ligurian Apennine mountains</i>
17:00	-	17:20	S. Timberlake <i>The discovery and exploitation of metal ores within upland areas of Western Britain during the Bronze Age - some lessons learnt from fieldwork, archaeological excavation, and experimental archaeometallurgy</i>
17:20	-	17:40	J. Lech <i>Neolithic and Copper Age flint mining in Europe: its impact on the early farming communities and reflection in the landscape</i>
17:40	-	18:00	G. Trnka <i>Early chert mining in the middle Danubian Area</i>

18:00 - 18:20 T. Stöllner
Copper and Salt – Mining communities in the Alpine Metal Ages

18:20 - 18:40 **Discussion**

18:40 - 19:00 **Break**

19:00 - 20:30 A. Kern & H. Reschreiter (Public Talk)

20:30 - 22:00 **Buffet**

Saturday, 14.11.09

Session IX: Documentation of Archaeological Excavations and GIS-supported Integrative Data Management

Chair: Gerald Hiebel

08:30 - 09:00 A. Frank (Keynote)
What is the use of ontologies concerning organizing data in multidisciplinary projects?

09:00 - 09:20 S. Stead
The CIDOC CRM: a standard for integration in multi-disciplinary archaeological projects

09:20 - 09:40 G. Hiebel, K. Hanke
GIS supported implementation of ontology based data management for multi-disciplinary research

09:40 - 10:00 P. Grussenmeyer, B. Cazalet, A. Burens, L. Carozza
Close range terrestrial laser scanning and photogrammetry for the 3D-documentation of the Bronze Age cave "Les Fraux" in Perigord (France)

10:00 - 10:20 E. Nau, W. Neubauer, Hans Reschreiter
3D laser scanner documentations of prehistoric tunnels at Hallstatt - Grünerwerk

10:20 - 10:40 W. Neubauer, C. Traxler
The Harris Matrix composer - a new tool to manage archaeological stratigraphy

10:30 - 11:00 **Coffee Break**

11:10 - 11:30 M. Doneus, W. Neubauer
GIS-based documentation of stratigraphic excavations using terrestrial laser scanners

11:30 - 11:50 P. Schneidhofer
3D recording at the stratigraphic excavation of Steinbrunn, Austria

11:50 - 12:10 S. Russegger, H. Zeiner
imdas pro 4.0 - Presentation of cultural data in modern design

12:10 - 12:30 **Discussion**

12:30 - 14:00 **Lunch Break**

Session II: Mining and Settlement in Pre-Modern Times

Chair:		Marina Hilber & Alois Unterkircher
14:00	- 14:30	R. Burt (Keynote Talk) <i>Economic and social structures in mining settlements from pre-modern to modern times</i>
14:30	- 14:50	A. Orejas, F.-J. Sánchez-Palencia <i>Mining, rural settlement and tax system in Roman Spain</i>
14:50	- 15:10	C. Bartels <i>Mining towns in the Upper-Harz district: foundation, structure and development</i>
15:10	- 15:30	A. Westermann <i>"Labour market in mining"- a useful term in pre-industrial times?</i>
15:30	- 15:50	E. Westermann <i>The Mansfeld mining area and its agrarian background in early modern times</i>
15:50	- 16:10	M. Hilber <i>Social interrelations in an Early Modern mining area: marriage patterns in the greater Schwaz area</i>

16:10 - 16:30 **Coffee Break**

Session VIII: Language and Culture

Chair:		Yvonne Kathrein
16:30	- 17:00	I. Hausner (Keynote Talk) <i>"Rudnicha", "Zelesna", "Ferraies", "Mons metallicus", "Arziperge" – what else? A cultural-historical survey on toponyms as witnesses of mining activities in Austria</i>
17:00	- 17:20	B. Turpin <i>The language of coal mines in the north of France. Origin and Evolution. A social and cultural approach</i>
17:20	- 17:40	U. Reiff <i>Project "BergMannsBilder" - Construction of work ethic and mining identity in Western Harz region</i>

Session VII: Mining Archeology : The Early History to Early Modern Mining

Chair:		N. N.
17:40	- 18:10	C. Canavas (Keynote Talk) <i>Mining practice in medieval Muslim Spain - Studying networks in cross-ethnic context</i>
18:10	- 18:20	F. Lopes de Paula, A. R. Threlfall <i>Towards a social archaeology of the mining region of Nova Lima / MG Brazil</i>
18:20	- 18:40	G. Goldenberg <i>Medieval silver ore mining in the Southern Black Forest, Germany - archaeological evidence of structural elements and social aspects</i>

18:40 - 19:00 **Farewell**

Sunday, 15.11.09

08:30 - 17:30 **Excursion**

Poster

Session	Number	Author(s)	Title
I.	P I-1	F. Borrell & J. Bosch	The neolithic <i>callais</i> mines of Gavà (Barcelona): mining activities, societies and exchange networks in the western Mediterranean
II.	P II-1	A. Unterkircher	Birth and Death in a Mining-Dominated Region: Population Movement exemplified by two Villages in the Greater Schwaz Area (17th – 19th century)
II.	P II-2	G. Heuhauser	Mining history of Montafon
III.	P III-1	L. Carozza, E. Chapron, A. Simonneau, P. Rostan, D. Bourgarit, B. Mille, H. Guyard, G. Saint Onge, M. Desmet, A. Burens	Glacial fluctuations and exploitation of copper resources in the high mountain Alps in the late Neolithic and Bronze Age (2500-1500 BC)
III.	P III-2	A. Röpke	Effects of human activity on the soil – geoarchaeological investigations at Bartholomäberg (Schrus, Montafon, Austria)
IV.	P IV-1	P. Rosenthal & D. Morin	Roman-medieval iron mining and smelting at high altitude in the western Alps : Mercantour and Ubaye mountains (Alpes-Maritimes, Alpes-de-haute-Provence, France)
IV.	P IV-2	I. Montero-Ruiz, N. Rafel, M. Hunt, M. Murillo, X.L. Armada, R. Graells	Pre-roman mining works in El Molar-Bellmunt-Falset district (Tarragona, Spain): indirect proofs based on Lead Isotopes analysis
IV.	P IV-3	F. Cattin, B. Guenette-Beck, I. M. Villa, N. Meisser, S. Ansermet, M. Besse	Copper Sourcing in the Alps using Lead Isotope Analysis: Ores from the Valais region and Late Neolithic-Early Bronze Age Artifacts from Western Switzerland
IV.	P IV-5	E. Valzolgher, F. Marzatico	Relative and absolute chronology of the Later Bronze Age metal production in the south-eastern Alps
IV.	P IV-6	J. Lutz, E. Pernicka, R. Pils	Geochemical characteristics of copper ores from the Greywacke Zone in the Austrian Alps and their relevance as a source of copper in prehistoric times
V.	P V-1	T. Ludemann	Kiln site anthracology and fuel wood ecology in Central Europe
V.	P V-2	H. Hüster Plogmann, S. Deschler-Erb, J. Schibler, B. Stopp	How to merge Bronze aged settlement sites and sacrifice sites
V.	P V-3	S. Deschler-Erb	Subsistence strategies in the Neolithic and Early Bronze age hill settlement of Thaur-Kiechlberg/Tirol: the example of the animal bones
V.	P V-4	T. Pichler, K. Nicolussi, M. Klauzner, G. Goldenberg	Dendrochronological analysis and dating of wooden artefacts from the prehistoric copper mine Kelchalm/Kitzbühel (Austria)
V.	P V-5	T. Pichler, A. Thurner, K. Nicolussi	Dendrochronological dating of charcoal originate from an Early Iron Age fire-set pit in the mining area of Schwaz / Brixlegg (Tyrol, Austria)
V.	P V-6	K. Nicolussi, A. Thurner, T. Pichler	The wooden remains from the prehistoric ore processing site Schwarzenbergmoos near Radfeld/Brixlegg (Tyrol)
VI.	P VI-1	J. Vital, M.-C. Bailly-Maître, E. Thirault, B. Moulin	First Early Bronze Age copper mines in the north-western Alps (Oisans, France) in their chrono-cultural and economic context
VI.	P VI-2	M. Secondo, V. Cavani & V. Poli	A Bronze Age minery district in the Idice River Valley (Bologna, Italy)?
VI.	P VI-3	F. LaRocca & S. Marino	Stone-tools and prehistoric mining exploitation in Calabria (Italy)
VI.	P VI-4	P. Ambert, J.-L. Guendon, V. Figueroa-Larre & D. Salazar, H. Salinas	The copper mines of the Cabrières-Péret district (Southern France) between the III rd and I st millennium BC
VI.	P VI-5	V. Figueroa-Larre, H. Salinas, D. Salazar & G. Manríquez, P. Núñez-Regueiro	Prehispanic hammerstones from the Atacama Desert (Antofagasta region, north of Chile)
VI.	P VI-6	B. Lechelon	Mining tools from the Chalcolithic cooper mines at Fayet (Aveyron, France)
VI.	P VI-7	D. S. Salazar, H. Salinas, J. L. Guendón, V. Figueroa-Larre	Earliest mining activities in South America: extraction of iron oxides in Late Holocene contexts in coastal northern Chile.
VIII.	P VIII-1	Y. Kathrein	Family Names as Indicators for Beginning Mining Activities in Schwaz
IX.	P IX-1	S. Printz, M. Lang	ArcheoInf – WebGIS-based provision of archaeological primary data

