emc2 2016

11 - 15 September

2nd European Mineralogical Conference

rimini, italy

Minerals, rocks and fluids: alphabet and words of planet Earth

PROGRAMME

Committees:

Scientific Committee
Bernardo Cesare (Chair, Padova, I), Giuseppe Cruciani (Chair, Ferrara, I), Heidi Höfer (DMG), Gerhard Brey (DMG), Roberta Oberti (EMU), Kevin Murphy (MinSoc), Peter J. Treloar (MinSoc), Jussi Liipo (MinSocFin), Herta Effenberger (ÖMG), Sergey V. Krivovichev (RMS), Encarnación Ruiz Agudo (SEM), Patrick Cordier (SFMC), Alessandro Pavese (SIMP), Bernard Grobety (SSMP).

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Editing: Omar Bartoli, Bernardo Carmina, Bernardo Cesare, Giuseppe Cruciani, Laura Matteini (New Aurameeting), Marco Pasero

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Plenary Lectures

Monday, September 12th 2016
08.30-09.15, Room Anfiteatro
Liane G. Benning (GFZ, German Research Center for Geosciences, Germany / University of Leeds, UK):
"The joys of making or breaking bonds in minerals: a molecular perspective"

Tuesday, September 13th 2016
08.30-09.15, Room Anfiteatro
Frank Melcher (University of Leoben, Austria):
"Nb-Ta-Sn mineralization in pegmatites and granites"

Wednesday, September 14th 2016
08.30-09.15, Room Anfiteatro
Emilio Galán (University of Sevilla, Spain):
"A new methodological approach for the evaluation of soil pollution by trace elements"
10.00-10.45, Room Anfiteatro
Rodney C. Ewing (Stanford University, USA):
"Radiation effects in minerals"

Thursday, September 15th 2016
08.30-09.15, Room Anfiteatro
Karen Appel (European XFEL, Hamburg, Germany):
"New perspectives for mineral sciences using fourth generation light sources"
15.45-16.30, Room Anfiteatro
Marco Scambelluri (University of Genova, Italy):
"Fluids, mass transfer and tectonics in subduction zones: what do we learn from serpentinite?"

Award Talks

Monday, September 12th 2016
10.45, Room Tempio 2
DMG Victor-Moritz-Goldschmidt-Preis (DMG)
Eva E. Stüken (University of Washington, USA)
"Nitrogen cycling in the early precambrian: a major player in early evolution and greenhouse warming"

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EMU Research Excellence Medal 2015
István János Kovács (Geological and Geophysical Institute of Hungary)
"Quantitative infrared spectrometry of water in nominally anhydrous minerals: facts, doubts and beliefs"

Tuesday, September 13th 2016
9.30, Room Marina
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Frank C. Hawthorne (University of Manitoba, Canada)
"Silicate minerals and the structural hierarchy hypothesis: sheet silicates"

Wednesday, September 14th 2016
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Kevin M. Rosso (Pacific Northwest National Laboratory, USA)
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Award Ceremony

Wednesday, September 14th 2016, 9.15-10.00 - Room Anfiteatro

Chair: Heidi Höfer (Frankfurt)

Citationist: President SEM - Juan Jiménez Millán (Jaén)
SEM Honorary Member
Emilio Galán
(Universidad de Sevilla, Spain)

Citationist: President MinSoc - Hilary Downes (London)
Mineralogical Society-Schlumberger Award
Liane G. Benning
(University of Leeds, UK; GFZ, Potsdam, Germany)

Citationist: Jon Lloyd (Manchester)
Hallimond Lecturer
Kevin M. Rosso
(Pacific Northwest National Laboratory, USA)

Citationist: Roland Stalder (Innsbruck)
EMU Research Excellence Medal 2015
István János Kovács
(Geological and Geophysical Institute of Hungary)

Citationist: President DMG - Francois Holtz (Hannover)
DMG Abraham-Gottlob-Werner-Medaille
Gerhard Brey
(University of Frankfurt, Germany)
DMG Victor-Moritz-Goldschmidt-Preis 2015
Eva E. Stüken
(University of Washington, USA)
DMG Victor-Moritz-Goldschmidt-Preis 2016
Christoph Burkhardt
(University of Münster, Germany)
DMG Georg-Agricola Medaille
Ulrich Förstner
(Technical University Hamburg-Harburg, Germany)

Citationist: President SIMP - Alessandro Pavese (Milan)
SIMP Honorary Fellow
Frank C. Hawthorne
(University of Manitoba, Canada)
SIMP Honorary Fellow
David L. Bish
(Indiana University, USA)

Citationist: President IMA - Sergey Krivovichev (St. Petersburg)
IMA 2015 Medal
Rodney C. Ewing
(Stanford University, USA)

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14.30-14.45 *(PerkinElmer)*
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Wittkopp A.*: ADVANCED MINERAL IDENTIFICATION AND CHARACTERISATION BY MICRO-XRF

15.00-15.15 *(Panalytical)*
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Monday, September 12th 2016 (15.45-16.45)
Room - Tempio 2

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Scardina P.* & Pasini V. : ONE MICRON HIGH SPATIAL RESOLUTION FT-IR IMAGING: APPLICATIONS IN THE GEOLOGICAL DOMAIN

16.15-16.30 *(Horiba)*
Fabris D.* & Gai S.: NEW SOLUTIONS IN RAMAN TECHNOLOGY

16.30-16.45 *(xplorex)*
Kinneging A.J.*, Verbruggen R. & Huber N.: THE PLANET. A PORTABLE, HIGH-RESOLUTION XRPD

16.45-17.00 *(SOGIN)*
Chiaravalli F., Uras S. & Ventura G.*: THE ITALIAN NATIONAL REPOSITORY FOR DISPOSAL OF RADIOACTIVE WASTES: LEARNING FROM THE DURABILITY OF ARCHAEOLOGICAL ANALOGUES OF MODERN BUILDING MATERIALS

Oral Scientific Sessions Timetable

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	11.15 - 12.30	**S6**	**S13**	**S3**	**S16**	**S10**	**S22**
	14.00 - 15.15	**S6**	**S1**	*Technical Session*	**S16**	**S20**	**S22**
	15.45 - 17.00		**S1**	*Technical Session*	**S17**	**S20**	**S22**
Tuesday 13	09.30 - 10.45	**S12**	**S2**	**S4**	**S17**	**S8**	**S23**
	11.15 - 12.30	**S12**	**S2**	**S4**	**S17**	**S8**	**S23**
	14.00 - 15.15	**S12**	**S2**	**S4**	**S28**	**S7**	**S23**
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Oral Scientific Sessions – When and Where

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ORAL SESSION	POSTER SESSION
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S2 Evolution of the Earth's mantle and melt generation through time

ORAL SESSION	POSTER SESSION
Room - Tempio 1	Poster Area
Tuesday 13th (09.30-10.45)(11.15-12.30) (14.00-15.15)(15.45-17.00)	Tuesday 13th

S3 Volatiles in the deep Earth: storage, mobility and implications

ORAL SESSION	POSTER SESSION
Room - Tempio 2	Poster Area
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S4 Fluids in the crust

ORAL SESSION	POSTER SESSION
Room - Tempio 2	Poster Area
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S5 The cycling of hydrogen, carbon, and mobile elements in the subduction factory

ORAL SESSION	POSTER SESSION
Room - Tempio 1	Poster Area
Wednesday 14th (15.45-17.00) Thursday 15th (09.30-10.45)(11.15-12.30) (14.00-15.15)	Wednesday 14th

S6 Metamorphism, crustal melting and granite magmas from start to stop and from inclusions to intrusions

ORAL SESSION	POSTER SESSION
Room – Arengo	Poster Area 12
Monday 12th (09.30-10.45)(11.15-12.30) (14.00-15.15)	Monday 12th

S7 From deep magmatic processes to volcanic eruption

ORAL SESSION	POSTER SESSION
Room – Parco	Poster Area
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S8 Diffusion, mineral reaction and deformation mechanisms from low to high temperatures: flow and brittle processes of the Earth's interior

ORAL SESSION	POSTER SESSION
Room – Parco	Poster Area
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S9 Inclusions in minerals as record of geological processes: new analysis methods and applications

ORAL SESSION	POSTER SESSION
Room – Parco	Poster Area
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S10 Mineral reaction kinetics: microstructures, textures, chemical and isotopic signatures

ORAL SESSION	POSTER SESSION
Room – Parco	Poster Area

Monday 12th (09.30-10.45)(11.15-12.30) Monday 12th

S11 Reading and understanding metamorphic rocks

ORAL SESSION POSTER SESSION
Room – Arengo Poster Area
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S12 Clays, zeolites and nanostructured minerals: from mineralogy to applications in industry and environment

ORAL SESSION POSTER SESSION
Room – Arengo Poster Area
Tuesday 13th (09.30-10.45)(11.15-12.30) (14.00-15.15)(15.45-17.00) Tuesday 13th

S13 Ores, minerals and geomaterials in industrial processes and human activities

ORAL SESSION POSTER SESSION
Room - Tempio 1 Poster Area
Monday 12th (09.30-10.45)(11.15-12.30) Monday 12th

S14 Advances in computational and experimental mineralogy: A journey from the surface to the deep Earth and beyond

ORAL SESSION POSTER SESSION
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S15 Structural behavior and energetic properties of minerals

ORAL SESSION POSTER SESSION
Room – Marina Poster Area
Thursday 15th (09.30-10.45)(11.15-12.30) (14.00-15.15) Monday 12th

S16 New minerals, modular structures and mineral groups

ORAL SESSION POSTER SESSION
Room – Marina Poster Area
Monday 12th (09.30-10.45)(11.15-12.30) (14.00-15.15) Monday 12th

S17 Mineral diversity, complexity and evolution

ORAL SESSION POSTER SESSION
Room – Marina Poster Area
Monday 12th (15.45-17.00) Tuesday 13th
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S18 Planetary materials: from dust to planets and Early Earth

ORAL SESSION POSTER SESSION
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ORAL SESSION POSTER SESSION
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ORAL SESSION POSTER SESSION
Room – Parco Poster Area
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S21 Mineralogy, geochemistry and valorization of Industrial and mining wastes

ORAL SESSION	POSTER SESSION
Room – Borgo	Poster Area
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S22 Platinum group minerals and accessory minerals: development in their characterisation

ORAL SESSION	POSTER SESSION
Room – Borgo	Poster Area
Monday 12th (09.30-10.45)(11.15-12.30) (14.00-15.15)(15.45-17.00)	Monday 12th

S23 The future of critical metals: mineralogy, metallogenesis and geometallurgy

ORAL SESSION	POSTER SESSION
Room – Borgo	Poster Area
Tuesday 13th (09.30-10.45)(11.15-12.30) (14.00-15.15)	Tuesday 13th

S24 The petrology-geochronology connection

ORAL SESSION	POSTER SESSION
Room - Tempio 1	Poster Area
Wednesday 14th (11.15-12.30)(14.00-15.15)	Wednesday 14th

S25 Biogeochemical interfaces and environmental (bio)mineralogy

ORAL SESSION	POSTER SESSION
Room - Tempio 2	Poster Area
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ORAL SESSION	POSTER SESSION
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S28 Museums and teaching mineral sciences to new generations

ORAL SESSION	POSTER SESSION
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Tuesday 13th (14.00-15.15)(15.45-17.00)	Tuesday 13th

	Arengo	Tempio1	Tempio2	Marina	Parco	Borgo
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8.30 – 09.15	**Plenary Benning**					
09.15 – 09.30						
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09.45 – 10.00		Dapiaggi	Stalder	Friis		
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10.15 – 10.30	White	D'Elia	**Bolfan-Casanova**	Juroszek	Li	Bindi
10.30 – 10.45	Racek	Kern M		Zhitova	Rodler	Schertl
10.45 – 11.15	Coffee Break		**Stüken**	Coffee Break		
11.15 – 11.30	**Yakymchuk**	Sindern	Ferriss	**Makovicky**	Lindner	Bowles
11.30 – 11.45		Signori	Massuyeau	Biagioni	Cuesta-Mayorga	Tsikouras
	S6	S13	S3	S16	S10	S22
11.45 – 12.00	Ferrero	Novak M	Ding	Cámara	Ruiz-Agudo	Escayola
12.00 – 12.15	Dyck	Lotti	Mair	Mugnaioli	Fischer	Mishra
12.15 – 12.30	Daczko	Arletti	Norris	Sokolova	Lacinska	Martin
12.30 – 14.00	Lunch Break					
14.00 – 14.15	Petford	Jones	*Technical Session*	Kahlenberg	Andersson	Kislov
14.15 – 14.30	Wolfram	Nimis		Krzątała	Jonsson	Ariskin
14.30 – 14.45	Fiannacca	Rudloff-Grund		Sharygin	Marien	Junge
	S6	S1		S16	S20	S22
14.45 – 15.00	Tavazzani	Rustioni		Stasiak	Menéndez	Karimova
15.00 – 15.15	Rocchi	Agrosì		Vereshchagin	Quevedo-González	Roqué-Rosell
15.15 – 15.45	Coffee Break					
15.45 – 16.00	**Kovács**	Chinn	*Technical Session*	**Hazen**	Sundblad	Villanova
16.00 – 16.15		Litvin		Uher	Onuk	Pushkarev
		S1		S17	S20	S22
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16.30 – 16.45		Smith		Pankova	Rompanen	Klötzli
16.45 – 17.00		Anzolini		Hazen	Plotinskaya	Vymazalová
17.00 – 18.30	**Poster Sessions**					

Monday, September 12 th

ORAL SESSIONS

MORNING

S3. Volatiles in the deep Earth: storage, mobility and implications

Conveners: Marc Blanchard, Dan Frost and István Kovács

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3-3 10.00 – 10.15
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3-4 10.15 – 10.45
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3-5 10.45 – 11.15
Stüeken E.E.*: NITROGEN CYCLING IN THE EARLY PRECAMBRIAN: A MAJOR PLAYER IN EARLY EVOLUTION AND GREENHOUSE WARMING

(11.15-12.30) Room - Tempio 2

3-6 11.15 – 11.30
Ferriss E.*, Plank T. & Walker D.: SITE-SPECIFIC HYDROGEN DIFFUSIVITY IN CLINOPYROXENE AND IMPLICATIONS FOR MANTLE XENOLITHS

3-7 11.30 – 11.45
Massuyeau M.*, Le Trong E., Gardés E., Aulbach S., Morizet Y. & Gaillard F.: THERMODYNAMIC MODELING CONSTRAINTS ON INCIPIENT MELT COMPOSITIONS IN THE CARBONATED UPPER MANTLE

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Ding S.* & Dasgupta R.: THE FATE OF SULFIDE DURING ADIABATIC DECOMPRESSION MELTING – IMPLICATIONS FOR SULFUR BUDGET OF MORB AND OIB SOURCE MANTLE

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3-10 12.15 – 12.30
Norris C.A.* & Wood B.: MEASURED VOLATILITIES OF IMPORTANT TRACE ELEMENTS IN THE EARTH

*****

S6. Metamorphism, crustal melting and granite magmas from start to stop and from inclusions to intrusions

Conveners: Antonio Acosta Vigil, Michael Brown, Sergio Rocchi and Richard White

(09.30-10.45) Room - Arengo

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(KEYNOTE) Weinberg R.F.*: THE ORIGIN OF HIMALAYAN LEUCOGRANITES AND HOW THEY INTERACTED WITH THE OROGEN

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6-3 10.15 – 10.30
White R.W.* & Palin R.M.: PARTIAL MELTING IN ARCHAEAN HIGH-GRADE GNEISS TERRAINS

6-4 10.30 – 10.45
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Daczko N.*, Piazolo S., Meek U., Stuart C.A. & Elliot V.: THE CURIOUS CASE OF THE IMPOSTER AMPHIBOLE CUMULATES – IDENTIFYING ZONES OF SIGNIFICANT MASS TRANSFER THROUGH THE LOWER CRUST

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S10. Mineral reaction kinetics: microstructures, textures, chemical and isotopic signatures

Conveners: Rainer Abart, Wilhelm Heinrich and Encarnación Ruiz Agudo

(09.30-10.45) Room - Parco

10-1 09.30 – 10.00
(KEYNOTE) Jollands M.C.*: LINKING EXPERIMENTAL AND NATURAL STUDIES OF DIFFUSION: CURRENT UNDERSTANDING AND FUTURE CHALLENGES

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10-3 10.15 – 10.30
Li C.*, Griffiths T.A., Pennycook T.J., Mangler C., Götze L.C., Jeřábek P., Meyer J., Habler G. & Abart R.: INTERFACE MIGRATION MECHANISM ON CORUNDUM/SPINEL/PERICLASE: ATOMIC STUDY *VIA* SCANNING TRANSMISSION ELECTRON MICROSCOPY

10-4 10.30 – 10.45
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(11.15-12.30) Room - Parco

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10-6 11.30 – 11.45
Cuesta-Mayorga I.*, Astilleros J.M., Roncal-Herrero T., Grattoni C.A., Fernández-Díaz L. & Benning L.G.: CARBONATION OF GYPSUM AND ANHYDRITE: INFLUENCE OF THE CARBONATE BEARING SOLUTION CONCENTRATION ON ITS REACTION PATHWAYS AND POROSITY

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Ruiz-Agudo C.*, Ruiz-Agudo E., Putnis C.V. & Putnis A.: REPLACEMENT PROCESSES IN EVAPORITES: GYPSUM TO BARITE REACTIONS

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Fischer C.* & Luttge A.: A NEW PATHWAY TO PREDICT WATER-ROCK REACTION RATES

10-9 12.15 – 12.30
Lacinska A.M.*, Styles M.T., Bateman K., Wagner D., Hall M.R., Gowing C. & Brown P.D.: THE IMPACT OF INTRINSIC MICRO-PROPERTIES OF SERPENTINE MINERALS ON REACTION KINETICS AND Mg EXTRACTION EFFICIENCY IN THE CONTEXT OF ACID-TREATMENT FOR CARBON CAPTURE AND STORAGE

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S13. Ores, minerals and geomaterials in industrial processes and human activities

Conveners: Piergiulio Cappelletti, Jan Elsen, Bernard Grobety and Jussi Liipo

(09.30-10.45) Room - Tempio 1

13-1 09.30 – 09.45
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13-4 10.15 – 10.30
D'Elia A.*, Pinto D., Eramo G. & Laviano R.: EFFECTS OF MECHANICAL AND THERMAL ACTIVATION METHODS ON REACTIVITY OF CALCAREOUS CLAYS AS PRECURSORS FOR GEOPOLYMERS

13-5 10.30 – 10.45
Kern M.*, Kästner J. & Gutzmer J.: LITHOLOGICAL UNITS AND Sn DEPORTMENT OF A COMPOSITIONALLY COMPLEX SKARN ORE (HÄMMERLEIN, ERZGEBIRGE, GERMANY)

(11.15-12.30) Room - Tempio 1

13-6 11.15 – 11.30
Gronen L., Sindern S.*, Meyer M. & Hellmann A.: RARE METAL AND REE DEPORTMENT IN ALKALINE GRANITES AND SYENITES: CHANCES AND CHALLENGES FOR GEOMETALLURGY

13-7 11.30 – 11.45
Signori G.*, Zucali M., Migliazza R., Lucchelli A. & Sturaro E.: QUANTITATIVE ANALYSIS OF CRYSTAL/GRAIN SIZES AND THEIR DISTRIBUTIONS IN 2D AND 3D AIMED TO PREDICTING TECHNICAL PROPERTIES OF DIMENSION STONES

13-8 11.45 – 12.00
Novak M.*, Jež J., Šolc U. & Bavec M.: PLATY LIMESTONE AS CHARACTERISTIC NATURAL AND CULTURAL HERITAGE ALONG THE ADRIATIC KARSTIC COAST

13-9 12.00 – 12.15
Lotti P.*, Joseph B., Gatta G.D., Comboni D., Lausi A., Merlini M. & Pastero L.: HIGH-*P* BEHAVIOR OF ZEOLITES IN "PENETRATING" FLUIDS: RECENT INSIGHTS AND NEW OPPORTUNITIES FROM *XPRESS*, THE HIGH-*P* DEDICATED DIFFRACTION BEAMLINE AT ELETTRA

13-10 12.15 – 12.30
Arletti R.*, Ronchi L., Quartieri S., Vezzalini G., Ryzhikov A., Nouali H., Daou T.J. & Patarin J.: NON-WETTING FLUID INTRUSION IN HYDROPHOBIC MEDIA: STRUCTURAL INTERPRETATION OF THE ENERGETIC PERFORMANCE OF PURE-SILICA FERRIERITE

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S16. New minerals, modular structures and mineral groups

Conveners: Luca Bindi, Stuart Mills, Marco Pasero and Igor Pekov

(09.30-10.45) Room - Marina

16-1 09.30 – 09.45
(KEYNOTE) Hatert F.*, Mills S.J., Pasero M. & Hålenius U.: NEW CHALLENGES IN MINERAL NOMENCLATURE AND CLASSIFICATION

16-2 09.45 – 10.00
Friis H.*: HEXANIOBATES, A NEW GROUP OF MINERALS

16-3 10.00 – 10.15
Hålenius U.*, Panikorovskii T.L. & Shilovskikh V.V.: ELECTRONIC *d-d* TRANSITIONS AND INTERVALENCE CHARGE TRANSFER PROCESSES IN 3d-CATIONS IN CYPRINE

AND CHEMICALLY RELATED VESUVIANITE GROUP MINERALS

16-4 10.15 – 10.30
Juroszek R.*, Galuskina I.O., Vapnik Y.A. & Galuskin E.V.: Se-BEARING THAUMASITE FROM PYROMETAMORPHIC ROCKS OF THE HATRURIM COMPLEX IN JORDAN

16-5 10.30 – 10.45
Zhitova E.S.*, Krivovichev S.V., Pekov I.V. & Yakovenchuk V.N.: HYDROTALCITE-GROUP AND QUINTINITE-GROUP MINERALS: STRUCTURAL CHARACTERIZATION AND IDENTIFICATION FEATURES

(11.15-12.30) Room - Marina

16-6 11.15 – 11.30
(KEYNOTE) Makovicky E.*, Topa D. & Stroeger B.: NEW MODULAR PRINCIPLES AND STRUCTURES DEFINED FOR THE SARTORITE HOMOLOGOUS SERIES OF Pb-As(Sb)-Ag-Tl SULFOSALTS

16-7 11.30 – 11.45
Biagioni C.*, Dini A., Merlino S., Moëlo Y., Orlandi P., Paar W.H., Pasero M. & Zaccarini F.: JORDANITE HOMOLOGUES FROM THE POLLONE MINE (APUAN ALPS, ITALY): THE GEOCRONITE-JORDANITE ISOTYPIC PAIR AND THE NEW N = 3.5 HOMOLOGUE MARCOBALDIITE

16-8 11.45 – 12.00
Cámara F.* & Ciriotti M.E.: POLYTYPISM, TOPOLOGICAL AND CRYSTALCHEMICAL RELATIONS AMONG NATROCHALCITE GROUP AND BRACKEBUSCHITE GROUP MINERALS

16-9 12.00 – 12.15
Mugnaioli E.*, Rozhdestvenskaya I.V., Czank M., Depmeier W., Schowalter M., Rosenauer A. & Schmidt M.U.: STRUCTURE, POLYTYPISM AND DISORDER OF DENISOVITE, $K_{14}Ca_{42}Na_6Si_{60}O_{162}F_{16}(OH)_4{\cdot}2H_2O$, OBTAINED BY A COMBINATION OF (S)TEM IMAGING, ELECTRON DIFFRACTION TOMOGRAPHY AND X-RAY POWDER DIFFRACTION

16-10 12.15 – 12.30
Sokolova E.* & Cámara F.: FROM CHEMICAL COMPOSITION TO STRUCTURE TOPOLOGY IN TITANIUM SILICATES (TS-BLOCK MINERALS)

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S22. Platinum group minerals and accessory minerals: development in their characterisation

Conveners: Oskar Thalhammer, Anna Vymazalova and Federica Zaccarini

(09.30-10.45) Room - Borgo

22-1 09.30 – 09.45
Thalhammer O.A.R.*, Zaccarini F., Strauss V. & Gallas P.: MELLINIITE, SECOND DISCOVERY OF THIS RARE PHOSPHIDE FROM AN ARGENTINIAN Fe-Ni-METEORITE

22-2 09.45 – 10.15
(KEYNOTE) Tredoux M.*: THE PGE: ARE THEY PARTY ANIMALS OR LONE DOGS? A LOOK AT WHAT THEIR MINERALOGY HAS TO SAY

22-3 10.15 – 10.30
Bindi L.*, Lin C., Ma C. & Steinhardt P.J.: LATEST NEWS FROM THE KHATYRKA METEORITE

22-4 10.30 – 10.45
Schertl H.-P.*, Hertwig A., Maresch W. & Li X.-P.: PETROLOGICAL SIGNIFICANCE OF MINERAL INCLUSIONS IN ACCESSORY MINERALS OF HP AND UHP ROCKS: THE PROBLEM OF INCLUSIONS AND "PSEUDO-INCLUSIONS"

(11.15-12.30) Room - Borgo

22-18 11.15 – 11.30
Bowles J.F.W.*, Suárez S., Prichard H.M. & Fisher P.C. :ALTERATION OF PRIMARY PLATINUM-GROUP MINERALS DURING WEATHERING OF THE FREETOWN LAYERED COMPLEX, SIERRA LEONE

22-6 11.30 – 11.45
Tsikouras B.*, Sharif A.H., Ifandi E., Hamdan H., Tarif R., Sulaiman H. & Teo C.H.: SPINEL CHEMISTRY FOR THE CHARACTERISATION OF PERIDOTITES FROM SABAH (BORNEO ISLAND, MALAYSIA)

22-7 11.45 – 12.00
Escayola M.*, Pimentel M. & Ramos V.A.: ZIRCON AND MONAZITE REVEAL THE METAMORPHIC EVOLUTION OF THE EASTERN PAMPEAN RANGES, ARGENTINA

22-8 12.00 – 12.15
Mishra B.*, Ozha M.K. & Pal D.C.: GEOCHEMICAL AND TEMPORAL EVOLUTION OF ACCESSORY URANINITE FROM THE PUR-BANERA BASIN, NORTHWESTERN INDIA: EVIDENCE OF HREE+Y-METASOMATISM

22-9 12.15 – 12.30
Barkov A.Y., Shvedov G.I., Polonyankin A.A. & Martin R.F.*: UNUSUAL PALLADIUM–THALLIUM MINERALIZATION IN THE ANOMAL'NYI DEPOSIT, KONDYOR RING COMPLEX, NORTHERN KHABAROVSKIY KRAY, RUSSIA

Monday, September 12th

ORAL SESSIONS

AFTERNOON

S1. Diamonds: open windows in the Earth's mantle

Conveners: Hélène Bureau, Fabrizio Nestola and Mikhail Sami

(14.00-15.15) Room - Tempio 1

1-1 14.00 – 14.15
Jones A.*, Alvaro M. & Nestola F.: DIAMOND: MESSENGERS FROM DEEP SPACE AND DEEP TIME AND OLDER THAN THE EARTH?

1-2 14.15 – 14.30
Nimis P.*, Alvaro M., Nestola F., Angel R.J., Marquardt K., Rustioni G. & Harris J.W.: HYDROUS SILICIC FLUID FILMS AROUND SOLID INCLUSIONS IN GEM-QUALITY DIAMONDS

1-3 14.30 – 14.45
Rudloff-Grund J.*, Brenker F.E., Marquardt K., Howell D., O'Reilly S.Y. & Kaminsky F.V.: NH-BEARING NANOINCLUSIONS IN MILKY DIAMONDS FROM JUINA AREA, MATO GROSSO, BRAZIL

1-4 14.45 – 15.00
Rustioni G.*, Angel R.J., Mazzucchelli M.L., Milani S., Nimis P., Domeneghetti M.C., Marone F., Harris J.W., Nestola F. & Alvaro M.: PRESSURE RELEASE FOR HOST – INCLUSION SYSTEMS: THE INTERPLAY BETWEEN BRITTLE FAILURE AND FLUID PHASE

1-5 15.00 – 15.15
Agrosì G.*, Tempesta G., Mele D., Allegretta I., Terzano R., Hutchison M.T. & Nestola F.: X-RAY DIFFRACTION TOPOGRAPHY, MICRO-TOMOGRAPHY AND MICRO X-RAY FLUORESCENCE OF DIAMONDS AND THEIR TRAPPED INCLUSIONS: A MULTI-ANALYTICAL APPROACH FOR NON-DESTRUCTIVE ANALYSES

(15.45-17.00) Room - Tempio 1

1-6 15.45 – 16.00
Chinn I.*, Perritt S. & Stiefenhofer J.: CARBON ISOTOPE, NITROGEN ABUNDANCE AND NITROGEN AGGREGATION STATE DATA FOR DIAMONDS FROM ORAPA MINE: A CLEAR SUBDUCTION SIGNATURE?

1-7 16.00 – 16.15
Litvin Y.A.*, Kuzyura A.V. & Spivak A.V.: MANTLE-CARBONATITE CONCEPT OF DIAMOND ORIGIN AT 150-800 KM LEVELS

1-8 16.15 – 16.30
Palot M.*, Jacobsen S.D., Townsend J.P., Nestola F., Marquardt K., Harris J.W., Stachel T., McCammon C.A. & Pearson D.G.**:** EVIDENCE FOR H_2O-BEARING FLUIDS IN THE LOWER MANTLE FROM DIAMOND INCLUSION

1-9 16.30 – 16.45
Smith E.M.*, Shirey S.B., Nestola F. & Wang W.: METALLIC INCLUSIONS IN UNIQUE TYPE IIA DIAMONDS

1-10 16.45 – 17.00
Anzolini C.*, Drewitt J.W.E., Lord O.T., Walter M.J. & Nestola F.: JEFFBENITE (EX-

"TAPP"): A HIGH-PRESSURE MARKER IN DIAMONDS

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S6. Metamorphism, crustal melting and granite magmas from start to stop and from inclusions to intrusions

Conveners: Antonio Acosta Vigil, Michael Brown, Sergio Rocchi and Richard White

(14.00-15.15) Room - Arengo

6-9 14.00 – 14.15
Petford N.*: FORCE AND MOMENTUM IN GRANITE EMPLACEMENT

6-10 14.15 – 14.30
Wolfram L.C.*, Weinberg R.F. & Becchio R.: ROLE OF MELT SEGREGATION STYLE ON GRANITE CHEMISTRY AND MULTIPLE MELTING EVENTS IN THE SIERRA DE QUILMES, NW ARGENTINA

6-11 14.30 – 14.45
Fiannacca P.*, Williams I.S. & Cirrincione R.: ORIGIN, TIMING AND ACCRETION MODES OF POST-COLLISIONAL BATHOLITHS: THE MESSAGE FROM GEOCHEMISTRY, ZIRCON OXYGEN ISOTOPES AND U-Pb AGES OF THE CRUST-DERIVED SERRE BATHOLITH (CALABRIA, SOUTHERN ITALY)

6-12 14.45 – 15.00
Tavazzani L.*, Peres S., Sinigoi S., Demarchi G., Quick J.E. & Klötzli U.S.: EMPLACEMENT AND REJUVENATION OF A GRANITIC BATHOLITH: THE VALLE MOSSO PLUTON (SESIA MAGMATIC SYSTEM)

6-13 15.00 – 15.15
Rocchi S.*, Vezzoni S. & Dini A.: SLIDING OF THERMALLY WEAKENED PLUTON OVERBURDEN AT CAMPIGLIA MARITTIMA (TUSCANY)

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S16. New minerals, modular structures and mineral groups

Conveners: Luca Bindi, Marco Pasero, Igor Pekov and Stuart Mills

(14.00-15.15) Room - Marina

16-11 14.00 – 14.15
Kahlenberg V.*, Braun D.E., Krüger H., Orlova M. & Schmidmair D.: TEMPERATURE AND MOISTURE DEPENDENT INVESTIGATIONS ON ALUNOGEN AND THE CRYSTAL STRUCTURE OF META-ALUNOGEN

16-12 14.15 – 14.30
Krzątała A.*, Galuskina I.O., Galuskin E.V. & Vapnik Y.A.: POTENTIAL NEW VANADIUM MINERAL BELONGING TO THE APATITE GROUP FROM HATRURIM COMPLEX, ISRAEL

16-13 14.30 – 14.45
Sharygin V.V.*, Doroshkevich A.G., Seryotkin Y.V., Karmanov N.S., Belogub E.V. & Moroz T.N.: A NEW K-Nb-CYCLOSILICATE $K_2(Nb,Ti)_2(Si_4O_{12})O(O,F)$ FROM CHUKTUKON CARBONATITE MASSIF, CHADOBETS UPLAND, RUSSIA

16-14 14.45 – 15.00
Stasiak M.*, Galuskin E.V. , Kusz J., Galuskina I.O., Krzykawski T., Vapnik Y.A., Murashko M. & Dulski M.: POTENTIALLY NEW MINERAL $\{Ca(OH_2)_2\}[Zn_2(OH)_6]$ FROM THE HATRURIM COMPLEX, DABA - SIWAQA, JORDAN

16-15 15.00 – 15.15
Vereshchagin O.S.*, Rozhdestvenskaya I.V., Frank-Kamenetskaya O.V. & Zolotarev A.A.: CRYSTAL CHEMISTRY OF 3*d*-ELEMENTS BEARING TOURMALINES: CATION DISTRIBUTION - MAXIMUM CONCENTRATION - CHEMICAL DEFORMATIONS

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S17. Mineral diversity, complexity and evolution

Conveners: Sergey Krivovichev and Edward Grew

(15.45-17.00) Room - Marina

17-1 15.45 – 16.00
(KEYNOTE) Hazen R.M.*, Hystad G., Golden J.J., Hummer D.R., Liu C., Downs R.T., Morrison S.M., Grew E.S. & Krivovichev S.V.: RECENT ADVANCES IN MINERAL EVOLUTION AND MINERAL ECOLOGY

17-2 16.00 – 16.15
Uher P.*, Kohút M., Ondrejka M. & Konečný P.: EVOLUTION OF REE MINERALS

17-3 16.15 – 16.30
Franz G.*, Khomenko V., Nissen J., Wirth R. & Vyshnevskyi O.: PALEOPROTEROZOIC BUDDINGTONITE FORMATION IN A PSEUDOMORPH AFTER BERYL - AN EXAMPLE OF EARLY ORGANIC-IGNEOUS INTERACTION IN THE EARTH'S HISTORY

17-4 16.30 – 16.45
Pankova Yu.A.*, Krivovichev S.V., Gorelova L.A., Pekov I.V.:
THE CRYSTAL STRUCTURE OF GINORITE, $Ca_2B_{14}O_{20}(OH)_6(H_2O)_5$, AND THE ANALYSIS OF DIMENSIONAL REDUCTION AND STRUCTURAL COMPLEXITY IN THE CaO-B_2O_3-H_2O SYSTEM

17-5 16.45 – 17.00
Hazen R.M.*, Grew E.S., Origlieri M. & Downs R.T.: ON THE MINERALOGY OF THE "ANTHROPOCENE EPOCH"

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S20. High-tech metal minerals in Europe

Conveners: Krister Sundblad and Erik Jonsson

(14.00-15.15) Room - Parco

20-1 14.00 – 14.15
Andersson S.S.*, Wagner T. & Jonsson E.: MINERALOGY AND MINERAL CHEMISTRY OF THE OLSERUM-DJUPEDAL REE DEPOSITS, SOUTHEASTERN SWEDEN

20-2 14.15 – 14.30
Jonsson E.*, Majka J., Högdahl K., Harlov D. & Persson-Nilsson K.: REE IN APATITE-IRON OXIDE ORES: THE CASE OF THE PALAEOPROTEROZOIC BERGSLAGEN PROVINCE, SWEDEN

20-3 14.30 – 14.45
Marien C.*, Dijkstra A. & Wilkins C.: RØDBERGITE – A POTENTIAL SOURCE FOR REE WITHIN THE FEN COMPLEX, NORWAY

20-4 14.45 – 15.00
Menéndez I.*, Mangas J., Quevedo-González L.Á., Tauler E. & Méndez-Ramos J.: RARE EARTH ELEMENTS EXPLORATION OF FELSIC IGNEOUS ROCKS AND THEIR WHEATHERING PROFILES ON GRAN CANARIA ISLAND, SPAIN

20-5 15.00 – 15.15
Quevedo-González L.Á.*, Mangas J., Menéndez I., Tauler E. & Méndez-Ramos J.: GEOCHEMICAL CONSTRAINTS ON RARE-EARTH ELEMENT DISTRIBUTION OF SEA-MOUNT-DERIVED DEPOSITS FROM AMANAY, BANQUETE AND CONCEPTION BANK (CANARY ISLANDS)

(15.45-17.00) Room - Parco

20-6 15.45 – 16.00
Sundblad K.*, Valkama M., Cook N.J., Nygård R., Lokhov K. & Ivashchenko V.: INDIUM-BEARING POLYMETALLIC MINERALIZATION ASSOCIATED WITH 1.52-1.85 Ga A-TYPE GRANITES IN THE FENNOSCANDIAN SHIELD

20-7 16.00 – 16.15
Onuk P.* & Melcher F.: HIGH-TECH METAL CONTENT OF SPHALERITE FROM EASTERN ALPINE PALEOZOIC SEDIMENT-HOSTED LEAD-ZINC DEPOSITS

20-8 16.15 – 16.30
Barros R.*, Menuge J.F. & Harrop J.: SPODUMENE PEGMATITES IN SOUTHEAST IRELAND: PETROGENESIS AND ECONOMIC POTENTIAL AS A RESOURCE OF LITHIUM AND RARE METALS

20-9 16.30 – 16.45
Romppanen S.*, Kaski S., Järvinen J. & Häkkänen H.: ANALYSIS OF LITHIUM BEARING PEGMATITES BY LASER-INDUCED BREAKDOWN SPECTROSCOPY (LIBS)

20-10 16.45 – 17.00
Plotinskaya O.Y.*, Grabezhev A.I. & Seltmann R.: Re-BEARING Cu-(Mo)-PORPHYRY DEPOSITS OF THE URALS: LINKS TO TECTONIC EVOLUTION

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S22. Platinum group minerals and accessory minerals: development in their characterisation

Conveners: Oskar Thalhammer, Anna Vymazalova and Federica Zaccarini

(14.00-15.15) Room - Borgo

22-10 14.00 – 14.15
Kislov E.*, Ariskin A., Danyushevsky L., Goemann K., Nikolaev G. & Malyshev A.: PGE-MINERALOGY OF THE MAIN REEF AND SULFIDE-POOR TROCTOLITE FROM THE YOKO-DOVYREN MASSIF (NORTHERN BAIKAL REGION)

22-11 14.15 – 14.30
Ariskin A.*, Danyushevsky L., Nikolaev G., Gilbert S., Fiorentini M.L., Kislov E. & Barmina G.: GEOCHEMICAL EVOLUTION OF PGM-BEARING SULFIDES IN LOW-MINERALIZED ROCKS FROM THE YOKO-DOVYREN LAYERED INTRUSION, RUSSIA

22-12 14.30 – 14.45
Junge M.*, Oberthür T. & Osbahr I.: PLATINUM-GROUP ELEMENTS AND MINERALS IN THE LOWER AND MIDDLE GROUP CHROMITITES OF THE BUSHVELD COMPLEX, SOUTH AFRICA

22-13 14.45 – 15.00
Karimova O.*, Zolotarev A.A. & Kojonen K.: CRYSTAL STRUCTURE REFINEMENT OF MERTIEITE-II, $Pd_8(Sb,As)_3$

22-14 15.00 – 15.15
Roqué-Rosell J.*, Aiglsperger T., Portillo J., Plana-Ruiz S., Mendoza J., Trifonov

T. & Proenza J.A.: SUBMICRON STRUCTURAL DETERMINATION OF "TOO-SMALL-TO-STUDY" PGM WITH PRECESSION ELECTRON DIFFRACTION: THE EXAMPLE OF ZACCARINIITE (RhNiAs)

(15.45-17.00) Room - Borgo

22-15 15.45 – 16.00
Aiglsperger T., Villanova-de-Benavent C.*, Rius J., Galí S., Font-Bardia M. & Proenza J.A.: SYNCHROTRON TTS-µXRD: A POWERFUL TOOL FOR *IN-SITU* MINERALOGICAL IDENTIFICATION OF PGM INCLUDED IN POLISHED THIN SECTION

22-16 16.00 – 16.15
Pushkarev E.*, Ballhaus C., Kamenetsky V. & Wirth R.: MICRO-, AND NANOSCALE FABRICS OF PGM FROM THE VOLCANIC ANKARAMITE AND Pt-RICH CHROMITITE OF THE URAL-ALASKAN-TYPE ULTRAMAFIC COMPLEXES: SEM AND TEM STUDY

22-17 16.15 – 16.30
Kotzé E.*, Schuth S., Oppermann L., Holtz F., Junge M. & Botcharnikov R.: MOBILITY OF PLATINUM AND PALLADIUM UNDER SUPERGENE WEATHERING CONDITIONS IN THE PRESENCE OF ORGANIC MATERIAL: FIRST EXPERIMENTAL RESULTS

22-5 16.30 – 16.45
Klötzli U.S.* : USING ACCESSORY MINERALS TO SHED LIGHT ON THE EVOLUTION OF ROCKS

22-19 16.45 – 17.00
Vymazalová A.* & Pašava J.: PGE OCCURENCES IN THE BOHEMIAN MASSIF: AN OVERVIEW

Monday, September 12th

POSTER SESSIONS

Poster Area

S1. Diamonds: open windows in the Earth's mantle

1-11 **Panel number 1**
Bureau H.*, Remusat L., Esteve I., Pinti D.L., Cartigny P. & Frost D.: ISOTOPIC CHARACTERIZATION OF DIAMOND GROWTH IN FLUIDS

1-12 **Panel number 2**
Cavallo F.*, Romano C., Vona A. & Nestola F.: *IN-SITU* HIGH-RESOLUTION MICRO-RAMAN SPECTROSCOPY ON MINERAL INCLUSIONS STILL TRAPPED WITHIN DIAMONDS

1-13 **Panel number 3**
Melai C.*, Marquardt K., Armstrong K. & McCammon C.A.: EXPLORING A NEW GEOBAROMETER FOR FERROPERICLASE INCLUSIONS IN DIAMOND FROM THE LOWER MANTLE

1-14 **Panel number 4**
Nasdala L.*, Dobrzhinetskaya L.F., Korsakov A.V., Massonne H.-J., Reissner C. & Steger S.: UHP PHASES VERSUS PREPARATION MATERIALS – BE CAUTIOUS WHEN USING MICRO-RAMAN SPECTROSCOPY

1-15 **Panel number 5**
Nestola F.*, Angel R.J., Nimis P., Alvaro M., Milani S. & Harris J.W.: THE CRYSTALLOGRAPHIC ORIENTATIONS BETWEEN DIAMOND AND ITS Mg-CHROMITE INCLUSIONS

1-16 **Panel number 6**
Pinti D.L.*, Bureau H., Ishida A., Sano Y. & Cartigny P.: CARBON ISOTOPIC COMPOSITION OF A JUINA DIAMOND WITH A CARBONATE INCLUSION DETERMINED BY NANOSIMS

1-17 **Panel number 7**
Scandolo L.*, Milani S., Mazzucchelli M.L., Alvaro M., Di Prima M., Domeneghetti M.C., Nestola F., Geiger C.A. & Stagno V.: THERMOELASTIC PROPERTIES OF SILICATE GARNETS AND THEIR USE IN THE STUDY OF DIAMOND FORMATION

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S3. Volatiles in the deep Earth: storage, mobility and implications

3-11 **Panel number 8**
Blanchard M.*, Ingrin J., Balan E., Kovács I. & Withers A.C.: EFFECT OF IRON AND TRIVALENT CATIONS ON OH-DEFECTS IN OLIVINE

3-12 **Panel number 9**
Demouchy S.*: HYDROGEN DISTRIBUTION AND DIFFUSION IN UPPERMOST MANTLE ROCKS

3-13 **Panel number 10**
Kovács I.*, Demény A., Czuppon G., Lécuyer C., Fourel F., Xia Q.-K., Liu J., Pintér Z., Király E., Török K., Szabó Á., Deloule E., Falus G., Fancsik T., Zajacz Z., Sándorné Kovács J. & Udvardi B.: WATER CONCENTRATIONS AND HYDROGEN ISOTOPE COMPOSITIONS OF ALKALINE BASALT HOSTED CLINOPYROXENE MEGACRYSTS: THE IMPORTANCE OF STRUCTURAL HYDROXYL GROUPS AND MOLECULAR WATER

3-14 **Panel number 11**
Stagno V.*, Ziberna L., Andreozzi G., Lenaz D., Lustrino M., Mollo S. & Scarlato P.:

REDOX CONDITIONS OF A CO_2-BEARING SPINEL PERIDOTITE AS FUNCTION OF COMPOSITION, PRESSURE AND TEMPERATURE, AND THE ARCHAEAN DEEP CARBON CYCLE

3-15 Panel number 12

Szabó Á.*, Tóth A., Hidas K., Kovács Z., Patkó L. & Szabó C.: SUBDUCTION-RELATED MANTLE METASOMATISM BENEATH THE EASTERN TRANSYLVANIAN BASIN?

3-16 Panel number 13

Weis F.A.*, Lazor P. & Skogby H.: ANALYSIS OF HYDROGEN IN NOMINALLY ANHYDROUS MINERALS BY TRANSMISSION RAMAN SPECTROSCOPY

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S6. Metamorphism, crustal melting and granite magmas from start to stop and from inclusions to intrusions

6-14 Panel number 14

Acosta-Vigil A.*, Barich A., Bartoli O., Garrido C.J., Cesare B., Remusat L., Poli S. & Raepsaet C.: THE COMPOSITION OF NANOGRANITOIDS IN MIGMATITES OVERLYING THE RONDA PERIDOTITES (BETIC CORDILLERA, S SPAIN): THE ANATECTIC HISTORY OF A POLYMETAMORPHIC BASEMENT

6-15 Panel number 15

Berzina A.N.*, Berzina A.P. & Gimon V.O.: GEOCHRONOLOGY AND PETROGENESIS OF GRANITOID INTRUSIONS RELATED TO THE AKSUG COPPER PORPHYRY DEPOSIT IN THE ALTAI-SAYAN FOLD BELT, RUSSIA

6-16 Panel number 16

Conte A.M.*, Naitza S., Oggiano G., Secchi F., Cifelli F., Cuccuru S. & D'Antonio M.: POST-COLLISIONAL LATE VARISCAN GRANITES OF SOUTHERN SARDINIA: EVIDENCES OF CONTRASTING SUITES

6-17 Panel number 17

Čopjaková R., Škoda R.*, Vašinová Galiová M. & Novák M.: COMPLEX EVOLUTION OF MIXED (NYF + LCT) KRACOVICE PEGMATITE (MOLDANUBIAN ZONE, CZECH REPUBLIC); AN EVIDENCE FROM Li AND REE CONTENTS IN ROCK FORMING MINERALS

6-18 Panel number 18

Lobjoie C.*, Wei L., Trap P., Goncalves P. & Marquer D.: THE ULTRA-HIGH TEMPERATURE METAMORPHISM OF THE KHONDALITE BELT, NORTH CHINA CRATON: NEW EVIDENCE FOR A LARGE PARTIALLY MOLTEN OROGENIC CRUST

6-19 Panel number 19

Muñoz R.* & Castro A.: MAGMATISM FROM THE LOWER CONTINENTAL CRUST: MELTING EXPERIMENTS ON GRANULITE XENOLITHS FROM PASO DE INDIOS, ARGENTINA

6-20 Panel number 20

Ratschbacher B.C.*, Paterson S.R. & Anderson L.: INVESTIGATING MAGMATIC AND TECTONIC PROCESSES FROM 5 TO 30 KM DEPTH IN A THICK CONTINENTAL ARC, ~ 90 MA MAGMATISM IN THE CASCADES, WASHINGTON, USA

6-21 Panel number 21

Reche J.*, Martínez F.J. & Traveria M.: COUPLED THERMO-CHEMICAL PHENOMENA AND GENESIS OF COR FROM LOW-K PSAMMOPELITES DURING SYN-D2 HT-LP HIGH GRADE VARISCAN METAMORPHISM AND HIDROUS MELTING (OSOR COMPLEX, CCR, NE IBERIA)

6-22 Panel number 22

Rochira F.*, Caggianelli A. & de Lorenzo S.: MODELLING THE THERMO-RHEOLOGICAL EVOLUTION OF A GRANITE INTRUSION AND WALL ROCKS: IMPLICATIONS FOR THE LARDERELLO GEOTHERMAL AREA

6-23 Panel number 23

Schimetzek K.* , Parat F. , Stechern A. & Holtz F.: DETERMINATION OF MELT FRACTION IN CRYSTAL MUSHES AND TRACE ELEMENT DISTRIBUTION IN HIGHLY CRYSTALLINE DACITIC MAGMAS: EXPERIMENTAL APPROACH USING MELT TRAPS

AND LA-ICP-MS ANALYSIS

6-24 Panel number 24

Schwindinger M.* & Weinberg R.F.: MULTISTAGE MAGMA MIXING AND THE ROLE OF WATER FLUXED MELTING IN AN ANATECTIC TERRANE – KANGAROO ISLAND, SOUTH AUSTRALIA

6-25 Panel number 25

Sinigoi S.*, Quick J.E., Demarchi G., Klötzli U.S. & Tavazzani L.: HYBRID GRANITIC MAGMA ORIGINATED AT THE ADVANCING FRONT OF BASALTIC UNDERPLATING: INFERENCES FROM THE SESIA MAGMATIC SYSTEM (WESTERN ALPS)

6-26 Panel number 26

Trap P.*, Lobjoie C., Wei L., Goncalves P., Marquer D. & Bruguier O.: STRAIN PARTITIONING, UHT METAMORPHISM, PARTIAL MELTING AND S-TYPE PLUTONISM IN THE DEEP OROGENIC CRUST: THE CASE OF THE KHONDALITE BELT, NORTH CHINA CRATON

6-27 Panel number 27

Wolf M.*, Romer R.L. & Franz L.: TIN DISTRIBUTION BETWEEN MELT AND RESTITE DURING PARTIAL MELTING OF METASEDIMENTARY ROCKS

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S10. Mineral reaction kinetics: microstructures, textures, chemical and isotopic signatures

10-10 Panel number 28

Bandyopadhyay D.*, Ghosh B., Nandy S. & Palin R.M.: THERMOBAROMETRIC EVOLUTION OF REACTION MICROSTRUCTURES IN "ARCLOGITE" – A CASE STUDY FROM THE SITTAMPUNDI LAYERED ANORTHOSITE COMPLEX, INDIA

10-11 Panel number 29

Burgos-Cara A.*, Ruiz-Agudo E. & Putnis C.V.: THE USE OF CITRATE TO TUNE CALCIUM OXALATE PRECIPITATES ON CALCITE

10-12 Panel number 30

Cepedal A.*, Gayol R., Martínez-Abad I., Fuertes-Fuente M., Martin-Izard A. & Boixet L.: TEXTURES AND TRACE-ELEMENT DISTRIBUTION IN ARSENOPYRITE RECORDING POST-CRYSTALLIZATION PROCESSES IN CORCOESTO OROGENIC GOLD DEPOSIT (NW OF SPAIN)

10-13 Panel number 31

Dulski M.*, Janeczek J., Ciesielczuk J. & Krzykawski T.: IMPACT OF THE ISOMORPHIC SUBSTITUTION (As <-> P) ON THE STRUCTURE OF COPPER PHOSPHATE MINERALS DETERMINED BY CHEMICAL AND STRUCTURAL INVESTIGATIONS

10-14 Panel number 32

Fernández-González A.*, González-López J. & Jiménez A.: PRECIPITATION AND AGING OF CALCIUM CARBONATES IN THE PRESENCE OF COBALT (II)

10-15 Panel number 33

Kurganskaya I.*, Fischer C., Arvidson R.S., Luttge A. & Churakov S.: A COMPUTATIONAL STUDY OF CARBONATE DISSOLUTION KINETICS: HOW TO DEAL WITH THE SYSTEM'S COMPLEXITY?

10-16 Panel number 34

Kwaśniak-Kominek M.*, Okniñska J. & Manecki M.: TRANSFORMATION OF CERUSSITE $PbCO_3$ TO PHOSPHATE PHASES AT WIDE RANGE OF *p*H

10-17 Panel number 35

Lamarca-Irisarri D.*, Sánchez-Encinar A., Van Driessche A.E.S. & Huertas F.J.: VARIABILITY OF DISSOLUTION RATES OF SMECTITES AS A FUNCTION OF AMMONIUM ION CONCENTRATION AT CIRCUMNEUTRAL CONDITIONS

10-18 Panel number 36

Lensing-Burgdorf M.*, Watenphul A., Schlüter J. & Mihailova B.: CRYSTAL CHEMISTRY OF TOURMALINES FROM THE ERONGO MOUNTAINS, NAMIBIA, STUDIED BY

RAMAN SPECTROSCOPY

10-19 Panel number 37

Petrishcheva E.*, Jollands M.C. & Abart R.: QUANTIFYING DIFFUSION OF TITANIUM IN OLIVINE

10-20 Panel number 38

Ruiz-Agudo E.*, Ruiz-Agudo C. & Rodriguez-Navarro C.V.: AN EXPERIMENTAL STUDY OF SURFACE ALTERED LAYER FORMATION DURING CHEMICAL WEATHERING OF SILICATE MINERALS: THE ROLE OF ADDITIVES

10-21 Panel number 39

Silva D.*, Daczko N., Piazolo S., Raimondo T. & Putnis A.: INTRACONTINENTAL OROGENY, CENTRAL AUSTRALIA: SHEAR ZONE PATTERNS AND THE ROLE OF FLUIDS IN LITHOSPHERIC WEAKENING

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S13. Ores, minerals and geomaterials in industrial processes and human activities

13-11 Panel number 40

Göttlicher J.*, Zuber M., Hamann E., Steininger R. & Baumbach T.: ANTHROPOZOIC INITIATED ROCK FORMATION IN TIDAL SAND FLATS

13-12 Panel number 41

Alves P.*, Pinto A.M.M. & Pires S.: THE USE OF AUTOMATED MINERALOGY TO CHARACTERIZE MINERALURGICAL PRODUCTS OF VHMS ORES FROM THE IBERIAN PYRITE BELT: THE CASE OF ALJUSTREL MINE, SOUTH PORTUGAL

13-13 Panel number 42

Bobocioiu E.* & Kheloufi A.: SILICA CHARACTERIZATION AND BENEFICIATION DESTINED FOR SILICON SOLAR GRADE PRODUCTION

13-14 Panel number 43

Galimberti M.*, Marinoni N., Della Porta G. & Marchi M.: CORRELATIONS BETWEEN CALCITE MICROSTRUCTURE AND ORDINARY PORTLAND CEMENT CLINKER RAW MEALS BURNABILITY

13-15 Panel number 44

Galluccio S.* & Pöllmann H.: SYNTHESIS AND CHARACTERIZATION OF SPECIAL CEMENTS WITH REDUCED CO_2-EMISSION BASED ON NEW CLINKER MINERALS USING MINERALIZERS

13-16 Panel number 45

Signori G.* & Prodomi A.: DETERMINATION OF RESISTANCE TO BENDING OF DIMENSION STONES: FIRST RESULTS OF AN EXPERIMENTAL STUDY ON A TECHNOLOGICAL AND TESTS SPECIMENS WITH JOB DIMENSIONS FOR PAVING

13-17 Panel number 46

Welling M., Giehl C., Kögler R., Beermann O. & Duesterhoeft E.*: THE EFFECT OF ENVIRONMENTAL INFLUENCES AND CUSTOMARY CLEANSERS ON NATURAL STONES

13-3 Panel number 47

Zucchini A., Comodi P., Di Michele A., Vivani R., Brizzi E.*, Casagrande S., Santarelli G., Gentili S., Santinelli F. & Neri A.: SUSTAINABLE PORTLAND CLINKERS: NANO-MATERIALS ADDITION TO RAW MIXTURES

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S16. New minerals, modular structures and mineral groups

16-16 Panel number 48

Biagioni C., Bosi F., Hålenius U. & Pasero M.*: CRYSTAL STRUCTURE OF TURNEAUREITE AND CRYSTAL-CHEMICAL RELATIONSHIPS AMONG THE MINERALS OF THE

SVABITE SUBGROUP (APATITE SUPERGROUP)

16-17 Panel number 49

Bonaccorsi E.*: WENKITE, A REVISED STRUCTURE

16-18 Panel number 50

Chernyatieva A.P.*, Mannasova A.Z., Filatova A.A. & Krivovichev S.V.: MODULAR STRUCTURE AND TOPOLOGY OF $CsNaCu(P_2O_7)$ AND $CsNaCo(P_2O_7)$, AND THEIR COMPARISON WITH WOOLDRIDGEITE

16-19 Panel number 51

Ciriotti M.E.* & Cámara F.: MINERALS DESCRIPTIONS AND HUMAN CIVILIZATION

16-20 Panel number 52

Galuskin E.V.*, Galuskina I.O., Krüger B. & Vapnik Y.A.: POTENTIALLY NEW LATIUMITE GROUP MINERAL, $KCa_3Al_2(SiO_4)(Si_2O_7)(PO_4)$ FROM LEUCITE-BEARING PARALAVA OF THE HATRURIM COMPLEX, NEGEV DESERT, ISRAEL

16-21 Panel number 53

Hatert F.*, Philippo S., Ottolini L., Dal Bo F., Scholz R., Chaves M.L.S.C., Yang H., Downs R.T. & Menezes Filho L.A.D.: WILANCOOKITE, A NEW BERYLLOPHOSPHATE FROM MINAS GERAIS, BRAZIL

16-22 Panel number 54

Hejny C.*, Kahlenberg V., Schmidmair D., Tribus M. & deVilliers J.: TWO NEW CHROMIC POLYSOMES OF BETA-ALUMINA OBSERVED IN SLAGS FROM THE PRODUCTION OF LOW-CARBON FERROCHROMIUM: BETA-ALUMINA-14*H* & BETA-ALUMINA-21*R*: $Na_{2-x}(Al,Mg,Cr)_{17}O_{25}$

16-23 Panel number 55

Kovrugin V.M.*, Aliev A., Colmont M., Mentré O. & Krivovichev S.V.: SYNTHESIS AND CRYSTAL STRUCTURE OF $Mn(SeO_4)\cdot 2H_2O$, A NEW MEMBER OF THE VARISCITE FAMILY OF COMPOUNDS

16-24 Panel number 56

Krüger B.*, Krüger H., Tropper P., Tribus M. & Joachim B.: FIRST NATURAL OCCURENCE OF "$KAlSiO_4$-*O*1"

16-25 Panel number 57

Krüger H.*, Jaeger F.D. & Konrad B.: SUPERSTRUCTURE AND DISORDER IN SYNTHETIC SHULAMITITE

16-26 Panel number 58

Pekov I.V.*, Zubkova N.V., Yapaskurt V.O., Britvin S.N., Belakovskiy D.I., Vigasina M.V., Lykova I.S., Turchkova A.G. & Sidorov E.G.: NEW ARSENATE MINERALS IN FUMAROLE EXHALATIONS OF THE TOLBACHIK VOLCANO, KAMCHATKA, RUSSIA

16-27 Panel number 59

Pinto D.* & Garavelli A.: OXO-CENTERED STRUCTURAL UNITS IN BISMUTH OXYSULFATES FROM VULCANO, AEOLIAN ISLAND, ITALY

16-28 Panel number 60

Schaller A.M.*, Stöber S. & Pöllmann H.: HIGH TEMPERATURE X-RAY DIFFRACTION STUDIES OF OXYGEN-DEFICIENT $Ca(Fe,Mn,Ti)O_{3-\delta}$ PEROVSKITES

16-29 Panel number 61

Środek D.*, Galuskina I.O., Galuskin E.V., Dulski M., Kusz J., Książek M. & Gazeev V.M.: RAMAN SPECTROSCOPIC AND STRUCTURAL DATA OF A POTENTIALLY NEW MINERAL "CHLORELLESTADITE"

16-30 Panel number 62

Yang Z.*, Giester G., Mao Q., Ma Y., Zhang D. & Li H.: DESCRIPTION AND REFINEMENT OF ZINCOBOTRYOGEN $ZnFe^{3+}(SO_4)_2(OH)\cdot 7H_2O$, A NEW MINERAL FROM XITIESHAN LEAD-ZINC DEPOSIT, QINGHAI PROVINCE, CHINA

16-31 Panel number 63

Yoshiasa A.*, Nakatsuka A., Okube M., Arima H. & Sugiyama K.: AN ORDERED ARRANGEMENT FOUND IN LOCAL STRUCTURE OF PEROVSKITE-TYPE $SrCo_{1-x}Mn_xO_3$ SOLID SOLUTION: XAFS ANALYSIS AND SPIN STATE CHANGE OF Co^{4+} IONS

16-32 Panel number 64

Zolotarev A.A.*, Zhitova E.S., Gabdrakhmanova F.A., Vladykin N.V. & Krivovichev S.V.: HIGH-TEMPERATURE BEHAVIOR OF KUPLETSKITE-(Cs)

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S20. High-tech metal minerals in Europe

20-11 Panel number 65
Ayora C.*, Macías F., Torres E., Lozano A., Pérez-López R. & Nieto J.M.: EXTRACTING RARE EARTH ELEMENTS FROM ACID MINE DRAINAGE

20-12 Panel number 66
Bauer M.E.*, Ostendorf J. & Seifert T.: RARE METAL VEIN-TYPE MINERALIZATIONS IN THE HISTORIC FREIBERG ORE DISTRICT (GERMANY)

20-13 Panel number 67
Broman C.*, Sundblad K., Valkama M. & Villar A.: DEPOSITION CONDITIONS FOR THE INDIUM-BEARING POLYMETALLIC QUARTZ VEINS AT SARVLAXVIKEN, SOUTH-EASTERN FINLAND

20-14 Panel number 68
Högdahl K.*, Jonsson E. & Kritikos A.: INDIUM-ENRICHED POLYMETALLIC MINERALISATIONS IN SVECOFENNIAN LITHOLOGIES, BERGSLAGEN, SWEDEN

20-15 Panel number 69
Kärenlampi K.*, Paulick H., Hanski E., Kontinen A. & Jylänki J.: THE OTANMÄKI REE MINERALIZATION (FINLAND) – A POTENTIAL SOURCE OF CRITICAL ELEMENTS IN EUROPE

20-16 Panel number 70
Langhof J.*, Jonsson E. & Gustafsson L.: PRIMARY *VS* SECONDARY BERYLLIUM-MINERALS IN PROTEROZOIC GRANITIC PEGMATITES IN SWEDEN

20-17 Panel number 71
Lima A.*, Leal S., Dias C., Dias F. & Noronha F.: LITHIUM EXPLORATION IN PORTUGAL: RESULTS FROM STREAM SEDIMENT ANALYSIS IN THE BARROSO-ALVÃO AREA

20-18 Panel number 72
Lima A.*, Leal S. & Barros J.: HIGH-TECH METALS IN THE LAGOA SALGADA DEPOSIT

20-19 Panel number 73
Marino E.*, González F.J., Lunar R., Somoza L., Ortega L., Reyes J. & Bellido E.: FERROMANGANESE CRUSTS FROM CANARY ISLAND SEAMOUNT PROVINCE AS SOURCE OF HIGH TECH METALS

20-20 Panel number 74
Rödel T.* & Borg G.: HIDDEN SKARN-HOSTED TUNGSTEN MINERALIZATION IN CENTRAL GERMANY - UNCOVERING A PREVIOUSLY UNKOWN ORE TYPE

20-21 Panel number 75
Valkama M.*, Sundblad K., Nygård R. & Cook N.J.: INDIUM–BEARING POLYMETALLIC VEINS IN THE SARVLAXVIKEN AREA, SE FINLAND

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S21. Mineralogy, geochemistry and valorization of Industrial and mining wastes

21-16 Panel number 76
Adamczyk Z. & Nowińska K.*: MIGRATION OF ARSENIC AND CADMIUM FROM ZINC OXIDE EMITTED FROM A SINTERING MACHINE IN PYROMETALLURGICAL PROCESS OF Zn AND Pb PRODUCTION

21-17 Panel number 77
Atzori R.*, Ardau C., Podda F., Agrosì G. & Frau F.: INDUCING THE PRECIPITATION OF LAYERED DOUBLE HYDROXIDES TO REMOVE DIVALENT METALS FROM MINE-WASTE DRAINAGES (IGLESIAS, ITALY)

21-18 Panel number 78
Ciesielczuk J.*, Misz-Kennan M. & Fabiańska M.: COMBINING SEM-EDS AND OP-

TICAL-MICROSCOPE METHODS IN INVESTIGATIONS OF THE CO-OCCURRENCE OF MINERAL- AND ORGANIC MATTER IN COAL WASTES

21-19 Panel number 79

Dimitrova D.* & Yossifova M.: ELEMENT MOBILIZATION IN WATER FROM COAL, MINING AND COMBUSTION WASTES, EAST MARITSA LIGNITE BASIN, BULGARIA

21-20 Panel number 80

Jiménez A.*, Astilleros J.M., Fernández-Díaz L., Fernández-González A., Pérez-Garrido C., Cubillas P. & Prieto M.: INTERACTION OF CU-BEARING SOLUTIONS WITH CALCITE, ARAGONITE AND GYPSUM: A COMPARATIVE STUDY

21-21 Panel number 81

Lozano A.*, Torres E., Carrero S., Fernández-Martínez A. & Ayora C.: REE MINERALOGY OF WASTES FROM ACID MINE DRAINAGE TREATMENT

21-22 Panel number 82

Macías F.*, Pérez-López R., Caraballo M.A., Cánovas C.R. & Nieto J.M.: POTENTIAL VALORIZATION OF SLUDGE FROM EXTREME METAL-POLLUTED ACID MINE DRAINAGE NEUTRALIZATION

21-23 Panel number 83

Nieto J.M.*, Macías F. & Ayora C.: HIGHLY POLLUTED ACID MINE DRAINAGE REMEDIATION BY PASSIVE TECHNOLOGY

21-24 Panel number 84

Rodríguez-Fernández D., García-Moliner D., Bagaria-Rovira F., Soler A., Rosell M. & Domènech C.*: ASSESSING CHLOROMETHANES ABIOTIC REDUCTIVE DECHLORINATION BY PYRITE AND MAGNETITE AT NEUTRAL AND ALKALINE CONDITIONS

21-25 Panel number 85

Romero-Hermida I., Morales-Flórez V., Esquivias L., Santos A. & Pérez-López R.*: CARBONATION OF KATOITE OBTAINED FROM PHOSPHOGYPSUM DISSOLUTION WITH WASTES OF THE ALUMINIUM INDUSTRY FOR MINERAL CO_2 SEQUESTRATION

21-26 Panel number 86

Yossifova M.* & Dimitrova D.: CONCENTRATION AND MODE OF OCCURRENCE OF REY, Sc, Th AND U IN MINING AND COMBUSTION WASTE PRODUCTS FROM THE EAST MARITSA LIGNITE, BULGARIA

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S22. Platinum group minerals and accessory minerals: development in their characterisation

22-20 Panel number 87

Chatzipanagiotou C.*, Gervilla F. & Fontboté L.: DISTRIBUTION OF PLATINUM-GROUP ELEMENTS IN THE SAN AGUSTÍN (CHROMITE-Ni ARSENIDE ORES) AND EL GALLEGO (SULPHIDE-GRAPHITE ORES) DEPOSITS, CARRATRACA ULTRAMAFIC MASSIF, SOUTHERN SPAIN

22-21 Panel number 88

García-Guinea J. & Gervilla F.*: MINERALOGY OF "PLATINA" FROM THE FIRST-MINED PLATINUM DEPOSIT

22-22 Panel number 89

Garuti G.* & Zaccarini F.: THE ROLE OF ACCESSORY CHLORITE AS PETROGENETIC INDICATOR OF HYDROTHERMAL VMS Fe-Cu-Zn SULFIDE ORE DEPOSITS IN THE NORTHERN APENNINE OPHIOLITES (EASTERN LIGURIA AND EMILIA ROMAGNA, ITALY)

22-23 Panel number 90

Grokhovskaya T.*, Karimova O. & Magazina L.: PLATINUM GROUP MINERALS FROM THE VURUCHUAIVENCH PGE DEPOSIT, MONCHEGORSK IGNEOUS COMPLEX, KOLA PENINSULA, RUSSIA

22-24 Panel number 91
Herrera A.*, Nazzareni S. & Morales J.: GEOLOGICAL AND METALLOGENIC CHARACTERIZATION OF MASSIVE MAGNETITE IN THE MINING CONCESSION "EMILIO ALBERTO" - CASCAS DISTRICT - REGION LA LIBERTAD (PERU)

22-25 Panel number 92
Khalmatov R.* & Koneyev R.: NON-TYPICAL Pt-Pd-Au MINERALIZATION IN DIORITE-GRANODIORITE INTRUSIVES OF KURAMA VOLCANO-PLUTONIC REGION (UZBEKISTAN)

22-26 Panel number 93
Montegrossi G.*, Giaccherini A. & Di Benedetto F.: EQUILIBRIA OF THE Cu-Sn-S SYSTEM IN ACQUEOUS SOLUTIONS: A NUMERICAL APPROACH

22-27 Panel number 94
Portella Y. de M.*, Zaccarini F., Luvizotto G.L., Garuti G., Angeli N., Bakker R.J. & Thalhammer O.A.R.: ACCESSORY RUTILE IN THE CEDROLINA CHROMITITES, BRAZIL: MAGMATIC OR METAMORPHIC IN ORIGIN?

22-28 Panel number 95
Princivalle F.*, Musco M.E., Petrelli M., Caldeira R., de Ignacio C., De Min A., Marzoli A., Mata J., Perugini D., Boumehdi M.A., Youbi N. & Lenaz D.: RESTITIC OR NOT? INSIGHTS FROM TRACE ELEMENT CONTENT OF SPINELS IN MANTLE XENOLITHS

22-29 Panel number 96
Shapovalova M.* & Tolstykh N.: Pt-Pd MINERALIZATION AND BEHAVIOR OF PGE, Cu, Ni, Au IN DIFFERENT ORE TYPES OF THE MONCHEGORSK PLUTON

22-30 Panel number 97
Sluzhenikin S.F.*: ISOMORPHISM AND PHASE HETEROGENEITY IN MINERALS OF NOBLE METALS IN PGE-CU-NI AND PGE ORES OF THE NORILSK REGION

22-31 Panel number 98
Tassara C.S.*, Garrido L., Romero R., González-Jiménez J.M., Reich M., Barra F., Morata D., Schilling M. & Plissart G.: NOBLE METALS IN SULFIDES AND ARSENIDES FROM ULTRAMAFIC ROCKS WITHIN THE ANDEAN SUBDUCTION FACTORY

22-32 Panel number 99
Tredoux M.*, Zaccarini F., Garuti G. & Miller D.E.: THE BON ACCORD NiO BODY, BARBERTON GREENSTONE BELT, SOUTH AFRICA: A SOURCE OF POTENTIAL NEW PHASES IN THE Ni-Sb-As SYSTEM

	Arengo	Tempio1	Tempio2	Marina	Parco	Borgo
08.30 09.15	**Plenary Melcher**					
09.15 09.30						
09.30 09.45	**Bauluz**	Sossi	Steinmann	Hawthorne	**Faulkner**	**Carvalho**
09.45 10.00		Münker	Villa	Ertl	Lecière	
10.00 10.15	Suárez	Ballhaus	Bonnemains	Burns	Abd Elmola	Cepedal
10.15 10.30	García-Rivas	**Aulbach**	de Ronde	Plášil	Campione	Mondillo
10.30 10.45	Martín	Natali	Pertsev	Gurzhiy	Tesei	Ciobanu
10.45 11.15	Coffee Break					
11.15 11.30	García-Romero	Tiepolo	Kutzschbach	Christy	**Tajčmanová**	Cook
11.30 11.45	Schiebel	Brombin	Miron	Rieder	Piazolo	Brodbeck
11.45 12.00	Malferrari	Aradi	Stefánsson	Krivovichev	Goryaeva	Pinto
12.00 12.15	Mervat	Liptai	Kleine	Krivovichev	Faryad	Gill
12.15 12.30	Mills	Puziewicz	Liebscher	Povarennykh	Plümper	Alfonso
12.30 14.00	Lunch Break					
14.00 14.15	**Cerri**	Portnyagin	Rapa	Chiesa	**Pichavant**	Kontonikas-Charos
14.15 14.30		Borghini	**Baumgartner**	Hecht		Goodenough
14.30 14.45	Rodeghero	Ali		Schumann	Gubbay-Nemes	Hughes
14.45 15.00	Quartieri	Ferrando	Fregola	Simon	Botcharnikov	Aiglsperger
15.00 15.15	Cruciani	Sanfilippo	Verlaguet	Kreher-Hartmann	Cigala	Al Ali
15.15 15.45	Coffee Break					
15.45 16.00	Occhipinti	Basch	Sanchez-Valle	Walcott	Oeser	
16.00 16.15	Belviso	**Rampone**	**Hermann**	Kaliwoda	González-García	
16.15 16.30	Comboni	Koepke		Maraffi	Assbichler	
16.30 16.45	Consani	Schwindrofska	McCaig	Paris	Ridolfi	
16.45 17.00	Golubev	Ziberna	Kullerud	Milke	Stuff	
17.00 18.30	**Poster Sessions**					
18.30 20.00	Annual National Society Meetings					

Tuesday, September 13th

ORAL SESSIONS

MORNING

S2. Evolution of the Earth's mantle and melt generation through time

Conveners: Costanza Bonadiman, Carsten Munker, Helen Williams, Marguerite Godard, Othmar Müntener and Alberto Zanetti

(09.30-10.45) Room - Tempio 1

2-1 09.30 – 09.45
Sossi P.A.* & Moynier F.: THE LUNAR Mg SUITE AND THE IRON ISOTOPE COMPOSITION OF THE MOON

2-2 09.45 – 10.00
van de Löcht J., Li C., Hoffmann J.E., Wang Z., Becker H., Rosing M., Kleinschrodt R. & Münker C.*: EARTH'S OLDEST MANTLE PERIDOTITES INDICATE EARLY MIXING OF THE LATE VENEER INTO THE MANTLE

2-3 10.00 – 10.15
Ballhaus C.*, Münker C., Fonseca R.O.C., Nagel T., Speelmanns I.M., Zirner A., Vogel A. & Heuser A.: THE SULFUR DEPLETION IN THE EARTH'S MANTLE IS NOT A HIGH PRESSURE SIGNATURE

2-4 10.15 – 10.30
(KEYNOTE) Aulbach S.*: CONSTRAINTS FROM SPREADING RIDGE-DERIVED ECLOGITES ON ARCHAEAN MANTLE POTENTIAL TEMPERATURES

2-12 10.30 – 10.45
Beccaluva L., Bianchini G., Natali C.* & Siena F.: THE ALKALINE-CARBONATITE COMPLEX OF JACUPIRANGA (BRAZIL) REVISITED: MAGMA GENESIS, MODE OF EMPLACEMENT AND TECTONO-MAGMATIC SIGNIFICANCE

(11.15-12.30) Room - Tempio 1

2-6 11.15 – 11.30
Sessa G., Tiepolo M.*, Moroni M., Fiorentini M.L., Langone A., Giazzi G., Krotz L., Ferrari E. & Loucks R.R.: AMPHIBOLE AS A PROXY OF THE SECULAR VARIATIONS IN PRIMITIVE MAGMAS

2-7 11.30 – 11.45
Brombin V.*, Bonadiman C., Coltorti M. & Bryce J.: MANTLE XENOLITHS FROM MAROSTICANO AREA (NORTHERN ITALY): A COMPARISON WITH VENETO VOLCANIC PROVINCE LITHOSPHERIC MANTLE

2-8 11.45 – 12.00
Aradi L.E.*, Hidas K., Klébesz R., Kovács I., Patkó L., Zanetti A. & Szabó C.: DEFORMATION OF THE LITHOSPHERIC MANTLE BENEATH THE STYRIAN BASIN (EASTERN AUSTRIA) - A STUDY ON PERIDOTITE XENOLITHS

2-9 12.00 – 12.15
Liptai N.*, Patkó L., Kovács I., Hidas K., O'Reilly S.Y., Griffin W.L., Pearson N.J. & Szabó C.: GEOCHEMICAL EVOLUTION OF THE UPPER MANTLE BENEATH THE NÓGRÁD-GÖMÖR VOLCANIC FIELD (N-HUNGARY – S-SLOVAKIA) AS RECONSTRUCTED FROM SPINEL PERIDOTITE XENOLITHS

2-11 12.15 – 12.30
Puziewicz J.*, Matusiak-Małek M., Ntaflos T., Kukuła A. & Ćwiek M.: MANTLE ROOTS OF NE PART OF THE VARISCAN OROGEN IN EUROPE: PROTOLITH PROVENANCE AND METASOMATIC STYLES

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S4. Fluids in the crust

Conveners: Maria Luce Frezzotti, Cristoph Heinrich and Thomas Müller

(09.30-10.45) Room - Tempio 2

4-1 09.30 – 09.45
Steinmann L.*, Lazarov M., Wang Z., Becker H. & Weyer S.: THE DISTRIBUTION OF SIDEROPHILE AND CHALCOPHILE TRACE METALS IN MANTLE ROCKS (BALMUCCIA, ITALY)

4-2 09.45 – 10.00
Villa I.M.*, Peverelli V., Oglialoro E., Pettke T. & Frezzotti M.L.: HALOGENS, BARIUM AND URANIUM IN MANTLE FLUID INCLUSIONS

4-3 10.00 – 10.15
Bonnemains D.*, Verlaguet A., Escartin J., Mével C., Boiron M.-C. & Andreani M.: NATURE AND ORIGIN OF SI-RICH FLUIDS AT 13°20'N SILICIFIED OCEANIC DETACHMENT FAULT (MID-ATLANTIC RIDGE)

4-4 10.15 – 10.30
de Ronde C.E.J.* & Stucker V.K.: SEAFLOOR HYDROTHERMAL VENTING AT VOLCANIC RCS AND BACKARCS

4-5 10.30 – 10.45
Pertsev A.*, Prokof'ev V.Y., Aranovich L. & Ageeva O.: PLUTONIC-LEVEL HYDROTHERMAL COOLING RELATED TO OCEANIC DETACHMENT FAULTING: MINERALOGY AND FLUID ORIGIN

(11.15-12.30) Room - Tempio 2

4-6 11.15 – 11.30
Kutzschbach M.*, Wunder B., Trumbull R.B., Meixner A., Heinrich W. & Franz G.: THE EFFECT OF TETRAHEDRAL B ON THE B ISOTOPE FRACTIONATION BETWEEN OLENITIC TOURMALINE AND FLUID

4-7 11.30 – 11.45
Miron G.D.*, Wagner T., Kulik D.A. & Heinrich C.A.: INTERNALLY CONSISTENT THERMODYNAMIC DATA FOR HYDROTHERMAL MINERAL SOLUBILITY EQUILIBRIA IN THE SYSTEM Ca-Mg-Na-K-Al-Si-O-H-C-Cl

4-8 11.45 – 12.00
Stefánsson A.*: MULTICOMPONENT FLUID CHEMISTRY OF HIGH-ENTHALPY GEOTHERMAL SYSTEM

4-9 12.00 – 12.15
Kleine B.I.*, Stefánsson A., Halldórsson S.A., Whitehouse M., Barnes J.D., Jónasson K. & Franzson H.: COUPLED HYDROGEN, OXYGEN AND SILICON ISOTOPE SYSTEMATICS OF GROUNDWATER-MAGMA INTERACTION IN ICELANDIC HYDROTHERMAL SYSTEMS

4-10 12.15 – 12.30
Liebscher A.*, Henninges J. & Möller F.: SPECTACULAR VIDEO INSPECTIONS OF TWO-PHASE FLUID CONDITIONS AND INVERTED FLUID-DENSITY PROFILES IN OBSERVATION WELLS AT THE KETZIN CO_2 STORAGE SITE, GERMANY – AN ARTI-

FICIAL ANALOGUE TO VAPOUR DOMINATED GEOTHERMAL SYSTEMS?

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S8. Diffusion, mineral reaction and deformation mechanisms from low to high temperatures: flow and brittle processes of the Earth's interior

Conveners: Sylvie Demouchy, Katharina Marquardt, Juan Jimenez-Millan, Martine Buatier and Cecilia Viti

(09.30-10.45) Room - Parco

8-1 09.30 – 09.45
(KEYNOTE) Faulkner D.R.*: FAULT STRENGTH, EARTHQUAKE NUCLEATION, AND RUPTURE PROPAGATION IN CLAY-RICH FAULT ZONES

8-2 09.45 – 10.00
Leclère H.*, Faulkner D.R., Wheeler J. & Mariani E.: PERMEABILITY CONTROL OF TRANSIENT SLIP WEAKENING DURING GYPSUM DEHYDRATION AND IMPLICATIONS ON SUBDUCTION ZONES

8-3 10.00 – 10.15
Abd Elmola A.*, Buatier M., Monié P., Charpentier D., Lanari P., Trincal V. & Labaume P.: THERMOCHRONOLOGY OF FAULT ACTIVITY BY CHARACTERIZATIONS OF CLAY MINERALS (EXAMPLE OF PIC DE PORT VIEUX THRUST, PYRENEES, SPAIN)

8-4 10.15 – 10.30
Campione M.*: THE BIVALENCE AND ANOMALIES OF ANTIGORITE IN THRUST FAULT MECHANICS

8-5 10.30 – 10.45
Tesei T.*, Viti C. & Collettini C.: DEFORMATION IN SERPENTINE-RICH SHEAR ZONES: FIELD OBSERVATIONS AND FRICTION OF MINERALOGICALLY-CONTROLLED SERPENTINES

(11.15-12.30) Room - Parco

8-6 11.15 – 11.30
(KEYNOTE) Tajčmanová L.*, Moulas E., Vrijmoed J.C. & Zhong X.: INTERPLAY BETWEEN CHEMICAL DIFFUSION AND DEFORMATION

8-7 11.30 – 11.45
Piazolo S.*, La Fontaine A., Trimby P., Harley S., Yang L., Armstrong R. & Cairney J.M.: ATOMS ON THE MOVE: DEFORMATION-INDUCED TRACE ELEMENT REDISTRIBUTION IN ZIRCON REVEALED USING ATOM PROBE TOMOGRAPHY

8-8 11.45 – 12.00
Goryaeva A.M.*, Carrez P. & Cordier P.: MODELING [100] DISLOCATION GLIDE IN $MgSiO_3$ POST-PEROVSKITE UNDER D'' CONDITIONS

8-9 12.00 – 12.15
Faryad S.W.*, Jedlicka R., Jezek J. & Hauzenberger C.: PRESERVATION OF COMPOSITIONAL ZONING OF ECLOGITE FACIES GARNET WITH GRANULITE FACIES OVERPRINT; HOW FAST THE METAMORPHIC PROCESSES DURING COLLISION OROGENY ARE?

8-10 12.15 – 12.30
Plümper O.*, Botan A., Los C., Malthe-Sørenssen A. & Jamtveit B.: NANOSCALE TRANSIENT POROSITY CONTROLS LARGE-SCALE METAMORPHIC FLUID FLOW

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S12. Clays, zeolites and nanostructured minerals: from mineralogy to applications in industry and environment

Conveners: Emilia Garcia Romero, Annalisa Martucci and Mercedes Suarez

(09.30-10.45) Room - Arengo

12-1 09.30 – 10.00
(KEYNOTE) Bauluz B.*, Mayayo M.J. & Yuste A.: MICROTEXTURE AND GENESIS OF KAOLIN MINERALS IN SEDIMENTARY ENVIRONMENTS OF THE LOWER CRETACEOUS IN NE SPAIN

12-2 10.00 – 10.15
Suárez M.*, García-Romero E., Simic V. & Andric N.: Mg-PHYLLOSILICATES CRYSTAL CHEMISTRY OF THE ANDRIĆI SEPIOLITE DEPOSIT (SERBIA)

12-3 10.15 – 10.30
García-Rivas J.*, Torres T., Ortiz J.E., Sánchez-Palencia Y., García-Romero E. & Suárez M.: GEOCHEMISTRY AND BIOMARKER ANALYSIS OF THE BENTONITES FROM ESQUIVIAS (MADRID)

12-4 10.30 – 10.45
Martín D.*, Aparicio P. & Galán E.: CAPTURE OF CO_2 BY CONSTRUCTION WASTE

(11.15-12.30) Room - Arengo

12-5 11.15 – 11.30
García-Romero E.* & Suárez M.: INFLUENCE OF INTERLAMINAR Mg IN THE CLASSIFICATION OF SMECTITES

12-6 11.30 – 11.45
Schiebel K.*, Jordan G., Kaestner A., Böhnke S. & Schmahl W.W.: INFLUENCE OF MOISTURE AND TEMPERATURE ON THE TENSILE STRENGTH OF BENTONITE BOUNDED MOULDING SAND

12-7 11.45 – 12.00
Malferrari D.*, Bernini F., Borsari M., Brigatti M.F., Castellini E. & Cástro R.G.: EFFICIENT AND SELECTIVE REMOVAL OF ORGANIC VOLATILE SULPHUR DERIVATIVES USING MONTMORILLONITE INTERCALATED WITH Fe^{3+}-PHENANTHROLINE COMPLEX

12-8 12.00 – 12.15
Mervat H.*, Heba F., Fatma A. & El-Herbiny S.: SPECTROSCOPIC AND MICROSCOPIC EVALUATION OF ORGANIC-CLAY INTERCALATION

12-9 12.15 – 12.30
Mills S.J.*, Génin J.-M.R. & Christy A.G.: GREEN RUST: THE FIRST DISCOVERIES IN AUSTRALIA, DNA, AND INDUSTRIAL USES

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S17. Mineral diversity, complexity and evolution

Conveners: Sergey Krivovichev and Edward Grew

(09.30-10.45) Room - Marina

17-6 09.30 – 09.45
Hawthorne F.C.*: SILICATE MINERALS AND THE STRUCTURAL HIERARCHY HYPOTHESIS: SHEET SILICATES

17-7 09.45 – 10.00
Kutzschbach M., Ertl A.*, Wunder B., Krstulovic M., Trumbull R.B. & Rocholl A.:

FIRST HIGH-PRESSURE SYNTHESIS OF LITHIUM-RICH TOURMALINE AND EVIDENCE FOR THE INCORPORATION OF Li AT THE *X* SITE

17-8 10.00 – 10.15
Burns P.C.* & Lussier A.J.: COMPLEXITY OF URANYL MINERALS: A STRUCTURAL HIERARCHY APPROACH

17-9 10.15 – 10.30
Plášil J.*: THE STRUCTURAL COMPLEXITY OF URANYL-OXIDE HYDROXY-HYDRATE MINERALS: IMPLICATIONS FOR THEIR FORMATION AND OCCURRENCE

17-10 10.30 – 10.45
Gurzhiy V.V.*, Tyumentseva O.S. & Krivovichev S.V.: EVOLUTION OF STRUCTURAL TOPOLOGY *VS*. CHEMICAL COMPOSITION IN MIXED URANYL SULFATE-SELENATES

(11.15-12.30) Room - Marina

17-11 11.15 – 11.30
Christy A.G.*: WHAT DO WE MEAN BY "CHALCOPHILICITY" AND "SIDEROPHILICITY" IN THE CRUST?

17-12 11.30 – 11.45
Rieder M.*: PLOTTING THE WHOLE MINERALOGICAL SYSTEM – THE CONCEPT AND THE RESULTS

17-13 11.45 – 12.00
Krivovichev V.G.*, Charykova M.V. & Krivovichev S.V.: MINERAL SYSTEM BASED ON THE NUMBER OF SPECIES-DEFINING CHEMICAL ELEMENTS IN MINERALS, THEIR TYPES, DISTRIBUTION AND MINERAL EVOLUTION OF EARTH'S CRUST

17-14 12.00 – 12.15
Krivovichev S.V.*, Krivovichev V.G. & Hazen R.M.: STRUCTURAL AND CHEMICAL COMPLEXITY OF MINERALS: RELATIONS AND TIME EVOLUTION

17-15 12.15 – 12.30
Povarennykh M.Y.*: CRYSTAL-CHEMICAL PARADIGM OF MODERN MINERALOGY. WHAT IS NEXT? ON THE ONTOGENY PARADIGM

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S23. The future of critical metals: mineralogy, metallogenesis and geometallurgy

Conveners: John Bowles, Nigel Cook and Hannah Hughes

(09.30-10.45) Room - Borgo

23-1 09.30 – 10.00
(KEYNOTE) Carvalho J.R.S., Relvas J.M.R.S.*, Pinto A.M.M., Pacheco N., Fonseca R., Santos S., Caetano P., Reis T. & Gonçalves M.: INDIUM AND SELENIUM IN THE NEVES-CORVO VHMS DEPOSIT

23-2 10.00 – 10.15
Gallard-Esquivel M.C., Cepedal A.*, Fuertes-Fuente M. & Martin-Izard A.: MINERAL RESOURCE OF CRITICAL METALS (Te-Ge-Se-In) IN EPITHERMAL DEPOSITS OF "LA CAROLINA" DISTRICT, SAN LUIS (ARGENTINA)

23-3 10.15 – 10.30
Mondillo N.*, Herrington R.J., Boni M. & Arfé G.: CRITICAL ELEMENTS IN NONSULFIDE ZINC DEPOSITS

23-4 10.30 – 10.45
Ciobanu C.L.*, Maunders C., Cook N.J. & Wade B.P.: NANOSCALE CHARACTERIZA-

TION OF COMPOSITIONALLY-ZONED SPHALERITE

(11.15-12.30) Room - Borgo

23-5 11.15 – 11.30
Cook N.J.* & Ciobanu C.L.: MULTI-TRACE ELEMENT CONCENTRATION DATA FOR MINERALS: IDENTIFYING POTENTIAL NEW RESOURCES OF CRITICAL ELEMENTS

23-6 11.30 – 11.45
Brodbeck M.*, Kleinhanns I., Schönberg R., Wenzel T. & Kamber B.S.: TRACE ELEMENT MAPPING - A POWERFUL TOOL TO ASSESS THE SMALL-SCALE DISTRIBUTION OF CRITICAL METALS

23-7 11.45 – 12.00
Pinto A.M.M.*, Relvas J.M.R.S., Barriga F.J.A.S., Carvalho J.R.S., Liu Y., Pacheco N., Fonseca R., Santos S., Caetano P., Reis T. & Gonçalves M.: GOLD MINERALIZATION IN THE NEVES-CORVO VHMS DEPOSIT

23-8 12.00 – 12.15
Gill S.-J.*: THE RELATIONSHIP BETWEEN MAGNETITE AND COPPER-SILVER MINERALISATION OF THE KALAHARI COPPERBELT IN CENTRAL-EASTERN NAMIBIA

23-9 12.15 – 12.30
Alfonso P.*, Garcia-Valles M., Hamid S., Tomasa O., Llorens T., Oliva J., Guasch E., Anticoi H. & García-Polonio F.: RARE-ELEMENT MINERALIZATION IN THE Sn-Ta PENOUTA ORE DEPOSIT, NW SPAIN

Tuesday, September 13th

ORAL SESSIONS

AFTERNOON

S2. Evolution of the Earth's mantle and melt generation through time

Conveners: Costanza Bonadiman, Carsten Munker, Helen Williams, Marguerite Godard, Othmar Müntener and Alberto Zanetti

(14.00-15.15) Room - Tempio 1

2-5 14.00 – 14.15
Portnyagin M.*, Sushchevskaya N., Shishkina T., Kamenetsky V., Taylor R.N. & Garbe-Schönberg D.: SILVER AND COPPER FRACTIONATION IN MORB

2-16 14.15 – 14.30
Borghini G.*, Fumagalli P. & Rampone E.: THE ROLE OF SECONDARY PYROXENITES IN THE COMPOSITION OF MELTS FROM VEINED MANTLE SOURCES: EXPERIMENTAL CONSTRAINTS

2-21 14.30 – 14.45
Ali S.A.*, Nutman A.P. & Jones B.G.: OVERVIEW OF THE TECTONIC EVOLUTION OF THE IRAQI ZAGROS THRUST ZONE: SIXTY MILLION YEARS OF CONVERGENCE IN NEOTETHYS

2-14 14.45 – 15.00
Ferrando C.*, Godard M. & Ildefonse B.: NEW CONSTRAINTS ON THE FORMATION OF HETEROGENEOUS OCEANIC CRUST AT SLOW SPREADING RIDGES: A DETAILED PETRO-GEOCHEMICAL STUDY OF THE OLIVINE-RICH TROCTOLITES FROM ATLANTIS MASSIF (MAR, IODP Hole U1309D, 30°N)

2-15 15.00 – 15.15
Sanfilippo A.*, Tribuzio R., Ottolini L. & Hamada M.: MANTLE MELTING, MELT EXTRACTION AND AGGREGATION BENEATH MID OCEAN RIDGES: CLUES FROM OLIVINE IN REPLACIVE DUNITES

(15.45-17.00) Room - Tempio 1

2-22 15.45 – 16.00
Basch V.*, Rampone E., Ildefonse B., Godard M. & Crispini L.: HYBRID ORIGIN OF THE ERRO-TOBBIO TROCTOLITES (LIGURIAN OPHIOLITES, ITALY): STRUCTURAL AND GEOCHEMICAL EVIDENCE OF MULTI-STAGE EVOLUTION

2-17 16.00 – 16.15
(KEYNOTE) Rampone E.*: MELT MIGRATION AND MELT-ROCK REACTION IN THE ALPINE-APENNINE PERIDOTITES: INSIGHTS ON MANTLE DYNAMICS IN EXTENDING LITHOSPHERE

2-18 16.15 – 16.30
Koepke J.*, Zhang C., Namur O., Meyer R. & Feig S.T.: ORTHOPYROXENE IN PRIMITIVE LAYERED GABBROS FROM HESS DEEP (EPR): FORMATION BY MANTLE/MELT INTERACTION OR FRACTIONAL CRYSTALLIZATION?

2-19 16.30 – 16.45
Schwindrofska A.*, Hoernle K., van den Bogaard P., Hauff F. & Werner R.: SUBMARINE STRUCTURES OF THE CARIBBEAN LARGE IGNEOUS PROVINCE: AGE AND GEOCHEMISTRY OF THE BEATA RIDGE AND HESS ESCARPMENT

2-20 **16.45 – 17.00**
Ziberna L.*, Green E.C.R. & Blundy J.D.: THE PRESSURE SIGNAL IN OLIVINE-BEARING GABBROIC ROCKS

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S4. Fluids in the crust

Conveners: Maria Luce Frezzotti, Cristoph Heinrich and Thomas Müller

(14.00-15.15) Room - Tempio 2

4-11 **14.00 – 14.15**
Rapa G.*, Groppo C., Rolfo F. & Mosca P.: CALC-SILICATE REACTIONS AND TEXTURES REVEAL METAMORPHIC-CO_2 PROCESSES AND FLUXES IN THE HIMALAYAS

4-12 **14.15 – 14.45**
(KEYNOTE) Baumgartner L.P.*, Bégué F., Bouvier A.-S., Putlitz B., Vennemann T. & Baumgartner C.: CONTROL OF STABLE ISOTOPE EXCHANGE BY NET-TRANSFER AND DISSOLUTION-RECRYSTALLIZATION REACTIONS AROUND HYDROTHERMAL VEINS IN CARBONATES

4-13 **14.45 – 15.00**
Fregola R.A.*, Ruggieri G., Rimondi V., Zucchi M., Punzi C., Brogi A. & Liotta D.: RECONSTRUCTING THE CIRCULATION OF PALEO-FLUIDS THROUGH FLUID INCLUSION STUDIES: THE CASE OF THE IRON-MINERALIZATION OF EASTERN ELBA ISLAND

4-14 **15.00 – 15.15**
Verlaguet A.*, Brunet F., Goffé B., Menut D., Findling N., Poinssot C. & Huet B.: SELECTIVE TRANSFER OF Li-Al-RICH PHYLLOSILICATE TO METAMORPHIC VEINS (WESTERN ALPS): LASER INDUCED BREAKDOWN SPECTROSCOPY (LIBS) COMPOSITIONAL PROFILES AND MICROSTRUCTURAL CHARACTERIZATION

(15.45-17.00) Room - Tempio 2

4-15 **15.45 – 16.00**
Sanchez-Valle C.*, Louvel M., Tsay A. & Zajacz Z.: SLAB FLUIDS AND CONTROLS ON TRACE ELEMENT RECYCLING IN SUBDUCTION ZONES

4-16 **16.00 – 16.30**
(KEYNOTE) Hermann J.*: THE DEEP WATER CYCLE THROUGH THE LITHOSPHERE

4-17 **16.30 – 16.45**
McCaig A.M.*, Titarenko S.S., Savov I.P., Cliff R.A., Agostini S. & Boyce A.J.: BORON CONTENT OF ALTERED OCEANIC GABBRO: IMPLICATIONS FOR BORON FLUXES IN SUBDUCTION ZONES

4-18 **16.45 – 17.00**
Kullerud K.*, Kotková J. & Škoda R.: ELEMENT MOBILITY DURING FORMATION OF THE KONGSBERG SILVER DEPOSIT

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S7. From deep magmatic processes to volcanic eruption

Conveners: Caroline Martel, Riccardo Avanzinelli, Maxim Portnyagin and Roman Botcharnikov

(14.00-15.15) Room - Parco

7-1 **14.00 – 14.30**
(KEYNOTE) Pichavant M.*: EXPERIMENTAL MODELLING OF THE DEEP FEEDING

SYSTEM OF BASALTIC VOLCANOES

7-2 14.30 – 14.45
Gubbay-Nemes L.J.*, Graham I.T., de Ronde C.E.J. & Timm C.: BROTHERS SUBMARINE CALDERA VOLCANO, KERMADEC ARC, NEW ZEALAND: A GEOCHEMICAL AND PETROLOGICAL EVOLUTION

7-3 14.45 – 15.00
Botcharnikov R.*, Holtz F., Stechern A., Almeev R.R. & Sato H.: EXPERIMENTAL CONSTRAINTS ON THE ORIGIN OF DACITIC VOLCANISM IN ARC SETTINGS

7-4 15.00 – 15.15
Cigala V.*, Kueppers U., Pena Fernandez J.J., Sesterhenn J. & Dingwell D.B.: THE INFLUENCE OF EXPERIMENTAL CONDITIONS ON THE DYNAMICS OF STARTING GAS-PARTICLE JETS

(15.45-17.00) Room - Parco

7-5 15.45 – 16.00
Oeser M.*, Ruprecht P. & Weyer S.: MAGMA ASCENT BENEATH CONTINENTAL ARC VOLCANOES – INSIGHTS FROM CHEMICALLY AND ISOTOPICALLY ZONED OLIVINES FROM IRAZÚ VOLCANO (COSTA RICA)

7-6 16.00 – 16.15
González-García D.*, Behrens H., Petrelli M., Vetere F.P., Zezza A., Morgavi D. & Perugini D.: WATER-ENHANCED DIFFUSION OF MAJOR ELEMENTS IN NATURAL MELTS: INSIGHTS FROM DIFFUSION COUPLE EXPERIMENTS

7-7 16.15 – 16.30
Assbichler D.*, Asadpour M., Heuss-Assbichler S. & Kunzmann T.: SEQUENCE OF REPETITIVE EXPLOSIVE AND EFFUSIVE ERUPTION PHASES RECORDED IN LAVAS AND EJECTED BOMBS OF SARAY VOLCANO, NW IRAN

7-8 16.30 – 16.45
Ridolfi F.*, Renzulli A. & Perugini D.: REFINEMENT AND APPLICATION OF CALCIC AMPHIBOLE THERMOBAROMETRY FOR IGNEOUS ROCKS: AMP-TBX.XLSX

7-9 16.45 – 17.00
Stuff M.*, Schuessler J.A., Rocholl A. & Wilke M.: HOW IRON ISOTOPES RECORD INTERACTIONS OF CARBONATITE AND SILICATE MAGMAS

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S12. Clays, zeolites and nanostructured minerals: from mineralogy to applications in industry and environment

Conveners: Emilia Garcia Romero, Annalisa Martucci and Mercedes Suarez

(14.00-15.15) Room - Arengo

12-10 14.00 – 14.30
(KEYNOTE) Farina M.*, Cerri G.*, Brundu A., Juliano C., Giunchedi P., Rassu G., Bonferoni M.C. & Gavini E.: EXPLOITING CLINOPTILOLITE AGAINST *HELICOBACTER PYLORI*: POSSIBILITY OR UTOPIA?

12-11 14.30 – 14.45
Rodeghero E.*, Guzzinati R., Martucci A. & Pasti L.: STRUCTURAL CHARACTERIZATION OF HIGH-SILICA ZEOLITES EXCHANGED WITH REEs ELEMENTS

12-12 14.45 – 15.00
Quartieri S.*, Arletti R., Gigli L. & Di Renzo F.: STABLE CO_2 HYDRATES IN ZEOLITE Na-Y: STRUCTURAL CHARACTERIZATION BY SYNCHROTRON X-RAY POWDER DIF-

FRACTION

12-13 15.00 – 15.15
Berton D., Cruciani G.*, Rodeghero E. & Martucci A.: NEW INSIGHTS ON THE RESPONSE TO HEATING OF METAVARISCITE: AN *IN SITU* SYNCHROTRON POWDER DIFFRACTION STUDY

(15.45-17.00) Room - Arengo

12-14 15.45 – 16.00
Occhipinti R.*, Tarantino S.C., Riccardi M.P. & Zema M.: S-BEARING ZEOLITES IN GEOPOLYMERS FROM VOLCANIC KAOLIN

12-15 16.00 – 16.15
Belviso C.*, Belviso S., Cavalcante C., Lettino A. & Ragone P.: FLY ASH AS RAW MATERIAL FOR THE SYNTHESIS OF ZEOLITE-ENCAPSULATED TETRAPYRROLES (PORPHYRAZINE AND METALLO PORPHYRAZINE – PORPHYRIN)

12-16 16.15 – 16.30
Comboni D.*, Gatta G.D., Lotti P., Merlini M. & Liermann H.-P.: PHILLIPSITE AT HIGH PRESSURE: A SINGLE-CRYSTAL X-RAY SYNCHROTRON DIFFRACTION STUDY

12-17 16.30 – 16.45
Consani S.*, Giuli G., Balić-Zunić T., Carbone C., Trapananti A., Cardinale A., Salviulo G. & Lucchetti G.: STUDY OF NATURAL AND SYNTHETIC WOODWARDITE AS POTENTIAL REEs RECOVERY

12-18 16.45 – 17.00
Golubev E.A.*: INFLUENCE OF THE IMPURITIES AND STRUCTURE ON ELECTROMAGNETIC PROPERTIES OF NATURAL NANOSTRUCTURED CARBON MATERIALS

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S23. The future of critical metals: mineralogy, metallogenesis and geometallurgy

Conveners: John Bowles, Nigel Cook and Hannah Hughes

(14.00-15.15) Room - Borgo

23-10 14.00 – 14.15
Kontonikas-Charos A.*, Ciobanu C.L., Cook N.J., Ehrig K. & Krneta S.: RARE EARTH ELEMENT REMOBILISATION IN FELDSPARS: EXAMPLES FROM IOCG SYSTEMS IN THE OLYMPIC Cu-Au PROVINCE

23-11 14.15 – 14.30
Goodenough K.*, Deady É., Lacinska A., Shaw R.A. & Roberts N.M.W.: THE ÇANAKLI REE PLACER DEPOSIT, TURKEY: AN ALKALINE VOLCANIC SOURCE?

23-12 14.30 – 14.45
Kinnaird J.A., Yudovskaya M., Chikwiri F. & Hughes H.S.R.*: PGE DEPOSITS: IT'S NOT JUST ABOUT THE GRADE

23-13 14.45 – 15.00
Aiglsperger T.*, Proenza J.A. & Longo F.: Ni LATERITES AS FUTURE UNCONVENTIONAL PGE ORE DEPOSITS

23-14 15.00 – 15.15
Al Ali S.*, Wall F., Pascoe R., Rollinson G. & Dawes W.: ROLE OF AUTOMATED MINERALOGY IN OPTIMISING MINERAL PROCESSING OF CARBONATITE HOSTED REE AT SONGWE HILL, MALAWI

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S28. Museums and teaching mineral sciences to new generations

Conveners: Lutz Hecht, Cristiano Ferraris and Eleonora Paris

(14.00-15.15) Room - Marina

28-1 14.00 – 14.15
Signori G. & Chiesa S.*: PIETRE-PIETANZE / ROCKING RECIPES

28-2 14.15 – 14.30
Hecht L.*, Banaszak M., Schmid-Beurmann P., Schmidt B.C. & Stalder R.: THE DEVELOPMENT OF MINERALOGICAL TOOL BOXES: AN EXAMPLE HOW TO STOP THE DISAPPEARANCE OF BASIC GEOSCIENCES IN GERMAN SCHOOL EDUCATION

28-3 14.30 – 14.45
Schumann D.*, Unrau D., Laquerre A., Collins R. & Phaneuf M.W.: LARGE AREA SEM IMAGING IN GEOSCIENCES: BRINGING THE WORLD OF NANOSCALE MICROSCOPY TO THE CLASSROOMS AND MUSEUMS AS A TOOL FOR TEACHING AND LEARNING

28-4 14.45 – 15.00
Simon G.* & Gille P.: SINGLE CRYSTAL GROWTH EXPERIMENT FOR AN EXHIBITION

28-5 15.00 – 15.15
Kreher-Hartmann B.*: WORKING WITH MINERALS FROM PRE-SCHOOL AGE TO THE ELDERLY

(15.45-17.00) Room - Marina

28-6 15.45 – 16.00
Walcott R.*: FROM NATURAL HISTORY SPECIMENS TO RECORDS OF EARTH SYSTEM PROCESSES

28-7 16.00 – 16.15
Kaliwoda M.* & Hochleitner R.: MINERALOGICAL EDUCATION FOR CHILDREN AND GROWNUPS IN THE MINERALOGICAL STATE COLLECTION MUNICH (MUSEUM REICH DER KRISTALLE): A SCIENTIFIC PROGRAM TO UNDERSTAND THE GEOLOGICAL WORK OF SCIENTIST

28-8 16.15 – 16.30
Maraffi S.*, Paris E., Sacerdoti F.M. & Scamardella A.: GEOQUEST - A COMPUTER CLASS ROLE PLAYING GAME

28-9 16.30 – 16.45
Boniello A. & Paris E.*: THE USE OF VIRTUAL WORLDS IN GEOSCIENCE TEACHING/LEARNING

28-10 16.45 – 17.00
Milke R.*: WHAT BLIND PEOPLE CAN SEE IN A MINERAL COLLECTION (AND WHAT THEY CAN SHOW US THERE)

Tuesday, September 13th

POSTER SESSIONS

Poster Area

S2. Evolution of the Earth's mantle and melt generation through time

2-10 **Panel number 1**
Pelorosso B.*, Bonadiman C., Coltorti M. & Gentili S.: PETROLOGICAL EVOLUTION OF NORTHERN VICTORIA LAND LITHOSPHERE: NEW INSIGHTS FROM HARROW PEAKS MANTLE XENOLITH

2-13 **Panel number 2**
Godard M.*, Alard O. & Gréau Y.: REDISTRIBUTION OF TRACE ELEMENTS IN REACTIVE ABYSSAL MANTLE: A LA-ICPMS STUDY OF ODP SITE 1274 PERIDOTITES (15°20 FZ, MID-ATLANTIC RIDGE)

2-23 **Panel number 3**
Berno D.*, Tribuzio R. & Zanetti A.: EARLY EVOLUTION OF MANTLE MELTS INTRUDING THE LOWERMOST CONTINENTAL CRUST OF THE IVREA-VERBANO ZONE: INSIGHTS FROM THE M. CAPIO PERIDOTITE-PYROXENITE LENS

2-24 **Panel number 4**
Bianchini G.*, Natali C., Shibata T. & Yoshikawa M.: BASIC DYKES CROSSCUTTING THE CRYSTALLINE BASEMENT OF VALSUGANA (ITALY): FURTHER EVIDENCE OF EARLY TRIASSIC VOLCANISM IN THE SOUTHERN ALPS

2-25 **Panel number 5**
Borghini G. & Fumagalli P.*: SUBSOLIDUS PHASE RELATIONS IN A SECONDARY-TYPE PYROXENITE: AN EXPERIMENTAL STUDY UP TO 1.5 GPa

2-26 **Panel number 6**
Ćwiek M.*: DUNITE CHANNELS IN PERIDOTITES OF LITHOSPHERIC MANTLE BENEATH LOWER SILESIA (SW POLAND)

2-27 **Panel number 7**
Francomme J.E.*, Fumagalli P. & Borghini G.: OLIVINE-RICH TROCTOLITE ORIGIN THROUGH MELT-ROCK REACTION EXPERIMENTS

2-28 **Panel number 8**
Harak M.*, Hezel D.C. & Münker C.: FRACTIONAL CRYSTALLISATION AND FE-ISOTOPY VARIATION OF BONINITES FROM PAPUA NEW GUINEA

2-29 **Panel number 9**
Heckel C.R.*, Brey G.P., Hoefer H.E. & Linckens J.: EXSOLUTION OF GARNET AND KYANITE FROM AN ESKOLAITE-BEARING, Al-RICH CLINOPYROXENE IN A RUBY ECLOGITE DURING COOLING IN THE SUBCRATONIC MANTLE (KAAPVAAL-CRATON)

2-30 **Panel number 10**
Hoefer H.E.*, Brey G.P. & Linckens J.: THE DETERMINATION OF THE OXIDATION STATE OF Fe IN CLINOPYROXENE MEGACRYSTS WITH THE "FLANK METHOD" BY EPMA: IS THE CRYSTALLOGRAPHIC ORIENTATION IMPORTANT?

2-31 **Panel number 11**
Kukuła A.*, Puziewicz J., Matusiak-Małek M., Ntaflos T. & Milke R.: EVIDENCE OF CARBONATITE METASOMATISM IN LITHOSPHERIC MANTLE BENEATH THE HELDBURG DIKE SWARM (HELDBURGER GANGSCHAR, CENTRAL GERMANY) SUBSET OF CENTRAL EUROPEAN VOLCANIC PROVINCE

2-32 **Panel number 12**
Renna M.R.*, Tribuzio R. & Ottolini L.: NEW PERSPECTIVES ON THE ORIGIN OF OLIVINE-RICH TROCTOLITES AND ASSOCIATED HARRISITES FROM THE LIGURIAN OPHIOLITES (ITALY)

2-33 **Panel number 13**
Giovanardi T., Zanetti A.*, Mazzucchelli M., Langone A. & Morishita T.: MELT-PER-

IDOTITE MULTISTAGE INTERACTION AT MANTLE CONDITIONS: PETROLOGICAL AND GEOCHEMICAL EVIDENCES FROM SAPPHIRINE-APATITE-CALCITE-BEARING GABBROIC DYKES FROM THE FINERO PHLOGOPITE PERIDOTITE (IVREA-VERBANO ZONE)

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S4. Fluids in the crust

4-19 Panel number 20
Remigi S., Ferrando S.* & Frezzotti M.L.: FLUID-ASSISTED COESITE-QUARTZ TRANSITION IN THE DORA-MAIRA WHITESCHISTS, WESTERN ALPS: PETROGRAPHIC AND RAMAN STUDIES

4-20 Panel number 21
Pollok K.*, Uhlmann L., Pleuger J. & Langenhorst F.: REDISTRIBUTION OF MAIN ELEMENTS DURING ECLOGITE TO AMPHIBOLITE RETROGRADE MINERAL REACTIONS

4-21 Panel number 22
Berryman E.*, Kutzschbach M., Trumbull R.B., Meixner A. & Franz G.: TOURMALINE'S RECORD OF FLUID HISTORY IN THE W TAUERN WINDOW

4-22 Panel number 23
Ganzhorn A.C.*, Verlaguet A. & Austrheim H.: CHARACTERIZATION OF FLUIDS AND ELEMENT TRANSFERS ASSOCIATED TO GARNET VEIN AND CORONA DEVELOPMENT DURING GRANULITIZATION

4-23 Panel number 24
Paoli G.*, Rocchi S. & Dini A.: ELEMENT MOBILITY BETWEEN GRANITE, FLUIDS AND SKARN (CAMPIGLIA MARITTIMA, TUSCANY)

4-24 Panel number 25
Kiss G.B.*, Zagyva T., Pásztor D. & Zaccarini F.: SUBMARINE HYDROTHERMAL PROCESSES, MIRRORING THE GEOTECTONIC EVOLUTION OF THE NE HUNGARIAN JURASSIC SZARVASKÕ UNIT

4-25 Panel number 26
Bergemann C.*, Gnos E., Berger A. & Whitehouse M.: ION PROBE DATING OF HYDROTHERMAL CLEFT MONAZITE TRACKING EXHUMATION AND BRITTLE TECTONIC EVOLUTION IN THE CENTRAL ALPS

4-26 Panel number 27
Kuesters T.*, Mueller T. & Renner J.: IMPLEMENTING METAMORPHIC CONCEPTS IN REACTIVE TRANSPORT MODELLING OF GEOTHERMAL SYSTEMS: CRYSTAL SIZE DESTRIBUTIONS: IDEAL SOLID-SOLUTIONS AND MINERAL ZONING

4-27 Panel number 28
Mueller T.*, Kuesters T., van Zuilen K. & Dietzel M.: MIDAS: MODELLING KINETICALLY CONTROLLED ISOTOPE FRACTIONATION BY MASS-DEPENDENT DIFFUSION, ADVECTION AND SORPTION PROCESS

4-28 Panel number 29
Halder S.*, Lehmann B., Cabral A.R., Horn I. & Weyer S.: *IN-SITU* IRON ISOTOPE STUDY OF IRON ORE AND BANDED IRON FORMATION FROM THE CARAJÁS MINERAL PROVINCE, BRAZIL

4-29 Panel number 30
Huertas F.J.*, Gervilla F. & Delgado-Huertas A.: ISOTOPIC COMPOSITION (δD, $\delta^{34}S$, $\delta^{13}C$) OF THE ORDOVICIAN BLACK SLATES HOSTING THE RETORTILLO-SANTIDAD URANIUM DEPOSIT (SALAMANCA, SPAIN)

4-30 Panel number 31
Jessop K.*, Daczko N. & Piazolo S.: HOT AQUEOUS FLUIDS: ARE THEY THE KEY TO HTLP REGIONAL AUREOLES?

4-31 Panel number 32
Vezzoni S.*, Dini A. & Rocchi S.: MAGMA CHASING HYDROTHERMAL FLUIDS IN A DISTAL SKARN SYSTEM AT CAMPIGLIA MARITTIMA (TUSCANY)

4-32 **Panel number 33**
Schmidt C.*: RAMAN SPECTROSCOPIC STUDY OF TIN SPECIATION IN HYDROTHERMAL FLUIDS TO 600°C
4-33 **Panel number 34**
Bakker R.J.*: CENTRE POSITION OF RAMAN SPECTROGRAPHIC BANDS OF GASES IN FLUID INCLUSIONS

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S7. From deep magmatic processes to volcanic eruption

7-10 **Panel number 14**
Just T.*, Parat F., Botcharnikov R., Stechern A., Holtz F. & Alard O.: INFLUENCE OF OXYGEN FUGACITY ON THE BEHAVIOUR OF SELENIUM AND TELLURIUM IN A BASALTIC MAGMA
7-11 **Panel number 15**
Mandolini T.*, Ridolfi F., Mollo S., Renzulli A. & Perugini D.: EARLY EXPERIMENTAL RESULTS ON THE MAGMATIC ASSIMILATION OF ANHYDRITIC ROCKS
7-12 **Panel number 16**
Rossi S.*, Morgavi D., Petrelli M., Vetere F.P. & Perugini D.: CHAOTIC MIXING EXPERIMENTS BETWEEN RHYOLITIC AND SHOSHONITIC MAGMAS FROM AEOLIAN ISLANDS (ITALY)
7-13 **Panel number 17**
Salem L., Edmonds M.*, Maclennan J. & Corsaro R.: CARBON DIOXIDE SOLUBILITY MODIFED BY CUMULATE ASSIMILATION AT MOUNT ETNA, ITALY
7-14 **Panel number 18**
Stabile P.*, Behrens H., Cestelli M., Radica F., Bello M., Carroll M.R., Paris E. & Giuli G.: EFFECT OF TEMPERATURE AND COMPOSITION ON WATER SOLUBILITY IN PANTELLERITES TO 250 MPa
7-15 **Panel number 19**
Tchaptchet Tchato D.*, Simeni Wambo N.A., Keutchafo Kouamo N.A. & Tchouankoue J.P.: GEOLOGY OF THE KEKEM DYKE SWARMS (CAMEROON CENTRAL SHEAR ZONE): AN INSIGHT INTO PALEZOIC AND MESOZOIC MAGMATISMS AND GEODYNAMIC IMPLICATION FOR THE WEST GONDWANA IN CAMEROON

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S8. Diffusion, mineral reaction and deformation mechanisms from low to high temperatures: flow and brittle processes of the Earth's interior

8-11 **Panel number 47**
Abad I.*, Sanchez C., Jiménez-Millán J., Faulkner D.R., Nieto F. & Velilla N.: DOLOMITE AND MICA MINERAL REACTIONS AND MICROSTRUCTURES FORMED DURING THE SEISMIC CYCLE OF THE ALHAMA DE MURCIA FAULT
8-12 **Panel number 48**
Abd Elmola A., Charpentier D., Lanari P., Trincal V. & Buatier M.*: FLUID-ROCK INTERACTIONS AND DEFORMATION CONDITIONS REGISTRATED BY PHYLLOSILICATES IN A MAJOR THRUST (GAVARNIE THRUST AT "PIC DE PORT VIEUX", PYRENEES)
8-13 **Panel number 49**
Bollinger C.*, Farla R. & Marquardt K.: GRAIN BOUNDARIES IN FORSTERITE: HOW DO THEY MOVE TO PRODUCE SHEAR?
8-14 **Panel number 50**
García-Tortosa F.J., Jiménez-Millán J.*, Abad I., Faulkner D.R., Martin-Rojas I. & Alfaro P.: FLOW PROCESSES IN DEFORMATION BANDS DEVELOPED ON PLIO-PLEISTOCENE SOFT-ROCKS IN THE BAZA FAULT ZONE (S SPAIN)
8-15 **Panel number 51**
Hashim L.*, Gardés E., Sifré D., Morales L.F.G., Précigout J. & Gaillard F.: ASSESS-

ING THE MACROSCOPIC OLIVINE GRAIN GROWTH THROUGH THE MICROSCOPIC PHYSICAL PROPERTIES OF THE INTERGRANULAR MEDIUM

8-16 Panel number 52

Idrissi H., Bollinger C., Cordier P.* & Boioli F.: *IN SITU* DEFORMATION OF OLIVINE IN THE TRANSMISSION ELECTRON MICROSCOPE: FROM DISLOCATION VELOCITY MEASUREMENTS TO STRESS-STRAIN CURVES

8-17 Panel number 53

Jollands M.C.*, O'Neill H.S.C., Van Orman J., Berry A.J., Hermann J., Newville M. & Lanzirotti A.: XANES DETERMINATION OF EQUILIBRIUM AND DIFFUSIVE BEHAVIOUR OF Cr^{2+} AND Cr^{3+} IN SYNTHETIC FORSTERITE AND NATURAL OLIVINE AT 1400°C

8-18 Panel number 54

Mussi A.*, Cordier P., Nzogang B.C. & Demouchy S.: ELECTRON TOMOGRAPHY STUDY OF DISLOCATIONS IN OLIVINE SINGLE CRYSTALS

8-19 Panel number 55

Sánchez-Roa C.*, Vidal O., Jiménez-Millán J., Nieto F. & Faulkner D.R.: THERMODYNAMIC MODELLING OF SEPIOLITE: IMPLICATIONS FOR MECHANICAL BEHAVIOUR OF CRUSTAL FAULTS

8-20 Panel number 56

Thieme M.*, Demouchy S., Mainprice D. & Barou F.: EXPERIMENTAL DUCTILE DEFORMATION OF POLYCRYSTALLINE OLIVINE AT 1000°C

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S12. Clays, zeolites and nanostructured minerals: from mineralogy to applications in industry and environment

12-19 Panel number 35

Ahmed Z.T., Abbas A.S., Albayati T.M. & Doyle A.M.*: BIODIESEL PRODUCTION USING ZEOLITE CATALYSTS PREPARED FROM SHALE ROCK

12-20 Panel number 36

Arletti R., Fois E., Tabacchi G., Vezzalini G.* & Quartieri S.: HIGH PRESSURE-INDUCED SUPRAMOLECULAR ORGANIZATION OF WATER AND ETHANOL IN ALL-SILICA FERRIERITE: A POTENTIAL ROUTE FOR A CHALLENGING SEPARATION PROBLEM

12-21 Panel number 37

Beltrami G.*, Rodeghero E., Martucci A., Cruciani G., Sarti E., Pasti L. & Ardit M.: DESORPTION OF CHLOROBENZENE CONFINED IN Y ZEOLITE: A COMBINED *IN SITU* SYNCHROTRON X-RAY POWDER DIFFRACTION AND CHROMATOGRAPHIC STUDY

12-22 Panel number 38

D'Alessio D.*, Tribaudino M., Mezzadri F., Milanese C., Mantovani L., Pontiroli D. & Riccò M.: GUEST GASES AND PHASE TRANSITIONS IN MELANOPHLOGITE (TYPE I CLATHRATE)

12-23 Panel number 39

Digiacomo F.*, Braschi I., Rodeghero E., Blasioli S. & Martucci A.: ZEOLITES FOR SUSTAINABLE AGRICOLTURE: FURFURAL ENCAPSULATION AND CONTROLLED RELEASE IN ZSM-5

12-24 Panel number 40

Durán E.*, Bueno S., Cornejo J., Gamiz B. & Hermosín M.C.: MODIFIED CLAYS AS ADSORBENT IN FILTER SYSTEM FOR MEDIUM OR SMALL SCALE WATER DEPURATION

12-25 Panel number 41

Ershova V.B.*, Vereshchagin O.S., Prokopiev A.V. & Alexandrova G.N.: CENOZOIC CLIMATE CHANGES IN THE RUSSIAN EASTERN ARCTIC (KOTEL'NY ISLAND, NEW SIBERIAN ISLANDS ARCHIPELAGO): EVIDENCE FROM PALENOLOGICAL AND CLAY

ASSEMBLAGE DATA

12-26 Panel number 42

Fernandez-Barranco C., Koziol A.E., Drewniak M. & Yebra-Rodriguez A.*: STRUCTURAL CHARACTERIZATION OF INJECTION MOLDED SEPIOLITE/POLYAMIDE6,6 NANOCOMPOSITES BY MEANS OF STATIC AND DYNAMIC THERMAL METHODS

12-27 Panel number 43

Ferretti G.*, Natali C., Faccini B., Di Giuseppe D., Bianchini G. & Coltorti M.: NEW INSIGHTS ON THE EFFECTS OF DIFFERENT ZEOLITE AMENDMENTS ON PLANTS C-N ISOTOPIC COMPOSITION

12-28 Panel number 44

Khatem R., Bakthi A., Celis R. & Hermosín M.C.*: ANIONIC CLAY AND CATIONIC ORGANOCLAY AS NANOCARRIERS IN SMART DELIVERY SYSTEMS OF THE HERBICIDE IMAZAMOX

12-29 Panel number 45

Mesto E.*, Lacalamita M., Scordari F., Moro D., Valdrè G., Della Ventura G., Bellatreccia F., Scirè S. & Schingaro E.: HYDROCARBONS IN PHLOGOPITES FROM KASENYI KAMAFUGITIC ROCKS (SW UGANDA): CROSS-CORRELATED AFM, CONFOCAL MICROSCOPY AND RAMAM IMAGING

12-30 Panel number 46

Schmidmair D.*, Kahlenberg V. & Praxmarer A.: $K_2Ca_2Si_8O_{19}$ - A NEW POTASSIUM CALCIUM DOUBLE-LAYER SILICATE

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S15. Structural behavior and energetic properties of minerals

15-15 Panel number 57

Chanmuang C.*, Habler G., Lenz C., Nasdala L. & Váczi T.: QUANTIFICATION OF RADIATION EFFECTS IN ZIRCON: FOCUSED-ION BEAM PREPARATION OF THIN LAMELLAE FOR ION-IRRADIATION EXPERIMENTS

15-16 Panel number 58

Váczi T.*: ARE THERE POINT DEFECTS IN THE CRYSTALLINE PORTION OF SELF-IRRADIATED MINERALS?

15-17 Panel number 59

Zietlow P., Beirau T., Mihailova B., Paulmann C., Malcherek T., Groat L.A. & Bismayer U.*: ANNEALING OF RADIATION DAMAGED TITANITE

15-18 Panel number 60

Nowak W.*, Majzlan J., Dachs E. & Benisek A.: THERMODYNAMIC DATA OF MAGNESIO- AND ALUMINOCOPIAPITE

15-19 Panel number 61

Niksch A.* & Pöllmann H.: SYNTHESIS AND CHARACTERIZATION OF A $[Li_{0+x}Mg_{2-2x}Al_{1+x}(OH)_6][Cl{\cdot}mH_2O]$ (x = 0-1) SOLID SOLUTION

15-20 Panel number 62

Confalonieri G.*, Capitani G., Buscaglia V., Rotiroti N. & Dapiaggi M.: STRUCTURAL LOCAL DEFECTS AND MODIFICATION OF THE POLAR BEHAVIOUR IN A SYNTHETIC PEROVSKITE

15-21 Panel number 63

Mirwald P.W.*, Stalder R., Paulini P. & Tappert R.: IRREGULAR PVT BEHAVIOUR OF APATITE – A RAMAN AND ULTRA-SONIC STUDY BETWEEN -200 AND 300°C

15-22 Panel number 64

Nakatsuka A.*, Sugiyama K., Ohkawa M., Ohtaka O., Fujiwara K. & Yoshiasa A.: SINGLE-CRYSTAL X-RAY DIFFRACTION STUDY OF $SrGe_2O_5$: A NEW HIGH-PRESSURE STRONTIUM GERMANATE

15-23 Panel number 65

Bolanz R.M.*, Wierzbicka-Wieczorek M., Giester G., Göttlicher J. & Steininger R.: As^{5+} STRUCTURALLY INCORPORATED INTO PHOSPHOSIDERITE ($FePO_4{\cdot}2H_2O$) – AN

EXAFS STUDY

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S17. Mineral diversity, complexity and evolution

17-16 Panel number 66
Anikina E.*, Vikent'eva O., Bortnikov N.S. & Gamyanin G.N.: GEOCHEMICAL CHARACTERISTICS OF CARBONATES FROM (Sn)-Ag-Pb-Zn DEPOSITS OF THE VERKHOYANSK FOLD-TRUST BELT (RUSSIA, SAKHA-YAKUTIA)

17-17 Panel number 67
Avgustinchik I.*: EVOLUTION OF ORE MINERAL ASSOCIATIONS IN SOME ORE-FORMING SYSTEMS: LOCAL AND GENERAL REGULARITIES, APPLIED QUESTIONS

17-18 Panel number 68
Bonazzi P.* & Bindi L.: LIGHT-INDUCED ALTERATION OF ALACRANITE, As_8S_9

17-19 Panel number 69
Filina M.* & Kogarko L.: COMPOSITIONAL EVOLUTION IN PYROXENES OF THE PERALKALINE NEPHELINE SYENITE (KOLA PENINSULA, RUSSIA)

17-20 Panel number 70
Galuskina I.O. *, Galuskin E.V. & Vapnik Y.A.: TERRESTRIAL MERRILLITE

17-21 Panel number 71
Hochleitner R.*, Kaliwoda M. & Rewitzer C.: NATURAL MEMBERS OF THE PHOSPHOHEDYPHANE - HEDYPHANE - MIMETITE SERIES

17-22 Panel number 72
Lyalina L.* & Selivanova E.: SAKHARJOK ALKALINE MASSIF: A NEW MINERALOGICAL OBJECT ON THE KOLA PENINSULA

17-23 Panel number 73
Lykova I.S.*, Pekov I.V., Yapaskurt V.O., Zubkova N.V., Zolotarev A.A. Jr & Giester G.: POSTCRYSTALLIZATION EVOLUTION OF EPISTOLITE-GROUP HETEROPHYLLOSILICATES AND ROLE OF NATURAL ION EXCHANGE IN FORMATION OF NEW MINERAL SPECIES IN THIS GROUP

17-24 Panel number 74
Novák M.*, Gadas P., Hreus S., Kocáb J. & Vašinová Galiová M.: OPPOSING CONCENTRATIONS OF Li AND Be IN CORDIERITE/SEKANINAITE FROM GRANITIC PEGMATITES IN THE MOLDANUBICUM; AN INDICATION OF THE DEPTH OF ANATECTIC PROCESSES?

17-25 Panel number 75
Pankova Y.A.*, Krivovichev S.V., Gorelova L.A. & Pekov I.V.: THE CRYSTAL STRUCTURE OF GINORITE, $Ca_2B_{14}O_{20}(OH)_6(H_2O)_5$, AND THE ANALYSIS OF DIMENSIONAL REDUCTION AND STRUCTURAL COMPLEXITY IN THE $CaO-B_2O_3-H_2O$ SYSTEM

17-26 Panel number 76
Tyumentseva O.S.*, Gurzhiy V.V. & Krivovichev S.V.: STRUCTURAL AND TOPOLOGICAL COMPLEXITY OF URANYL SELENATES

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S19. Gem materials

19-15 Panel number 77
Andriamamonjy A.*, Giuliani G., Razafindratsimba S.N. , Fallick A.E. & Chatagnier P.-Y.: THE GEM ANDRADITE FROM ANTETEZAMBATO, NORTHERN MADAGASCAR: NEW MINERALOGICAL AND GEOCHEMICAL DATA

19-16 Panel number 78
Aurisicchio C., Conte A.M., De Vito C., Medeghini L.*, Moroz I. & Ottolini L.: THE CONTRIBUTION OF MAJOR AND TRACE ELEMENTS IN THE EMERALD-DEPOSITS CLASSIFICATION SCHEME: STATISTICAL TREATMENT OF EMPA AND SIMS DATA

19-17 Panel number 79
Barone G.*, Bersani D., Lottici P.P., Mazzoleni P. & Raneri S.: COLORED GEMS: A REVIEW ON NON DESTRUCTIVE AND NON INVASIVE APPROACHES IN ART AND

GEMMOLOGY

19-18 Panel number 80
Reid M.G. & Anderson A.J.*: DIRECT OBSERVATION OF MELTING AND CRYSTALLIZATION IN THE SYSTEM $LiAlSi_4O_{10}$–H_2O: IMPLICATIONS FOR CRYSTAL GROWTH IN GEM-BEARING POCKETS IN MIAROLITIC PEGMATITES

19-19 Panel number 81
Rossi M.*, Rizzi R., Capitelli F., Vergara A. & Ghiara M.R.: MULTI-METHODOLOGICAL CHARACTERIZATION OF TURQUOISE FROM ROYAL MINERALOGICAL MUSEUM OF NAPLES

19-20 Panel number 82
Tempesta G.* & Agrosì G.: EMERALDS AND RED BERYLS INVESTIGATED BY LASER INDUCED BREAKDOWN SPECTROSCOPY (LIBS)

19-21 Panel number 83
Diella V.*, Adamo I., Bocchio R. & Marinoni N.: A NEW INSIGHT ON THE GEM-QUALITY PINK EPIDOTE ("CLINOTHULITE") FROM VAL MALENCO, CENTRAL ALPS, ITALY

19-22 Panel number 84
Scacchetti M.*, Marinoni L., Caucia F. & Scetti I.: PHYSICAL, CHEMICAL AND GEMOLOGICAL PROPERTIES OF SOME RHODONITES FROM TANATZ ALP (SWITZERLAND)

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S23. The future of critical metals: mineralogy, metallogenesis and geometallurgy

23-15 Panel number 85
Jiménez-Franco A.*, Alfonso P., Canet C., Trujillo E. & Garcia-Valles M.: MINERAL ASSEMBLAGES IN THE TIN (-INDIUM) SANTA FE MINING DISTRICT, BOLIVIA

23-16 Panel number 86
Martin A.J.*, McDonald I., Prichard H.M. & MacLeod C.J.: PRELIMINARY FINDINGS ON THE DISTRIBUTION AND ENRICHMENT OF TELLURIUM (Te) AND SELENIUM (Se) IN HYDROTHERMAL ORE DEPOSITS OF THE TROODOS OPHIOLITE, CYPRUS

23-17 Panel number 87
Lefebvre M.*, Romer R.L. & Roscher M.: CHEMICAL AND ISOTOPIC CHARACTERIZATION OF THE HÄMMERLEIN TIN-SKARN DEPOSIT, WESTERN ERZGEBIRGE, GERMANY

23-18 Panel number 88
Ramos V.*, Guedes A. & Noronha F.: MALAYAITE AND OTHER TIN-BEARING MINERALS IN THE TUNGSTEN SKARN OF TABUAÇO, NORTHERN PORTUGAL

23-19 Panel number 89
Zaccarini F. * & Garuti G.: OCCURRENCES OF PLATINUM GROUP MINERALS (PGM) AND OTHER RARE ACCESSORY PHASES IN ITALY: WHERE AND WHY

23-20 Panel number 90
Deady É.*, Knight H., Moore K., Gunn A.G., Naden J. & Boyce A.J.: ANTIMONY MINERALISATION IN SOUTH WEST ENGLAND: NEW INSIGHTS INTO CRITICAL METAL ORE GENESIS

23-21 Panel number 91
Vikent'eva O.*, Vikentyev I. & Bortnikov N.: CRITICAL METALS IN THE ORES OF THE SVETLINSK Au-Te DEPOSIT, SOUTHERN URALS

23-22 Panel number 92
Anikina E.*, Vikent'eva O., Bortnikov N.S., Gamyanin G.N. & Prokof'ev V.Y.: A COMPARATIVE STUDY OF Au-Bi-SIDERITE-SULFIDE ARKACHAN AND Ag-Pb-Zn MANGAZEYSKOE DEPOSITS, SAKHA (YAKUTIA), RUSSIA

23-23 Panel number 93
Cruz C.*, Lima A., Santos P. & Noronha F.: SUPERGENE GOLD ENRICHMENT IN THE CASTROMIL GOLD DEPOSIT

23-24 Panel number 94
Graupner T.*, Henjes-Kunst F., Klemd R., Gerdes A., Dohrmann R. & Kaufhold S.: RARE EARTH POTENTIAL OF APATITE IN THE SCHIEL COMPLEX, SOUTH AFRICA

23-25 Panel number 95
Elizetti de Freitas M., Javier Rios F.*, Andrade S. & de Moraes R.: CHEMISTRY OF Nb-Ta OXIDE MINERALS FROM SANTA MARIA DE ITABIRA PEGMATITE DISTRICT, MINAS GERAIS, BRAZIL

23-26 Panel number 96
Dressler S.*, Kirk C.A., Norman R.L., Herrington R.J. & Schofield P.F.: THE RESIDENCE OF THE CRITICAL METAL COBALT IN OXIDE MINERAL DEPOSITS - A SYNTHETIC STUDY

23-27 Panel number 97
Conte A.M., Cuccuru S., Naitza S.*, Oggiano G., Secchi F. & Tocco S.: INTO THE DEPTH OF THE ARBURESE VEIN SYSTEM (SW SARDINIA, ITALY): ARSENIDE-SULFIDE EVOLUTION IN THE Ni-Co ORES

23-28 Panel number 98
Tuhý M.*, Ettler V. & Mihaljeviè M.: MINERALOGY OF SMELTER- AND MINING-DERIVED PARTICULATES DEPOSITED IN SEMI-ARID SOILS

23-29 Panel number 99
Bobos I.* & Noronha F.: Fe,Mn- AND Fe,Mg-CHLORITE: A GENETIC LINKAGE TO W- AND Cu,Mo-METALLIZATION IN THE MAGMATIC-HYDROTHERMAL SYSTEM OF BORRALHA, NORTHERN PORTUGAL

23-30 Panel number 100
Molnár Z.*, Kiss G.B., Zaccarini F., Dunkl I. & Dódony I.: FORMATION CONDITIONS OF TWO PHOSPHORITE OCCURRENCES FROM THE TRANSDANUBIAN MOUNTAIN RANGE (HUNGARY)

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S28. Museums and teaching mineral sciences to new generations

28-11 Panel number 101
Biagioni C., Bonaccorsi E., Musetti S.* & Pasero M.: MONTE AMIATA: THE MINERALOGICAL COLLECTION OF THE NATURAL HISTORY MUSEUM OF THE PISA UNIVERSITY

28-12 Panel number 102
del Buey P.* & Sanz-Montero M.E.: LINKING MINERALS AND HEALTH THROUGH THE WIND DUST. AN EDUCATIONAL PROPOSAL

28-13 Panel number 103
Pieraccioni F.*, Bonaccorsi E. & Gioncada A.: MINERALS AT SCHOOL

WEDNESDAY 14/09/16

	Arengo	Tempio1	Tempio2	Marina	Parco	Borgo
08.30 09.15	**Plenary Galán**					
09.15 10.00	**Awards Ceremony**					
10.00 10.45	**Plenary Ewing**					
10.45 11.15	Coffee Break					
11.15 11.30	Artioli	Engelhardt	**Rosso**	**Marquardt**	**Frezzotti**	**Downes**
11.30 11.45	Geisweid	Schmitt		Buchen		
11.45 12.00	Germinario	**Kylander-Clark**	S25	Angel	Berkesi	Hezel
12.00 12.15	Giustetto		Lu	S14	S9	S18
12.15 12.30	Possenti	Jamieson	Aeppli	Woodland	Shchepetova	Bonadiman
12.30 14.00			Brown	Pavese	Mazzucchelli	Di Rocco
			Lunch Break			
14.00 14.15	Berthold	Reddy	Morris	Reali	Moulas	Murri
14.15 14.30	Rodler	Koreshkova	Kuippers	Jahn	Kiseeva	Carli
14.30 14.45	Mozgai	Molnár	Cleary	Speziale	Kotková	Stangarone
14.45 15.00	Rose	Brandt	Li	Belmonte	Bartoli	Serventi
15.00 15.15	Warchulski	van Schijndel	Kimber	Gouriet	Esposito	Gemelli
15.15 15.45	Coffee Break					
15.45 16.00	Maritan	**Plümper**	Kothe	**Blanchard**	Scambelluri	Wood
16.00 16.15	Ionescu		Medas	Ohmann	Griffiths	Green
16.15 16.30	Bajnóczi	Peters	Consani	Kowalski	Zhong	Zeh
16.30 16.45	Rossano	Gilio	Marescotti	Kéri	Musiyachenko	Koeberl
16.45 17.00	Mastelloni	Malaspina	Chovan	Evans	Hermann	Folco
17.00 18.30	**Poster Sessions**					
18.30 20.00						
20.00 22.00	Conference Dinner					

Wednesday, September 14th

ORAL SESSIONS

MORNING

S9. Inclusions in minerals as record of geological processes: new analysis methods and applications

Conveners: Matteo Alvaro, Silvio Ferrero and Ross Angel

(11.15-12.30) Room - Parco

9-1 11.15 – 11.45
(KEYNOTE) Frezzotti M.L.*: DIAMONDS-BEARING FLUID INCLUSIONS REVEAL CARBON SPECIATION AND SOLUBILITY IN SUBDUCTION ZONE FLUIDS

9-2 11.45 – 12.00
Berkesi M.*, Park M., Szabó C., Jung H. & Kil Y.: MELT AND FLUID INCLUSIONS IN MANTLE XENOLITHS BENEATH THE RIFT SHOULDER (ADAM'S DIGGINGS) OF RIO GRANDE RIFT: EVIDENCES FOR METASOMATISM

9-3 12.00 – 12.15
Shchepetova O.*, Korsakov A.V., Mikhailenko D. & Mikhno A.: RAMAN GEOBAROMETRY OF SOLID AND FLUID INCLUSIONS IN MINERALS FROM THE KOKCHETAV DIAMONDIFEROUS KYANITE GNEISSES

9-4 12.15 – 12.30
Mazzucchelli M.L.*, Burnley P., Angel R.J., Domeneghetti M.C., Nestola F. & Alvaro M.: ELASTIC GEOBAROMETRY: UNCERTAINTIES ARISING FROM THE SHAPE OF THE INCLUSION

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S14. Advances in computational and experimental mineralogy: A journey from the surface to the deep Earth and beyond

Conveners: Azzurra Zucchini, Catherine McCammon, Paola Comodi and Mainak Mookherjee

(11.15-12.30) Room - Marina

14-1 11.15 – 11.30
(KEYNOTE) Marquardt H.*, Kurnosov A., Boffa Ballaran T., Marquardt K., Frost D., Liermann H.-P., Speziale S., Miyagi L., Merkel S., Immoor J., Buchen J. & Schulze K.: INSIGHTS INTO THE NATURE OF EARTH'S MANTLE FROM ELASTICITY AND RHEOLOGY MEASUREMENTS AT HIGH-PRESSURE/HIGH-TEMPERATURE

14-2 11.30 – 11.45
Buchen J.*, Marquardt H., Kurnosov A., Speziale S., Kawazoe T. & Boffa Ballaran T.: INTERNALLY CONSISTENT SINGLE-CRYSTAL ELASTICITY OF IRON-BEARING WADSLEYITE AT HIGH PRESSURES AND HIGH TEMPERATURES

14-3 11.45 – 12.00
Angel R.J.*, Alvaro M., Gonzalez-Platas J. & Nestola F.: NEW FEATURES IN EosFit: FITTING ELASTIC MODULI AND PHASE TRANSITIONS

14-4 12.00 – 12.15
Woodland A.B.*, Uenver-Thiele L. & Boffa Ballaran T.: HIGH P-T STABILITY OF

Fe_5O_6 AND ITS COEXISTENCE WITH OTHER Fe-OXIDES

14-5 12.15 – 12.30
Merli M., Bonadiman C., Diella V., Sciascia L. & Pavese A.*: H*P*-H*T* (Mg,Fe)O SUB-SOLIDUS REACTION MODELLING: IMPLICATIONS FOR LOWER MANTLE GEO-CHEMICAL HETEROGENEITIES

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S18. Planetary materials: from dust to planets and Early Earth

Conveners: Luigi Folco, Armin Zeh and Christian Koeberl

(11.15-12.30) Room - Borgo

18-1 11.15 – 11.45
(KEYNOTE) Downes H.* & Herrin J.S.: Fe-SILICIDE-BEARING METEORITES: FEEDING BODIES FOR REDUCED TERRESTRIAL PLANETS?

18-2 11.45 – 12.00
Hezel D.C.*, Wilden J., Frank-Richter S. & Wombacher F.: Fe ISOTOPE COMPOSITION OF CHONDRULES FROM THE MURCHISON (CM) CHONDRITE

18-3 12.00 – 12.15
Bonadiman C.*, Cruciani G., Franceschelli M., Marchi M., Taricco C., Colombetti P., Bhandari N., Sinha N., Rubinetti S., Romero A., Tassinari R. & Lugari C.: PRELIMINARY PETROLOGICAL STUDY AND GAMMA-ACTIVITY MEASUREMENTS OF SINNAI METEORITE

18-4 12.15 – 12.30
Di Rocco T.*, Nava J., Gemelli M., D'Orazio M., Domeneghetti M.C., Alvaro M., Pack A. & Folco L.: THE METAL-RICH EUCRITE ALH 12073

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S24. The petrology-geochronology connection

Conveners: Robert Anczkiewicz, Daniela Rubatto and Igor Villa

(11.15-12.30) Room - Tempio 1

24-1 11.15 – 11.30
Engelhardt J.*, Sudo M., Stockhecke M. & Oberhänsli R.: CORES FROM ICDP PALEOVAN LINK FELDSPAR TEXTURES TO $^{40}Ar/^{39}Ar$ RESULTS TAKING A LIMNOLOGIC AGE-MODEL INTO ACCOUNT

24-2 11.30 – 11.45
Schmitt A.K.*, Cisneros de León A. & Trail D.: PROTACTINIUM PARTITIONING IN SYNTHETIC AND NATURAL ZIRCON

24-3 11.45 – 12.15
(KEYNOTE) Kylander-Clark A.R.C.*: Laser-ABLATION SPLIT-STREAM PETROCHRONOLOGY

24-4 12.15 – 12.30
Butler J.P., Jamieson R.A.*, Robinson P., Dunning G.R. & Pecha M.: 15 MILLION YEARS OF ULTRA-HIGH-PRESSURE METAMORPHISM IN WESTERN NORWAY: INSIGHTS FROM U-Pb ZIRCON GEOCHRONOLOGY, NORDØYANE DOMAIN

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S25. Biogeochemical interfaces and environmental (bio) mineralogy

Conveners: Giovanni De Giudici, Jonathan Lloyd and Caroline Peacock

(11.15-12.30) Room - Tempio 2

25-1 11.15 – 11.45
(KEYNOTE) Rosso K.M.*: PATHWAYS AND KINETICS OF BIOGEOCHEMICAL REDOX REACTIONS AT THE MOLECULAR SCALE

25-2 11.45 – 12.00
Lu A.*, Li Y., Ding H. & Wang C.: PHOTOELECTRONS TRANSFER BETWEEN MINERALS AND MICROORGANISMS TOWARDS CARBON DIOXIDE FIXATION

25-3 12.00 – 12.15
Aeppli M.*, Brown A.R., Voegelin A., Hofstetter T.B. & Sander M.: REDUCTIVE DISSOLUTION OF IRON(OXYHYDR-)OXIDES AS ASSESSED BY MEDIATED ELECTROCHEMICAL ANALYSIS

25-4 12.15 – 12.30
Brown A.R.*, Aeppli M., Voegelin A., Sander M. & Hofstetter T.B.: ELECTROCHEMICAL CHARACTERISATION OF MICROBIAL Fe(III) REDUCTION

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S27. Mineral sciences for the understanding of cultural heritage

Conveners: Gilberto Artioli, Corina Ionescu and Sabine Klein

(11.15-12.30) Room - Arengo

27-1 11.15 – 11.30
Addis A., Artioli G.*, Marzaioli F., Passariello I., Preto N., Secco M., Terrasi F. & Zorzi F.: RADIOCARBON DATING OF HISTORICAL AND ARCHAEOLOGICAL MORTARS: TASK IMPOSSIBLE?

27-2 11.30 – 11.45
Geisweid J.*, Hofmeister W. & Schaaff H.: ORIGIN AND PROVENANCE OF TUFF FOR THE ROMAN EMPIRE IN *GERMANIA INFERIOR*

27-3 11.45 – 12.00
Germinario L.*, Hanchar J.M., Maritan L., Mazzoli C. & Sassi R.: BULK GEOCHEMISTRY *VS.* MICROCHEMISTRY OF PHENOCRYSTS FOR PROVENANCING VOLCANIC STONES FROM THE SAME QUARRY BASIN – THE CASE OF EUGANEAN TRACHYTE

27-4 12.00 – 12.15
Giustetto R.*, Venturino M., Barale L., d'Atri A. & Compagnoni R.: AN ARCHAEOMETRIC STUDY OF THE NEOLITHIC GREENSTONE INDUSTRY OF BRIGNANO FRASCATA (ITALY): ARCHAEOLOGICAL/MINERO-PETROGRAPHIC IMPLICATIONS AND POSSIBLE SUPPLY SOURCES

27-5 12.15 – 12.30
Possenti E.*, Colombo C., Conti C., Gatta G.D., Merlini M. & Realini M.: CHARACTERIZATION OF NEWLY-FORMED CALCIUM PHOSPHATES STRATIGRAPHIES CRYSTALLIZED ON CALCIUM CARBONATE SUBSTRATES: A MULTI-ANALYTICAL APPROACH

Wednesday, September 14th

ORAL SESSIONS

AFTERNOON

S5. The cycling of hydrogen, carbon, and mobile elements in the subduction factory

Conveners: Jörg Hermann, Timm John and Marco Scambelluri

(15.45-17.00) Room - Tempio 1

5-1 15.45 – 16.15
(KEYNOTE) Plümper O.*, John T., Podladchikov Y., Vrijmoed J.C. & Scambelluri M.: CHANNELIZING REACTIVE POROSITY CONTROLLS FLUID ESCAPE FROM SUBDUCTION ZONES

5-2 16.15 – 16.30
Peters D.*, John T., Scambelluri M. & Pettke T.: FLUID-ROCK INTERACTIONS IN SERPENTINITES SUBDUCTED TO 60-80 KM DEPTH

5-3 16.30 – 16.45
Gilio M.*, Scambelluri M., Agostini S., Pettke T. & Godard M.: SERPENTINITE-DRIVEN EXHUMATION OF THE UHP LAGO DI CIGNANA UNIT IN THE FOSSIL ALPINE PLATE INTERFACE

5-4 16.45 – 17.00
Malaspina N.*, Langenhorst F., Tumiati S., Frezzotti M.L. & Poli S.: THE REDOX BUDGET OF CRUST-DERIVED FLUID PHASES AND IMPLICATIONS FOR THE SLAB-TO-MANTLE ELEMENT TRANSFER

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S9. Inclusions in minerals as record of geological processes: new analysis methods and applications

Conveners: Matteo Alvaro, Silvio Ferrero and Ross Angel

(14.00-15.15) Room - Parco

9-5 14.00 – 14.15
Moulas E.*, Podladchikov Y. & Tajčmanová L.: PHASE TRANSITIONS IN NUMERICAL MODELS

9-6 14.15 – 14.30
Kiseeva E.S.*, Vasiukov D.M., Wood B., Stachel T., McCammon C.A., Chumakov A., Harris J.W. & Dubrovinsky L.: HIGHLY OXIDISED MAJORITIC INCLUSIONS IN DIAMOND

9-7 14.30 – 14.45
Kotková J.* & Čopjaková R.: KINOSHITALITE-BEARING MULTIPHASE INCLUSIONS – CRUSTAL CONTAMINATION OF THE MANTLE

9-8 14.45 – 15.00
Bartoli O.*, Acosta-Vigil A., Ferrero S. & Cesare B.: NANOGRANITOID INCLUSIONS IN HIGH-GRADE METAMORPHIC ROCKS

9-9 15.00 – 15.15
Esposito R.*, Lamadrid H.M., Redi D., Steele-MacInnis M., Bodnar R.J., Manning C.E., De Vivo B., Cannatelli C. & Lima A.: BUBBLE-BEARING MELT ICLUSIONS AS

MINI MAGMA CHAMBERS TO STUDY MELT-VOLATILE EVOLUTION

(15.45-17.00) Room - Parco

9-10 15.45 – 16.00
Scambelluri M.*, Pettke T. & Cannaò E.: POLYPHASE INCLUSIONS IN ALPINE HIGH-PRESSURE PERIDOTITE MONITOR SUBDUCTION-ZONE DEHYDRATION OF SERPENTINIZED MANTLE (CIMA DI GAGNONE, SWISS ALPS)

9-11 16.00 – 16.15
Griffiths T.A.*, Habler G. & Abart R.: USING HOST-INCLUSION CRYSTALLOGRAPHIC ORIENTATION RELATIONSHIPS TO EXTRACT PETROLOGICAL INFORMATION: NEW INSIGHTS FROM LARGE EBSD DATASETS

9-12 16.15 – 16.30
Zhong X.*, Moulas E., Vrijmoed J.C. & Tajčmanová L.: A COUPLED MODEL ON CHEMICAL DIFFUSION AND MECHANICAL DEFORMATION WITH APPLICATION TO AN INCLUSION-HOST SYSTEM

9-13 16.30 – 16.45
Musiyachenko K.A.* & Korsakov A.V.: RAMAN BASED QUARTZ GEOBAROMETRY OF K-BEARING TOURMALINE

9-14 16.45 – 17.00
Hermann J.* & Stepanov A.S.: MULTIPHASE SOLID INCLUSIONS IN DIAMOND-BEARING GNEISSES DOCUMENT DIFFERENT STYLES OF MELTING DURING SUBDUCTION AND EXHUMATION

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S14. Advances in computational and experimental mineralogy: A journey from the surface to the deep Earth and beyond

Conveners: Azzurra Zucchini, Catherine McCammon, Paola Comodi and Mainak Mookherjee

(14.00-15.15) Room - Marina

14-6 14.00 – 14.15
Reali R.*, Boioli F., Gouriet K., Carrez P. & Cordier P.: MODELING PLASTICITY OF MgO AT THE MESOSCALE USING 2.5D DISLOCATION DYNAMICS

14-7 14.15 – 14.30
Jahn S.* & Koch-Müller M.: PHASE BEHAVIOR AND VIBRATIONAL PROPERTIES OF CALCITE-DERIVED $CaCO_3$ POLYMORPHS UP TO 30 GPa: A COMBINED COMPUTATIONAL AND EXPERIMENTAL STUDY

14-8 14.30 – 14.45
Gentili S., Speziale S.*, Zucchini A., Comodi P., Reichmann H.J. & Wunder B.: THE EFFECT OF CATIONS ORDER/DISORDER ON THE ELASTIC PROPERTIES OF DOLOMITE

14-9 14.45 – 15.00
Belmonte D.*: CAN WE PREDICT MELTING BEHAVIOUR OF MINERALS AT DEEP MANTLE CONDITIONS?

14-10 15.00 – 15.15
Gouriet K.*, Boioli F., Devincre B., Carrez P. & Cordier P.: MODELING THE CREEP PROPERTIES OF OLIVINE IN THE LITHOSPHERIC MANTLE FROM DISLOCATION DYNAMICS MODELS

(15.45-17.00) Room - Marina

14-11 15.45 – 16.00
(KEYNOTE) Blanchard M.*: CRYSTAL-CHEMICAL AND ISOTOPIC PROPERTIES OF MINERALS BY COMBINING COMPUTATIONAL AND SPECTROSCOPIC TECHNIQUES

14-12 16.00 – 16.15
Ohmann S.*, Ufer K., Dohrmann R. & Kaufhold S.: DATA RECONCILIATION BETWEEN XRD AND CHEMICAL COMPOSITION DATA FOR QUANTITATIVE ANALYSIS BY LINEAR PROGRAMMING

14-13 16.15 – 16.30
Kowalski P.M.*, Beridze G., Ji Y. & Li Y.: RELIABLE AND EFFICIENT *AB INITIO* SIMULATIONS OF COMPUTATIONALLY CHALLENGING MATERIALS

14-14 16.30 – 16.45
Kéri A.*, Dähn R., Krack M. & Churakov S.: COMBINED *AB INITIO* AND EXAFS SPECTROSCOPY STUDY ON THE CHARACTERISTICS OF IRON UPTAKE BY CLAY MINERALS

14-15 16.45 – 17.00
Evans R.J.* & Groat L.A.: CHARACTERIZING THE DISTORTIONS AND BOND TOPOLOGY OF TETRAHEDRAL AND OCTAHEDRAL GROUPS IN MINERAL CRYSTAL STRUCTURES

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S18. Planetary materials: from dust to planets and Early Earth

Conveners: Luigi Folco, Armin Zeh and Christian Koeberl

(14.00-15.15) Room - Borgo

18-5 14.00 – 14.15
Murri M.*, Scandolo L., Fioretti A.M., Nestola F., Domeneghetti M.C. & Alvaro M.: NEW INSIGHTS ON THEO'S FLOW LAVA USING INTRACRYSTALLINE THERMOMETRY ON AUGITES

18-6 14.15 – 14.30
Carli C.*, Moggi-Cecchi V., Pratesi G. & Capaccioni F.: VNIR REFLECTANCE OF HEDs: SPECTRAL VARIABILITY FROM POWDERS TO SLABS

18-7 14.30 – 14.45
Stangarone C.*, Tribaudino M., Prencipe M., Helbert J., Maturilli A., D'Amore M. & Ferrari S.: MODELLING OF HT-IR SPECTRA OF FORSTERITE FOR REMOTE SENSING

18-8 14.45 – 15.00
Serventi G.*, Carli C., Altieri F., Geminale A., Sgavetti M., Grassi D., Orosei R. & Bellucci G.: SPECTRAL CLASSIFICATION AND MINERALOGICAL CHARACTERIZATION OF NILI FOSSAE (MARS) FOR A BETTER UNDERSTANDING OF HYDRATED MINERALOGIES

18-9 15.00 – 15.15
Gemelli M.*, Di Rocco T., Iacoviello F., Shearing P. & Folco L.: I-TYPE COSMIC SPHERULES: AN X-RAY MICRO-CT STUDY

(15.45-17.00) Room - Borgo

18-10 15.45 – 16.00
Wood B.* & Harrison T.: CONDENSATION TEMPERATURES OF VOLATILE ELEMENTS

AND THEIR ABUNDANCES IN SILICATE EARTH

18-11 16.00 – 16.15
Green E.C.R.*, Artacho E. & Connolly J.A.D.: COSMOCHEMISTRY OF NEAR-CRITICAL SILICATE FLUIDS

18-12 16.15 – 16.30
Zeh A.* & Laurent O.: LINEAR Hf ISOTOPE-AGE ARRAYS OF ARCHEAN CRUSTAL ROCKS: WHAT DO THEY REFLECT? AN EXAMPLE FROM THE PIETERSBURG BLOCK (SOUTH AFRICA)

18-13 16.30 – 16.45
Koeberl C.*: THE IMPACT BOMBARDMENT HISTORY OF THE EARLY EARTH

18-14 16.45 – 17.00
Folco L.*, D'Orazio M., Gemelli M., Rochette P., Gattacceca J. & Glass B.P. : STRETCHING OUT THE AUSTRALASIAN MICROTEKTITE STREWN FIELD IN VICTORIA LAND TRANSANTARCTIC MOUNTAINS: AN UPDATE

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S24. The petrology-geochronology connection

Conveners: Robert Anczkiewicz, Daniela Rubatto and Igor Villa

(14.00-15.15) Room - Tempio 1

24-5 14.00 – 14.15
Reddy S.M.*, Peterman E.M., Saxey D.W., Rickard W.D.A., Fougerouse D., Snoeyenbos D.R. & Kylander-Clark A.R.C.: ATOM PROBE ANALYSIS OF DISCORDANT ZIRCON REVEALS PRESERVATION OF $^{207}Pb/^{206}Pb$ CRYSTALLISATION AGES IN NANOSCALE DISLOCATION LOOPS

24-6 14.15 – 14.30
Koreshkova M.* & Downes H.: ZONING IN GARNETS AND ZIRCONS FROM LOWER CRUSTAL XENOLITHS FROM NW RUSSIA

24-7 14.30 – 14.45
Molnár K.*, Harangi S., Dunkl I., Lukács R., Kiss B., Seghedi I. & Schmitt A.K.: ERUPTION CHRONOLOGY OF A LONG DORMANT VOLCANIC SYSTEM IN THE EASTERN CARPATHIANS

24-8 14.45 – 15.00
Brandt S.*, Raith M.M., Schenk V., Sengupta P., Srikantappa C. & Gerdes A.: DETECTION OF DISTINCT CRUSTAL DOMAINS IN THE SOUTHERN GRANULITE TERRANE (SOUTH INDIA) BY LA-ICP-MS ZIRCON DATING, AND IMPLICATIONS FOR THE GONDWANA FORMATION

24-9 15.00 – 15.15
van Schijndel V.*, Stevens G., Frei D. & Lana C.: MESOARCHAEAN POLYMETAMORPHISM OF THE DWALILE SUPRACRUSTAL SUITE OF THE ANCIENT GNEISS COMPLEX, SWAZILAND

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S25. Biogeochemical interfaces and environmental (bio)mineralogy

Conveners: Giovanni De Giudici, Jonathan Lloyd and Caroline Peacock

(14.00-15.15) Room - Tempio 2

25-5 14.00 – 14.15
Morris K.*, Law G., Lloyd J.R., Livens F., Mosselmans F., Pattrick R., Shaw S.,

Brookshaw D., Newsome L., Rizoulis A., Masters Waage N., Williamson A. & Bots P.: THE IMPACT OF MICROBIAL PROCESSES ON TECHNETIUM, URANIUM AND NEPTUNIUM SPECIATION AND FATE – REDOX CYCLING, BIOMINERALS AND STABILITY OF REACTION PRODUCTS

25-6 14.15 – 14.30
Kuippers G.*, Bryan N., Bagshaw H., Morris K. & Lloyd J.R.: THE REMOVAL OF HEAVY METAL AND RADIONUCLIDE COMPLEXES *VIA* THE BIODEGRADATION OF ISOSACCHARINIC ACID IN NUCLEAR WASTE DISPOSAL

25-7 14.30 – 14.45
Cleary A.*, Newsome L., Lloyd J.R., Shaw S., Boshoff G., Trivedi D., Atherton N. & Morris K.: ENHANCED *IN-SITU* MICROBIAL TREATMENT OF STRONTIUM IN SEDIMENT SYSTEMS BY STIMULATION WITH GLYCEROL PHOSPHATE

25-8 14.45 – 15.00
Li Y., Lu A.* & Ding H.: SEMICONDUCTING PROPERTY OF Fe/Mn OXIDES ON EARTH SURFACE

25-9 15.00 – 15.15
Kimber R.L.*, Pattrick R., Figueroa-Garcia A. & Lloyd J.R.: THE APPLICATION OF SUBSURFACE METAL-REDUCING BACTERIA FOR THE PRODUCTION OF COPPER NANOPARTICLES

(15.45-17.00) Room - Tempio 2

25-10 15.45 – 16.00
Kothe E.*, Klose M., Meier A. & Schütze E.: MICROBIAL MECHANISMS IN BIOMINERALIZATION

25-11 16.00 – 16.15
Medas D.*, De Giudici G., Meneghini C. & Lattanzi P.: ZINC BEHAVIOUR AT THE MINERAL-ROOT INTERFACE: PLANT RESPONSE TO ZINC EXTREME ENVIRONMENTS

25-12 16.15 – 16.30
Carbone C., Consani S.*, Zotti M., Giovine M., Tolotti R., Cutroneo L., Capello M. & Lucchetti G.: MICROORGANISMS IN AMD PROCESSES AND THEIR ROLE IN METALS FATE: THE CASE OF LIBIOLA FE-CU MINE AND GROMOLO STREAM FLOW (EASTERN LIGURIA, ITALY)

25-13 16.30 – 16.45
Chiarantini L., Rimondi V., Benvenuti M., Beutel M.W., Costagliola P. & Lattanzi P.*: BIOMONITORING OF AIRBORNE Hg BY PINUS NIGRA BARKS: AN EXAMPLE FROM THE Mt. AMIATA AREA, SOUTHERN TUSCANY, ITALY

25-14 16.45 – 17.00
Chovan M.*, Števko M., Majzlan J., Radková A., Jamieson H. & Lalinská-Voleková B.: CHEMICAL PROCESSES AND POSSIBLE BIOLOGICAL CONTRIBUTION DURING WEATHERING OF TETRAHEDRITE, $(Cu,Ag)_2(Fe,Zn,Hg)_{10}(Sb,As)_4S_{13}$

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S27. Mineral sciences for the understanding of cultural heritage

Conveners: Gilberto Artioli, Corina Ionescu and Sabine Klein

(14.00-15.15) Room - Arengo

27-6 14.00 – 14.15
Berthold C.*, Bente K. & Keuper M.: NONDESTRUCTIVE CHARACTERIZATION OF

ANTIQUE OBJECTS: SYNERGY BY COUPLING X-RAY MICRODIFFRACTION, MICRO-RAMAN SPECTROSCOPY AND MICRO-X-RAY FLUORESCENCE

27-7 14.15 – 14.30
Fink-Jensen P., Rodler A.S.*, Brøns C., Skriver Hedegaard S. & Klein S.: PROVENANCE OF COPPER USED FOR EGYPTIAN BLUE PIGMENTS OF ANCIENT MEDITERRANEAN ARTEFACTS

27-8 14.30 – 14.45
Mozgai V.*, Bajnóczi B., Fórizs I., Szabó M., Dági M., Mráv Z., Nagy M. & Tóth M.: MINERALOGICAL AND STABLE ISOTOPIC COMPOSITION OF CORROSION PRODUCTS ON A LATE ROMAN COPPER CAULDRON: AN ATTEMPT TO CHARACTERISE THE BURIAL ENVIRONMENT

27-9 14.45 – 15.00
Rose T.*, Klein S. & Hoefer H.E.: MANY A MICKLE MAKES A MUCKLE: Pb ISOTOPE SIGNATURE OF COPPER ORES MAKED BY LEADED INCLUSIONS IN GANGUE MINERALS

27-10 15.00 – 15.15
Warchulski R.*, Gawęda A. & Juszczuk P.: GEOCHEMISTRY AND MINERALOGY IN SERVICE OF CULTURAL HERITAGE PRESERVATION: A CASE OF MUSEUM OF ZINC IN KATOWICE, POLAND

(15.45-17.00) Room - Arengo

27-11 15.45 – 16.00
Maritan L.*, Piovesan R., Dalconi M.C., Vidale M. & Olivieri L.: GOLDEN-SLIP WARE: MANIFACTURING TECHNOLOGY OF A GOLD-LIKE SLIP IN THE FIRST MILLENIUM BC SWAT (NORTHERN PAKISTAN)

27-12 16.00 – 16.15
Ionescu C.*, Berecki S., Hoeck V., Simon V. & Enea- Giurgiu A.: CELTIC FUNERARY POTTERY IN TRANSYLVANIA (ROMANIA): IN THE SEARCH OF RAW MATERIALS

27-13 16.15 – 16.30
Bajnóczi B.*, Szabó M. & Tóth M.: TECHNOLOGICAL STUDIES OF HISTORICAL GLAZES WITH THE USE OF RIGAKU D/MAX RAPID II MICRO-XRD

27-14 16.30 – 16.45
Rossano S.*, Khomenko V., Bedidi A., Loisel C., Ferrand J., Sarrasin L., Bertin A. & Perez A.: GLASS COLOURATIONS CAUSED BY Mn-Fe REDOX PAIR

27-15 16.45 – 17.00
Barone G., Di Bella M., Mastelloni M.A.*, Mazzoleni P., Quartieri S., Raneri S., Sabatino G. & Vailati C.: POTTERY PRODUCTION OF THE PITTORE DI LIPARI: CHEMICAL AND MINERALOGICAL ANALYSIS OF THE PIGMENTS

Wednesday, September 14th

POSTER SESSIONS

Poster Area

S5. The cycling of hydrogen, carbon, and mobile elements in the subduction factory

5-19 **Panel number 1**
Beyssac O.*: INSIGHTS INTO THE CARBON CYCLE IN THE LITHOSPHERE AND THE ROLE OF GRAPHITIC CARBON FROM SUBDUCTION TO EROSION

5-20 **Panel number 2**
Casalini M.*, Avanzinelli R., Elliott T., Tommasini S. & Conticelli S.: MOLYBDENUM ISOTOPES AS TRACERS FOR SUBDUCTION COMPONENTS: THE CASE OF ROMAN MAGMATIC PROVINCE MAGMAS

5-21 **Panel number 3**
Chariton S.*, Bykova E., Cerantola V., Bykov M., Ismailova L., Kupenko I., Aprilis G., McCammon C.A. & Dubrovinsky L.: THE BEHAVIOR OF RHODOCHROSITE ($MnCO_3$) AT EXTREME CONDITIONS

5-22 **Panel number 4**
Clément M.*, Padrón-Navarta J.A., Tommasi A. & Mainprice D.: LOCAL STRESS FIELD DURING SERPENTINE DEHYDRATION INFERRED FROM ORTHOPYROXENE INVERSION TO CLINOENSTATITE

5-23 **Panel number 5**
Förster B.*, Bebout G.E., Bianchini G., Natali C., Aulbach S., Braga R. & Scambelluri M.: MULTI-STAGE CARBONATION AND DECARBONATION IN THE MANTLE-WEDGE: STABLE-ISOTOPE COMPOSITIONS OF CARBONATE PHASES IN ULTRAMAFIC ROCKS OF THE ULTEN ZONE (EASTERN ALPS, ITALY)

5-24 **Panel number 6**
Gudelius D.*, Aulbach S., Seitz H.-M. & Braga R.: METASOMATISM IN THE MANTLE WEDGE: MULTIPLE ISOTOPE CONSTRAINTS FROM OROGENIC PERIDOTITES OF THE ULTEN ZONE (N ITALY)

5-25 **Panel number 7**
John T.* & Vrijmoed J.C.: HYDRATION OF ECLOGITE AT THE PLATE INTERFACE: AN EXAMPLE OF FLUID INFILTRATION INTO A DRY ROCK

5-26 **Panel number 8**
Kovács Z., Patkó L., Aradi L.E., Klébesz R., Hidas K., Garrido C.J., Creon-Bocquet L.* & Szabó C.: ORTHOPYROXENE-ENRICHED, DUNITE VEINED UPPER MANTLE XENOLITHS FROM MINDSZENTKÁLLA (BAKONY-BALATON HIGHLAND, WESTERN PANNONIAN BASIN): TRACES OF A SUBDUCTED SLAB?

5-27 **Panel number 9**
Piccoli F.*, Vitale Brovarone A., Beyssac O., Martinez I., Ague J.J. & Chaduteau C.: CARBONATION BY FLUID-ROCK INTERACTIONS AT HIGH-PRESSURE CONDITIONS: IMPLICATIONS FOR CARBON CYCLING IN SUBDUCTION ZONES

5-28 **Panel number 10**
Poli S.*: EXPERIMENTAL MODELLING OF DISSOLUTION AND MELTING OF SUBDUCTED PELAGIC CARBONATES

5-29 **Panel number 11**
Rosa A.D.*, Mathon O., Pasternak S., Jacobs J., Cardon H., Krstulovic M., Merkulova M., Louvel M., Tsay A., Ghosh S., Liebske C., Irifune T., Munoz M. & Wilke M.: DEVELOPMENT OF AN EXAFS SETUP AT THE BEAMLINE BM23 OF THE ESRF OPTIMIZED FOR STUDYING TRACE ELEMENTS *IN-SITU* UNDER EXTREME *P*/*T* CONDITIONS

5-30 **Panel number 12**
Scambelluri M., Bebout G.E.*, Belmonte D., Gilio M., Campomenosi N. & Crispi-

ni L.: CARBONATION OF SUBDUCTION-ZONE SERPENTINITE (HIGH-PRESSURE OPHICARBONATE; LIGURIAN WESTERN ALPS) AND IMPLICATIONS FOR THE DEEP CARBON CYCLING

5-31 Panel number 13

Secchiari A., Montanini A.*, Bosch D., Macera P. & Cluzel D.: SUBDUCTION-RELATED ULTRADEPLETED MELTS IN A NASCENT ARC: GEOCHEMICAL AND ISOTOPIC EVIDENCE FROM THE INTRUSIVE SEQUENCE OF THE NEW CALEDONIA OPHIOLITE

5-32 Panel number 14

Soder C.*, Romer R.L. & Altherr R.: ORIGIN AND GEODYNAMIC SIGNIFICANCE OF POST-COLLISIONAL K-RICH MAFIC MAGMATISM OF THE VARISCAN OROGEN

5-33 Panel number 15

Wojtulek P.*, Puziewicz J. & Ntaflos T. : DESERPENTINIZATION PHASES IN SERPENTINITES AS METAMORPHISM INDICATORS: A CASE STUDY OF THE LOWER SILESIA (SW POLAND, CENTRAL EUROPE) VARISCAN OPHIOLITES

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S9. Inclusions in minerals as record of geological processes: new analysis methods and applications

9-15 Panel number 16

Ageeva O.*, Habler G., Pertsev A. & Abart R.: ORIENTATION RELATIONS OF Fe-Ti-OXIDE MICRO-INCLUSIONS AND THEIR HOSTS IN THE OCEANIC GABBRO

9-16 Panel number 17

Braga R.*, Ferrero S., Wälle M. & Remusat L.: GENESIS AND EVOLUTION OF THE LATE MIOCENE MAGHREBIAN GRANITOIDS UNRAVELED THROUGH THE NANOGRANITES OF LA GALITE ARCHIPELAGO (TUNISIA)

9-17 Panel number 18

Fischer L.A.*, Charlier B., Namur O., Roberts J. & Holtz F.: MELT INCLUSIONS REVEAL IMMISCIBILITY IN THE UPPER ZONE OF THE BUSHVELD COMPLEX

9-18 Panel number 19

Jakubová P.*, Kotková J. & Wirth R.: MICRODIAMONDS AND PIEZOBAROMETRY: POLYCRYSTALLINE AND MULTIPHASE INCLUSIONS REVEALED BY FIB-TEM

9-19 Panel number 20

Kátai O.R.*, Tóth A., Káldos R. & Szabó C.: PETROGRAPHIC AND FLUID INCLUSION STUDY OF BADENIAN SALT ROCKS FROM THE TRANSYLVANIAN BASIN (ROMANIA)

9-20 Panel number 21

Koneyev R.*: MICRO-NANOMINERAL ENSEMBLES – INDICATORS OF FORMATION AND DIRECT EVIDENCES OF VARIOUS TYPES OF GOLD ORES (UZBEKISTAN)

9-21 Panel number 22

Milani S.*, Nestola F., Cerantola V., Anzolini C., McCammon C.A., Novella D., Kupenko I., Chumakov A., Rüffer R. & Harris J.W.: FIRST *IN-SITU* MEASUREMENTS OF Fe^{3+}/Fe_{tot} FOR OXIDES AND SILICATES INCLUDED IN NATURAL DIAMONDS WITH SYNCHROTRON MÖSSBAUER SOURCE

9-22 Panel number 23

Shishkina T.*, Portnyagin M., Botcharnikov R., Almeev R.R. & Holtz F.: EXPERIMENTAL CALIBRATION AND IMPLICATIONS OF OLIVINE-MELT VANADIUM OXYBAROMETRY FOR HYDROUS MAGMAS FROM MUTNOVSKY VOLCANO (KAMCHATKA)

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S11. Reading and understanding metamorphic rocks

11-12 Panel number 24

Bucher K.* & Weisenberger T.B.: POLYMETAMORPHIC GARNET PORPHYROBLASTS IN ECLOGITE-FACIES GARNET-PHENGITE SCHISTS FROM THE ZERMATT AREA, CENTRAL ALPS

11-16 Panel number 25

Colás V.*, Tassara C.S., Padrón-Navarta J.A., González-Jiménez J.M., Griffin W.L.,

Fanlo I., O'Reilly S.Y., Gervilla F., Proenza J.A., Pearson N.J., Camprubí A. & Escayola M.: THE EFFECT OF COMPOSITION ON MINOR AND TRACE ELEMENTS IN SPINELS: INSIGHTS FROM EXSOLVED CHROMITE

11-17 Panel number 26

Cruciani G.*, Franceschelli M., Massonne H.-J. & Musumeci G.: P-T CONDITIONS OF THE GARNET-KYANITE GRANULITIC GNEISS FROM TARCU, SOUTH-EAST CORSICA

11-18 Panel number 27

Da Mommio A.*, Zanchetta S., Poli S. & Zanchi A.: NAPPE STACKING AND METAMORPHIC EVOLUTION IN THE WESTERN TAUERN WINDOW

11-19 Panel number 28

Dubacq B.*, De Andrade V. & Plunder A.: TRACE ELEMENTS IN METAPELITES: PARTITIONING, IMAGING AND USE FOR THERMOBAROMETRY

11-20 Panel number 29

Elmi C., Chen J., Goldsby D. & Gieré R.*: A COUPLED ANALYTICAL AND THEORETICAL INVESTIGATION OF ROCK FULGURITES

11-21 Panel number 30

Ferrero S., Palmeri R., Godard G., Wunder B. & Cesare B.*: NANOGRANITOID INCLUSIONS IN ULTRAMAFIC HIGH-PRESSURE GRANULITES FROM DRONNING MAUD LAND, ANTARCTICA

11-22 Panel number 31

Likhanov I.I.* & Nozhkin A.D.: COUNTERCLOCKWISE P-T EVOLUTION AT ~1.75 Ga RECORDED FROM Fe- AND Al-RICH ULTRAHIGH-TEMPERATURE METAPELITIC GRANULITES (YENISEI RIDGE): IMPLICATION FOR PROTEROZOIC SUPERCONTINENT TECTONICS

11-23 Panel number 32

Masci L.*, Dubacq B., Verlaguet A., Chopin C., De Andrade V., Siebert J. & Wehr N. : CRYSTAL CHEMISTRY AND THERMODYNAMICS OF Fe-CHLORITE: SPECIATION AND SITE OCCUPANCY OF IRON

11-25 Panel number 33

Ortolano G., Visalli R.*, Cirrincione R. & Godard G.: A NEW TOOL TO DISPLAY COMPOSITIONAL CHANGES WITHIN METAMORPHIC ZONED MINERALS DUE TO THE DIFFUSION PHENOMENA: THE CASE OF MAMMOLA PARAGNEISS COMPLEX (SERRE MASSIF-SOUTHERN CALABRIA, ITALY)

11-26 Panel number 34

Palmeri R.*, Di Vincenzo G., Godard G., Sandroni S. & Talarico F.M.: PANAFRICAN(?) HP RELICS IN MAFIC-ULTRAMAFIC ROCKS FROM DRONNING MAUD LAND (ANTARCTICA)

11-27 Panel number 35

Pitra P.* & Martínez F.J.: STAUROLITE+KYANITE-BEARING PSEUDOMORPHS AFTER ANDALUSITE (CAP DE CREUS, SPAIN)

11-28 Panel number 36

Tual L.*, Möller C., Pitra P. & Whitehouse M.: TRACKING THE P–T PATH OF PRECAMBRIAN ECLOGITE USING PSEUDOSECTION, Ti-IN-QUARTZ AND Zr-IN-RUTILE THERMOBAROMETRY

11-29 Panel number 37

Waters D.J.* & Utting J.: INCLUSION SUITES IN ECLOGITE GARNETS: UNRELIABLE WITNESSES OF PROGRADE METAMORPHIC HISTORY

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S14. Advances in computational and experimental mineralogy: A journey from the surface to the deep Earth and beyond

14-16 Panel number 38

Caracas R.* & Bobocioiu E.: THE WURM PROJECT: COMPUTATIONAL MINERAL PHYSICS, RAMAN SPECTRA, AND A WINDOW TO NEW LOW-TEMPERATURE MINER-

ALOGY
14-17 Panel number 39
Comodi P.*, Nazzareni S., Guidoni F., Balic-Zunic T. & Prakapenka V.: HIGH PRESSURE BEHAVIOUR OF CHALCOSTIBITE
14-18 Panel number 40
Hernández-Laguna A.*, Sainz-Díaz C.I., Hernández-Haro N., Muñoz-Santiburcio D., Pérez Del Valle C., Ortega-Castro J. & Mookherjee M.: ENERGETICS AND COMPRESSIBILITY OF $2M_1$ MUSCOVITE-PHLOGOPITE SOLID-SOLUTION SERIES TO 9 GPa
14-19 Panel number 41
McCammon C.A.*, Chariton S., Cerantola V., Kupenko I., Vasiukov D.M., Aprilis G., Chumakov A. & Dubrovinsky L.: A NUCLEAR INELASTIC SCATTERING WINDOW TO THE DEEP EARTH
14-20 Panel number 42
Merlini M.*, Lotti P., Gatta G.D., Crichton W., Hanfland M., Plaisier J.R. & Lausi A.: CANDIDATE CARBONATE PHASES IN THE EARTH
14-21 Panel number 43
Mookherjee M.*, Hermann A. & Wunder B.: HIGH-PRESSURE ELASTICITY OF PHASE-Pi, $Al_3Si_2O_7(OH)_3$
14-22 Panel number 44
Pedone A., Muniz-Miranda F., Lodesani F., Malferrari D.* & Brigatti M.F.: SEPIOLITE AND PALYGORSKITE INTERACTION WITH CARBON DIOXIDE: EXPERIMENTAL EVIDENCE AND MOLECULAR DYNAMICS SIMULATION
14-23 Panel number 45
Ridolfi F., Oberti R., Zanetti A., Renzulli A.* & Perugini D.: AMFORM.XLSX - A NEW MODEL FOR AMPHIBOLE FORMULA CALCULATION FROM EMP ANALYSES
14-24 Panel number 46
Sun X.-Y., Cordier P.*, Taupin V., Fressengeas C. & Karki B.B.: INFLUENCE OF PRESSURE ON DISCLINATION STRUCTURES AND GRAIN-BOUNDARY MIGRATION OF A {310}/[001] BOUNDARY IN MgO
14-25 Panel number 47
Zucchini A.*, Prencipe M., Belmonte D. & Comodi P.: DOLOMITE TO DOLOMITE-II: A HIGH PRESSURE *AB-INITIO* STUDY

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S18. Planetary materials: from dust to planets and Early Earth

18-15 Panel number 48
Moggi-Cecchi V.*, Pratesi G., Caporali S. & Carli C.: PRELIMINARY DATA ON TWO NEW RUMURUTI CHONDRITES FROM NORTHWEST AFRICA
18-16 Panel number 49
Słaby E.*, Karwowski Ł., Majzner K., Wirth R., Muszyński A., Simon K., Domonik A., Moszumańska I., Schreiber A. & Orłowski R.: ALKALI FELDSPAR CRYSTALS FROM MORASKO IAB IRON METEORITE: PRODUCT OF MAGMA DIFFERENTIATION, METASOMATISM OR PROJECTILE - TARGET MATERIAL INTERACTION
18-17 Panel number 50
Ferrari M.*, Rotundi A., Rietmeijer F.J.M., Della Corte V., Baratta G.A., Brunetto R., Dartois E., Djouadi Z., Merouane S., Borg J., Brucato J.R., Le Sergeant d'Hendecourt L., Mennella V., Palumbo M.E. & Palumbo P.: WILD 2 GRAINS CHARACTERIZED COMBINING MIR/FIR/RAMAN MICRO-SPECTROSCOPY AND FE-SEM/EDS ANALYSES
18-18 Panel number 51
Mahan B.*, Siebert J., Pringle E.A. & Moynier F.: METAL-SILICATE CHEMICAL AND ISOTOPIC FRACTIONATION OF Zn AND COSMOCHEMICAL ESTIMATION OF THE S CONTENT OF THE EARTH'S CORE

18-19 Panel number 52
Giera A.*, Słaby E., Wiedenbeck M., Birski L. & Lepland A.: HYDROGEN AND CHLORINE ISOTOPE RATIOS IN EARLY ARCHEAN APATITE CRYSTALS FROM THE ISUA SUPRACRUSTAL BELT, SW GREENLAND – INITIAL RESULTS

18-20 Panel number 53
Birski L.*, Słaby E., Wirth R., Giera A., Lepland A. & Schreiber A.: TRACES OF FLUIDS-APATITE CRYSTALS INTERACTIONS IN ARCHEAN BARBERTON GREENSTONE BELT

18-21 Panel number 54
Farina F.*, Albert C., Aguilar C., Moreno J.A., Narduzzi F. & Lana C.: FROM MEDIUM- TO HIGH-K GRANITOIDS: TOWARDS STABILIZATION OF THE SOUTHERN SÃO FRANCISCO CRATON

18-22 Panel number 55
Hamann C.*, Hecht L., Schäffer S., Deutsch A. & Lexow B.: DECOMPOSITION AND MELTING OF CARBONATES IN CONTACT WITH SILICATE MELTS IN MEMIN LASER MELTING EXPERIMENTS

18-23 Panel number 56
Giuli G.*, Pratesi G., Paris E. & Cibin G.: IRON OXIDATION STATE IN FULGURITE GLASS

18-24 Panel number 57
Muftakhetdinova R.*, Grokhovsky V. & Petrova E.: PRE-TERRESTRIAL SHOCK METAMORPHISM AND EXPERIMENTAL SHOCK-WAVE LOADING IN THE METEORITE MINERALS

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S24. The petrology-geochronology connection

24-10 Panel number 58
Cisneros de León A.*, Schmitt A.K. & Weber B.: THE ORIGIN OF BADDELEYITE, SRILANKITE, HÖGBOMITE AND ZIRCON CORONAS IN Ti-Fe ORES FROM THE MARISCAL-SOCONUSCO MASSIF-TYPE ANORTHOSITE COMPLEX, SOUTHEASTERN MEXICO

24-11 Panel number 59
Dias A.N.C.*, Chemale F. Jr, Martins-Ferreira M.A.C., Lana C. & Pereira A.A.: DETRITAL-ZIRCON GEOCHRONOLOGY AND SEDIMENTARY PROVENANCE OF THE SÃO FRANCISCO CRATON COVERS

24-12 Panel number 60
Gürsu S.*, Möller A., Usta D., Köksal S., Ates S., Sunkari E.D. & Göncüoğlu M.C.: LA-ICP-MS U-Pb DETRITAL AND MAGMATIC ZIRCON AGES OF THE LATE ORDOVICIAN GLACIAL DIAMICTITES AND PEBBLES, TAURIDES AND SOUTHEAST ANATOLIAN AUTOCHTHONE BELT, TURKEY: PROVENANCE OF THE NORTHEASTERN GONDWANA (EGYPT-SINAI PENINSULA)

24-13 Panel number 61
Gawęda A.*, Burda J., Klötzli U.S., Golonka J. & Szopa K.: HOW MANY OCEAN FLOORS? GEOCHEMICAL AND GEOCHRONOLOGICAL STUDY OF AMPHIBOLITES FROM THE WESTERN TATRA MOUNTAINS (CENTRAL WESTERN CARPATHIANS)

24-14 Panel number 62
Gilotti J.A.*, McClelland W.C., Coble M.A. & Compagnoni R.: U-Pb SIMS ANALYSIS OF JADEITE-BEARING ORTHOGNEISS AT TAVAGNASCO, SESIA ZONE, WESTERN ALPS, ITALY

24-15 Panel number 63
Giovanardi T.*, Lugli F., Girardi V.A.V., Correia C.T., Tassinari C.C.G., Sinigoi S., Cipriani A. & Mazzucchelli M.: THE LARGE LAYERED GOIAS COMPLEXES: NEW U-Pb AND PRELIMINARY Lu-Hf *IN SITU* ZIRCON ANALYSES FROM BARRO ALTO AND CANA BRAVA

24-16 Panel number 64
Hasalová P.*, Schaltegger U., Schulmann K., Weinberg R.F., Štípská P., Kyland-

er-Clark A.R.C., Holder R. & Sergeev S.: TIMESCALE OF PERVASIVE MELT MIGRATION IN THE CRUST

24-17 Panel number 65

Kiefer S.*, Majzlan J., Gerdes A. & Chovan M.: THE AGE OF HYDROTHERMAL SULFIDIC VEIN MINERALIZATIONS IN VARISCAN BASEMENT ROCKS OF THE NÍZKE TATRY MOUNTAINS (SLOVAKIA)

24-18 Panel number 66

Langone A.*, Zanetti A., Tiepolo M. & Mazzucchelli M.: DATING THE ONSET OF A LOWER CRUSTAL SHEAR ZONE: A (LUCKY) CASE FROM THE NORTHERN SECTOR OF THE IVREA-VERBANO ZONE (VAL CANNOBINA, ITALY)

24-19 Panel number 67

Lugli F., Giovanardi T., Girardi V.A.V., Correia C.T., Tassinari C.C.G., Sinigoi S., Cipriani A. & Mazzucchelli M.*: PRELIMINARY U-Pb LA-ICPMS ZIRCON ANALYSES FROM THE GOIAS COMPLEXES: SHRIMP COMPARISON AND INTRUSION AGE

24-20 Panel number 68

McClelland W.C.*, Gilotti J.A. & Compagnoni R.: DETRITAL ZIRCON GEOCHRONOLOGY OF PARAGNEISS ADJACENT TO JADEITE-BEARING ORTHOGNEISS AT TAVAGNASCO, SESIA ZONE, ITALY

24-21 Panel number 69

Sorokhtina N.V.*, Belyatsky B.V., Antonov A.V., Kononkova N.N. & Lepekhina E.N.: SOURCE OF THE RARE-METAL MINERALIZATION OF THE ELET'OZERO MASSIVE, NORTH KARELIA

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S25. Biogeochemical interfaces and environmental (bio) mineralogy

25-15 Panel number 70

Askhabov A.*: THE NONCLASSICAL QUATARON CONCEPT OF CRYSTAL GROWTH

25-16 Panel number 71

Bardelli F., Barone G., Costagliola P., D'Acapito F., De Giudici G., Di Benedetto F., Giuffrida A., Mazzoleni P.*, Montegrossi G. & Podda F.: CONSIDERATION ON THE MOUNT ETNA FINE ASH RAISES CONCERNS FOR THE HEALTH DUE TO THE CHEMICAL RELEASE AND THE IRON BEHAVIOR

25-17 Panel number 72

Marescotti P.*, Cecchi G., Di Piazza S., Lucchetti G., Mariotti M.G. & Zotti M.: MICROFUNGI-MINERAL INTERACTIONS IN SULPHIDE-RICH HARDPANS

25-18 Panel number 73

Haynes H.*, Pearce C., Morris K., Pattrick R., Pimblott S. & Lloyd J.R.: MICROBIAL PROCESSES WITHIN BENTONITE BARRIER MATERIALS

25-19 Panel number 74

He J.*, Zhao S. & Bismayer U.: HIERARCHICAL DOMAIN STRUCTURE OF CALCIUM CARBONATES IN *PINCTADA MARTENSII* SHELLS

25-20 Panel number 75

Izatulina A.R.*, Punin Y.O., Shtukenberg A.G., Kalkura S.N. & Frank-Kamenetskaya O.V.: ON THE FORMATION OF AGGREGATION AND CRYSTALLIZATION STRUCTURES OF HUMAN OXALATE RENAL STONES

25-21 Panel number 76

Li Y.*, Li Y., Xu X., Lu A., Yang X., Wang H. & Ding C.: MINERALOGICAL CHARACTERISTICS OF IRON-MANGANESE CUTANS IN A AND B HORIZON OF SUBTROPICAL SOILS IN CHINA

25-22 Panel number 77

Nixon S.L.*, Cockell C.S. & Lloyd J.R.: MICROBIAL IRON REDUCTION IN EXTREME ENVIRONMENTS

25-23 Panel number 78

Ren G., Ding H., Li Y. & Lu A.*: PROMOTION OF MICROBIAL EXTRACELLULAR ELECTRON TRANSFER BY NATURE HEMATITE

25-24 Panel number 79
Pusceddu C.*, Medas D., De Giudici G., Meneghini C. & Giannoncelli A.: BIOGEOCHEMICAL INTERFACES IN THE HYPORHEIC ZONE OF SAN GIORGIO RIVER (SARDINIA SW, ITALY)
25-25 Panel number 80
Vettorello A.*, Frallonardo P., Nestola F., Oliviero F., Peruzzo L. & Scanu A.: A NEW MULTI-ANALYTICAL APPROACH IN THE STUDY OF SYNOVIAL FLUID CRYSTALS: A COMBINED INVESTIGATION OF ELECTRON MICROSCOPY, MICRO-RAMAN SPECTROSCOPY AND X-RAY MICRO-DIFFRACTION

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S26. Mineral-hazards. The environmental and human health problem represented by raw and man-processed mineral phases

26-15 Panel number 81
Belluso E., Capella S., Di Benedetto F.*, Bardelli F., Giaccherini A., Montegrossi G., Romanelli M., Zoleo A. & D'Acapito F.: PRELIMINARY XAS AND ESE INVESTIGATIONS ON CRYSTALLINE SILICA CONTAINED IN LUNG TISSUES
26-16 Panel number 82
Bloise A.*, Barca D., Gualtieri A.F., Pollastri S. & Belluso E.: TRACE ELEMENTS IN HAZARDOUS MINERAL FIBERS
26-17 Panel number 83
Capella S.* & Belluso E.: RECENT EXPOSURE TO INORGANIC FIBERS AIRBORNE: EVALUATION BY URINE SAMPLES
26-18 Panel number 84
Fornasaro S.*, Marescotti P., Crispini L., Comodi P., Malerba G. & Lercari M.: CHROMIUM AND NICKEL IN SERPENTINITIC SOILS AND ROCKS IN OPHIOLITE FROM DIFFERENT OROGENIC SETTINGS (LIGURIA, ITALY)
26-19 Panel number 85
Funari V.*, Mantovani L., Tribaudino M., Vigliotti L., Braga R. & Dinelli E.: ENVIRONMENTAL RELEVANCE OF SOLID BY-PRODUCTS FROM MUNICIPAL SOLID WASTE INCINERATION ASSESSED BY COMBINING MAGNETIC AND MINERALOGICAL ANALYSIS
26-20 Panel number 86
Giordani M.*, Mattioli M., Valentini L. & Ballirano P.: POTENTIALLY CARCINOGENIC ERIONITE IN ITALY: GEOLOGICAL OCCURRENCE AND RISK ASSESSMENT
26-21 Panel number 87
Giordani M., Mattioli M.*, Ballirano P., Boscardin M. & Valentini L.: PRISMATIC TO EXTREMELY FIBROUS OFFRETITE FROM NORTHERN ITALY: MORPHOLOGICAL AND CHEMICAL DATA OF A POTENTIALLY HAZARDOUS ZEOLITE
26-22 Panel number 88
Gualtieri A.F.*, Pollastri S., Bursi Gandolfi N., Perchiazzi N., Plaisier J.R., Lezzerini M. & Gialanella S.: THE CRYSTAL STRUCTURES OF MINERAL FIBRES
26-23 Panel number 89
Lepore G.O.*, Mazzuoli M., Proposito M., Trovato C. & Armiento G.: As SPECIATION IN VICAN IGNIMBRITES: PRELIMINARY XAS DATA
26-24 Panel number 90
Li Y.*, Wang C., Meng F., Li Y., Lu A., Yang C. & Li K.: MINERALOGICAL CHARACTERIZATION OF CALCIFICATION AGGREGATIONS IN CEREBRAL ARTERIES
26-25 Panel number 91
Petriglieri J.R., Tribaudino M.*, Salvioli-Mariani E., Mantovani L., Bersani D., Lottici P.P., Tomatis M. & Laporte-Magoni C.: A SURVEY OF ASBESTOS MINERALS IN NEW CALEDONIA: PRELIMINARY RESULTS

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S27. Mineral sciences for the understanding of cultural heritage

27-16 Panel number 93
Abu El-Enen M.M., Lorenz J., Okrusch M.*, Kamal A.A., von Seckendorff V., Schüssler U., Brätz H. & Schmitt R.-T.: *PORFIDO ROSSO ANTICO* – THE IMPERIAL DIMENSION STONE FROM THE EASTERN DESERT OF EGYPT

27-17 Panel number 94
Bajnóczi B., Györkös D.*, Mozgai V., Szabó M., Tóth M. & Burnichioiu I.: ARCHAEOMETRIC ANALYSIS OF MOSAIC TESSERAE AND A "RED MARBLE" DECORATIVE STONE FROM THE BIZERE MONASTERY (ARAD COUNTY, WESTERN ROMANIA)

27-18 Panel number 95
Barone G., Mazzoleni P., Monterosso G., Raneri S.*, Santostefano A. & Spagnolo G.: EXPLORING THE COROPLASTS "*TECHNE*" IN GREEK ARCHITECTURAL TERRACOTTAS: AN ARCHAEOMETRIC APPROACH

27-19 Panel number 96
Bruni Y.*, Demaude M., Hatert F., George P. & Strivay D.: GEMMOLOGICAL STUDY OF A RELIQUARY CROSS FROM THE LIÈGE CATHEDRAL, BELGIUM

27-20 Panel number 97
Enea-Giurgiu A.*, Ionescu C., Hoeck V. , Tămaș T. & Roman C.: TECHNOLOGICAL CONSTRAINTS FOR LATE NEOLITHIC POTTERY FOUND IN THE SOUTHERN CARPATHIANS (ROMANIA)

27-21 Panel number 98
Gatuingt L.*, Rossano S., Mertz J.-D., Lanson B., Rozenbaum O., Fourdrin C., Reguer S. & Trcera N.: DEVELOPMENT OF MANGANESE-RICH PATINAS ON THE BUILDING SANDSTONES FROM THE LUNEVILLE CASTLE: FROM INITIAL BEARING PHASES TOWARDS FINAL PHASES

27-22 Panel number 99
Kucharova A.* & Prikryl R.: "ATLAS OF CZECH MARBLES": MINERALOGICAL-PETROGRAPHIC AND ISOTOPIC REFERENCE DATABASE FOR PROVENANCE STUDIES

27-23 Panel number 100
Matau F.*, Breaban I.G., Nica V., Matricala A.-L., Bele A. & Stancu A.: CUCUTENI - A POTTERY PRODUCTION IN EASTERN ROMANIA: INSIGHTS FROM COMPOSITIONAL ANALYSIS

		Arengo	Tempio1	Tempio2	Marina	Parco	Borgo
08.30	09.15	**Plenary Appel**					
09.15	09.30						
09.30	09.45	Alvaro	Tiraboschi	**Marshall**	Hovis	Gunter	**Cruz-Hernández**
09.45	10.00	Crivellaro	Smye		Grevel		Aparicio
10.00	10.15	Kendrick	Locatelli	Fritsch	Geiger	**Andreozzi**	Bello
10.15	10.30	Dutrow	Bayet	Bačík	Majzlan	Ballirano	Cánovas
10.30	10.45	Goncalves	Bryden	Pignatelli	Mahmoud	Belluso	Caraballo
10.45	11.15	Coffee Break					
11.15	11.30	George	Cannaò	Marshall	**Palke**	Rasmeni	Carrero
11.30	11.45	Spruzeniece	Tumiati	Giuliani		Pollastri	Carbone
11.45	12.00	Ortolano	**Dasgupta**	Karampelas	Watenphul	Bursi Gandolfi	Bogush
12.00	12.15	Brown		Palke	Cametti	Sanchez	Crouzet
12.15	12.30	Weller	Sieber	Turner	Gori	Michalik	Kasina
12.30	14.00	Lunch Break					
14.00	14.15	Lotout	Capizzi	Rondeau	Beirau	Mantovani	Kowalski
14.15	14.30	Möller	Pohlenz	Adamo	Lenz	Wilczyńska	Eisen
14.30	14.45	Chopin	Carter	Chauviré	Mihailova	Giehl	Carroll
14.45	15.00	Godard	Avanzinelli	Simmons	Goethals	Vigliaturo	Tyszka
15.00	15.15	Massonne	Lustrino	Pizzorusso	Balitsky	D'Orazio	Zanelli
15.15	15.45	Coffee Break					
15.45	16.30	**Plenary Scambelluri**					
16.30	17.00	Closing Ceremony					

Thursday, September 15th

ORAL SESSIONS

MORNING

S5. The cycling of hydrogen, carbon, and mobile elements in the subduction factory

Conveners: Jörg Hermann, Timm John and Marco Scambelluri

(09.30-10.45) Room - Tempio 1

5-5 09.30 – 09.45
Tiraboschi C.*, Tumiati S., Ulmer P., Pettke T. & Poli S.: HIGH-PRESSURE FLUIDS IN THE MS + COH SYSTEM: AN EXPERIMENTAL STUDY ON FORSTERITE, ENSTATITE AND MAGNESITE SOLUBILITY IN MIXED H_2O–CO_2 FLUIDS AT fO_2 BUFFERED CONDITIONS

5-6 09.45 – 10.00
Smye A.*, Jackson C., Konrad-Schmolke M., Parman S. & Ballentine C.: NOBLE GASES TRACE EARTH'S SUBDUCTED WATER FLUX

5-7 10.00 – 10.15
Locatelli M.*, Verlaguet A., Agard P. & Federico L.: ECLOGITIC BRECCIA FROM THE MONVISO META-OPHIOLITE COMPLEX: FIELD AND PETROGRAPHIC EVIDENCES OF MULTIPLE-STAGE ECLOGITE-FACIES BRECCIATION

5-8 10.15 – 10.30
Bayet L.*, Menneken M., John T., Agard P. & Gao J.: COHERENT RAMAN SPECTROSCOPY-BASED PT ESTIMATES TO UNRAVEL THE METAMORPHIC EVOLUTION OF A HP/UHP UNIT (SOUTHERN TIANSHAN METAMORPHIC BELT / SW CHINA)

5-9 10.30 – 10.45
Bryden C.D.*, Jamieson R.A. & Robinson P.: STABLE ISOTOPE CHEMISTRY OF SCAPOLITE IN ULTRA-HIGH-PRESSURE ROCKS: A MONITOR OF SUBDUCTION ZONE FLUIDS?

(11.15-12.30) Room - Tempio 1

5-10 11.15 – 11.30
Cannaò E.*, Bebout G.E., Agostini S. & Scambelluri M.: TEXTURAL AND GEOCHEMICAL EVOLUTION OF OPHICARBONATES FROM OCEAN TO DEEP SUBDUCTION

5-11 11.30 – 11.45
Tumiati S.*, Miozzi F., Pettke T., Tiraboschi C., Ulmer P. & Poli S.: EXPERIMENTAL CONSTRAINTS ON THE COMPOSITION OF FLUIDS INTERACTING WITH A GRAPHITE-BEARING, CARBONATE-FREE SUBDUCTION MELANGE

5-12 11.45 – 12.15
(KEYNOTE) Dasgupta R.*, Duncan M.S., Tsuno K. & Muth M.: SUBDUCTION EFFICIENCY OF CARBONATES THROUGH GEOLOGIC TIME AND THE ROLE OF SLAB-DERIVED MELTS IN TRANSPORTING CO_2 TO VOLCANIC ARCS

5-13 12.15 – 12.30
Sieber M.*, Yaxley G.M. & Hermann J.: ANALYSES OF CO_2 IN FLUIDS FROM PISTON CYLINDER EXPERIMENTS

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S11. Reading and understanding metamorphic rocks

Conveners: Lukas Baumgartner, Pavel Pitra and Dave Waters

(09.30-10.45) Room - Arengo

11-1 09.30 – 09.45
Alvaro M.*, Angel R.J., Mazzucchelli M.L. & Nestola F.: NEW CONSTRAINTS ON PT EVOLUTION OF METAMORPHIC ROCKS FROM SINGLE INCLUSION PIEZOBAROMETRY

11-2 09.45 – 10.00
Crivellaro M.*, Bartoli O., Cesare B., Acosta-Vigil A., Petrelli M. & Garrido C.J.: APPLICATION OF Ti-IN-QUARTZ, Ti-IN-ZIRCON AND Zr-IN-RUTILE THERMOMETERS TO METAPELITIC GRANULITES FROM JUBRIQUE SEQUENCE (BETIC CORDILLERA, S SPAIN)

11-3 10.00 – 10.15
Kendrick J.* & Indares A.: THE BEAUTY AND COMPLEXITY OF PARTIALLY MELTED ALUMINOUS ROCKS: DISEQUILIBRIUM RECORDED BY Ti-IN-QUARTZ

11-4 10.15 – 10.30
Hoffmann T., Dutrow B.* & Foster C.T.: PLAGIOCLASE CORONAS AROUND GARNETS: IMPLICATIONS FOR PRESSURE-TEMPERATURE PATHS IN ALUMINOUS GNEISSES AND SCHISTS

11-5 10.30 – 10.45
Goncalves P.*, Raimondo T. & Santos de Souza J.: INTERPRETATION(S) OF GARNET DISTRIBUTION AND CHEMICAL ZONING: INSIGHTS FROM MAJOR AND TRACE ELEMENT LA-ICPMS MAPPING. AN EXAMPLE FROM PELITIC MIGMATITES OF SALVADOR DA BAHIA (BRAZIL)

(11.15-12.30) Room - Arengo

11-6 11.15 – 11.30
George F.R.* & Gaidies F. : RATES AND MECHANISMS OF PORPHYROBLAST CRYSTALLISATION: INSIGHTS FROM A GARNET-GRADE SCHIST OF THE LESSER HIMALAYA

11-7 11.30 – 11.45
Spruzeniece L.*, Piazolo S., Putnis A., Daczko N. & Kilburn M.R.: SYMPLECTITE FORMATION IN THE PRESENCE OF A REACTIVE FLUID: INSIGHTS FROM HYDROTHERMAL EXPERIMENTS

11-8 11.45 – 12.00
Ortolano G.*, Cirrincione R., Visalli R. & Godard G.: THERMODYNAMIC MODELLING AND QUANTITATIVE PETROLOGICAL ANALYSIS OF METAMORPHIC ROCKS: AN ESSENTIAL INTEGRATED TOOL TO INVESTIGATE THE PTX EVOLUTION OF OROGENIC PROCESS

11-9 12.00 – 12.15
Brown M.*: READING AND UNDERSTANDING THE PRECAMBRIAN METAMORPHIC RECORD

11-10 12.15 – 12.30
Weller O.M.* & St-Onge M.R.: HIGH-P ECLOGITE IN THE TRANS-HUDSON OROGEN, CANADA: MODERN-DAY PLATE TECTONIC PROCESSES IN THE PALEOPROTEROZOIC

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S15. Structural behavior and energetic properties of minerals

Conveners: Charles Arthur Geiger, Matteo Ardit and Alan Woodland

(09.30-10.45) Room - Marina

15-1 09.30 – 09.45
Hovis G.L.*: SYSTEMATIC BEHAVIOR OF K-Na MIXING ENTHALPIES WITH Al-Si ORDER IN ALKALI FELDSPARS AND IMPLICATIONS FOR PHASE EQUILIBRIA

15-2 09.45 – 10.00
Grevel K.-D.*, Nowak W., Majzlan J., Fockenberg T. & Theye T.: THE ENTHALPY OF FORMATION OF MAGNESIOCARPHOLITE ($MgAl_2[Si_2O_6](OH)_4$)

15-3 10.00 – 10.15
Geiger C.A.* & Dachs E.: A THERMODYNAMIC STUDY OF END-MEMBER ANDRADITE AND ANDRADITE ($Ca_3Fe_2Si_3O_{12}$) – GROSSULAR ($Ca_3Al_2Si_3O_{12}$) SOLID SOLUTIONS

15-4 10.15 – 10.30
Majzlan J.*, Grevel K.-D., Kiefer B., Dachs E., Benisek A., Grube E. & Nielsen U.G.: THERMODYNAMICS AND CRYSTAL CHEMISTRY OF RHOMBOCLASE, $(H_5O_2)Fe(SO_4)\cdot 2H_2O$, AND THE PHASE $(H_3O)Fe(SO_4)_2$

15-5 10.30 – 10.45
Mahmoud A.*, Lacivita V., Erba A., D'Arco P. & Mustapha S.: HYDROGROSSULAR, $Ca_3Al_2(SiO_4)_{3-x}(H_4O_4)_x$: AN *AB INITIO* INVESTIGATION OF ITS STRUCTURAL AND ENERGETIC PROPERTIES

(11.15-12.30) Room - Marina

15-6 11.15 – 11.45
(KEYNOTE) Palke A.C.* & Geiger C.A.: SHORT-RANGE ORDER/DISORDER IN ROCK-FORMING MINERALS: INVESTIGATIONS BY NUCLEAR MAGNETIC RESONANCE AND OTHER SPECTROSCOPIC TECHNIQUES

15-7 11.45 – 12.00
Watenphul A.*, Lensing-Burgdorf M., Schlüter J. & Mihailova B.: TEMPERATURE AND PRESSURE EVOLUTION OF PHONON VIBRATIONS OF DIFFERENT TOURMALINE SPECIES

15-8 12.00 – 12.15
Cametti G.* & Armbruster T.: CRYSTAL STRUCTURE AND PHASE TRANSITION IN NOELBENSONITE $BaMn^{3+}{}_2[Si_2O_7](OH)_2\cdot H_2O$

15-9 12.15 – 12.30
Gori C.*, Tribaudino M., Mantovani L., Skogby H., Hålenius U., Dondi M., Delmonte D., Gilioli E., Mezzadri F. & Calestani G.: CERAMIC AND MAGNETIC PROPERTIES OF SYNTHETIC COBALT-DOPED DIOPSIDE

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S19. Gem materials

Conveners: Gaston Giuliani, Lee Groat and Federico Pezzotta

(09.30-10.45) Room - Tempio 2

19-1 09.30 – 10.00
(KEYNOTE) Marshall D.*, Giuliani G., Groat L.A., Fallick A.E. & Branquet Y.: RE-

CLASSIFICATION OF EMERALD DEPOSIT FORMATIONAL MODELS BASED ON TECTONIC AND METAMORPHIC CONDITIONS

19-2 10.00 – 10.15
Fritsch E.*, Rondeau B. & Pinsault L.: WHY ARE SOME MINERAL GEM QUALITY? CRYSTAL GROWTH CONSIDERATIONS

19-3 10.15 – 10.30
Bačík P.*, Fridrichová J., Malíčková I., Milovský R., Luptáková J. & Škoda R.: SPECTROSCOPIC CHARACTERIZATION OF Cr AND V AS CHROMOPHORES IN SELECTED GEM MINERALS

19-4 10.30 – 10.45
Pignatelli I.*, Giuliani G., Chatagnier P.-Y.: COLOMBIAN EMERALD AND EUCLASE: TRAPICHE *VERSUS* TRAPICHE-LIKE TEXTURES?

(11.15-12.30) Room - Tempio 2

19-5 11.15 – 11.30
Marshall D.*, Downes P., Ellis S. & Jones P.: PRESSURE-TEMPERATURE-FLUID CONSTRAINTS FOR THE POONA EMERALD DEPOSITS, WESTERN AUSTRALIA: FLUID INCLUSION AND STABLE ISOTOPE STUDIES

19-6 11.30 – 11.45
Giuliani G.*, Fallick A.E., Boyce A.J., Pardieu V. & Pham V.L.: PINK AND RED SPINELS IN MARBLE: TRACE ELEMENTS, OXYGEN ISOTOPES AND SOURCES

19-7 11.45 – 12.00
Karampelas S.*, Hainschwang T. & Notari F.: UPDATE ON THE HEAT TREATMENT DETECTION OF TANZANITE

19-8 12.00 – 12.15
Palke A.C.*, Renfro N.D. & Berg R.B.: MELT INCLUSIONS IN YOGO SAPPHIRES AS A CLUE TO THEIR ORIGIN

19-9 12.15 – 12.30
Turner D.*, Groat L.A., Rivard B. & Belley P.: MINERALOGICAL INSIGHTS FROM NEAR-FIELD HYPERSPECTRAL IMAGING OF SAPPHIRE-BEARING MARBLE AND ITS POTENTIAL FOR EXPLORATION, BAFFIN ISLAND, NUNAVUT, CANADA

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S21. Mineralogy, geochemistry and valorization of Industrial and mining wastes

Conveners: Jose Miguel Nieto, Salvador Morales and Rafael Pérez-López

(09.30-10.45) Room - Borgo

21-1 09.30 – 09.45
(KEYNOTE) Cruz-Hernández P.*, Pérez-López R. & Nieto J.M.: TRACE ELEMENTS MOBILITY DURING IRON-PRECIPITATES DIAGENESIS

21-2 09.45 – 10.00
Aparicio P.*, Galán E. & Martín D.: MINERAL CARBONATION OF INDUSTRIAL WASTES

21-3 10.00 – 10.15
Bello M.* & Carroll M.R.: CHEMICAL AND PETROLOGICAL CHARACTERIZATION OF MUNICIPAL SOLID WASTE BOTTOM ASH: A COMPARISON WITH VOLCANICS PRODUCTS

21-4 10.15 – 10.30
Cánovas C.R.*, Pellet-Rostaing S., Chapron S. & Macías F.: FIRST STEPS FOR RARE EARTH ELEMENTS RECOVERY FROM WASTES GENERATED IN A FERTILIZER INDUSTRY

21-5 10.30 – 10.45
Caraballo M.A.*, Hochella M.F. Jr, Wanty R.B., Verplanck P.L., Ayora C., Macías F. & Nieto J.M.: REEY WATER SCAVENGING AND ENRICHMENT BY POORLY CRYSTALLINE ALUMINUM HYDROXYSULFATES: ALPINE NATURAL STREAMS *VS* AMD PASSIVE TREATMENT SYSTEMS

(11.15-12.30) Room - Borgo

21-6 11.15 – 11.30
Carrero S.*, Fernández-Martínez A., Pérez-López R. & Nieto J.M.: BASALUMINITE AS SCAVENGER OF CONTAMINANTS

21-7 11.30 – 11.45
Carbone C.*, Salviulo G., Vianello F., Baratella D., Magro M., Molinari S., Canepa M., Belmonte D., Dinelli E. & Brescianini C.: THE CASE OF STOPPANI SPA (GE), AN EXTREME POLLUTED CR(VI) SITE: MINERALOGICAL AND GEOCHEMICAL CHARACTERIZATION OF WASTE, SOILS, AND WATER. EFFICIENCY OF PECULIAR MAGHEMITE NANOPARTICLES FOR CR(VI) REMOVAL FROM POLLUTED WATERS

21-8 11.45 – 12.00
Bogush A.A.*, Stegemann J.A. & Roy A.: CHANGES IN COMPOSITION AND MINERALOGY OF ENERGY-FROM WASTE AIR POLLUTION CONTROL RESIDUES DUE TO WATER WASHING

21-9 12.00 – 12.15
Crouzet C.*, Brunet F., Recham N., Ferrasse J.-H. & Goffé B.: HYDROTHERMAL ALTERATION OF STEEL SLAGS: A NOVEL VALORIZATION ROUTE

21-10 12.15 – 12.30
Kasina M.*, Kowalski P.R. & Michalik M.: FLY ASH FROM MUNICIPAL SEWAGE SLUDGE INCINERATION - A SOURCE OF PHOSPHOROUS

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S26. Mineral-hazards. The environmental and human health problem represented by raw and man-processed mineral phases

Conveners: Alessandro F. Gualtieri, Mickey Gunter and Marisa Rozalen

(09.30-10.45) Room - Parco

26-1 09.30 – 09.45
Gunter M.E.*: MINERALS HAZARDS A TO Z: THE ROLE OF THE MINERALOGIST

26-2 09.45 – 10.15
(KEYNOTE) Andreozzi G.B.*, Pacella A. & Turci F.: TOPOCHEMISTRY OF IRON AND SURFACE REACTIVITY OF CROCIDOLITE AND TREMOLITE AMPHIBOLE ASBESTOS: A COMPARATIVE CASE STUDY

26-3 10.15 – 10.30
Pacella A., Fantauzzi M., Atzei D., Cremisini C., Nardi E., Montereali M.R., Rossi A. & Ballirano P.*: IRON FIXED AS EXTRA-FRAMEWORK CATION POTENTIALLY PLAYS A CRUCIAL ROLE IN INDUCING CARCINOGENICITY IN ERIONITE

26-4 10.30 – 10.45
Belluso E.*, Fornero E. & Capella S.: ANALYSIS OF RESPIRED AMPHIBOLE FIBERS

(ASBESTOS AND NON-ASBESTOS CLASSIFIED): DISCRIMINATION BETWEEN NATURAL AND ANTHROPOGENIC SOURCES USING SENTINEL ANIMALS

(11.15-12.30) Room - Parco

26-5 11.15 – 11.30
Rasmeni S.K.*, Ball M. & Negota N.: MINERALOGICAL ASSESSMENT OF ABANDONED ASBESTOS MINE SITES ALONG THE ORANGE RIVER IN THE KOEGAS AREA, NORTHERN CAPE PROVINCE OF SOUTH AFRICA

26-6 11.30 – 11.45
Pollastri S.*, Gualtieri A.F., Bursi Gandolfi N., Lassinantti Gualtieri M. & Gherardini D.: DISSOLUTION OF MINERAL FIBRES IN CONTACT WITH SIMULATED LUNG FLUID SOLUTIONS

26-7 11.45 – 12.00
Bursi Gandolfi N.*, Pollastri S., Gualtieri A.F., Langenhorst F., Belpoggi F. & Viglia-turo R.: HIGH RESOLUTION TEM INVESTIGATION OF MINERAL FIBRES IN CONTACT WITH ORGANIC MEDIA

26-8 12.00 – 12.15
Sanchez M.S.*: CHARACTERIZATION OF TALC ORE AND WASTE ROCK FROM THE UPPER DORA-MAIRA MASSIF IN THE RODERETTO MINE

26-9 12.15 – 12.30
Michalik M.*, Kasina M., Kowalski P.R., Wilczyńska-Michalik W. & Pietras B.: EMISSION OF PARTICULATE MATTER FROM SEWAGE SLUDGE THERMAL UTILIZATION PLANT

Thursday, September 15th

ORAL SESSIONS

AFTERNOON

S5. The cycling of hydrogen, carbon, and mobile elements in the subduction factory

Conveners: Jörg Hermann, Timm John and Marco Scambelluri

(14.00-15.15) Room - Tempio 1

5-14 14.00 – 14.15
Capizzi L.S.*, Fumagalli P., Ildefonse B., Poli S. & Tumiati S.: GEOMETRY AND CONNECTIVITY OF HYDROUS-CARBONATITIC LIQUIDS IN THE MANTLE: AN EXPERIMENTAL MODEL

5-15 14.15 – 14.30
Pohlenz J.*, Pascarelli S., Mathon O., Rosa A.D., Belin S., Landrot G., Shiryaev A., Murzin V., Veligzhanin A., Wagner J., Künzel D., Irifune T. & Wilke M.: STRUCTURAL PROPERTIES OF CARBONATE-SILICATE MELTS: TRACE ELEMENT EXAFS AT HIGH-PRESSURE & TEMPERATURE

5-16 14.30 – 14.45
Carter L.B.* & Dasgupta R.: CRUSTAL CARBONATE ASSIMILATION AS A SOURCE OF MAGMATIC CO_2 RELEASE AT CONTINENTAL ARCS

5-17 14.45 – 15.00
Avanzinelli R.*, Casalini M., Elliott T. & Conticelli S.: DEEP RECYCLING OF CARBONATE-RICH SEDIMENTS IN THE MANTLE SOURCE OF VESUVIUS VOLCANO

5-18 15.00 – 15.15
Lustrino M.*, Gaeta M., Palladino D.M., Rossi G. & Stagno V.: THE POLINO CALCIOCARBONATITE IS NOT A CARBONATITE

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S11. Reading and understanding metamorphic rocks

Conveners: Lukas Baumgartner, Pavel Pitra and Dave Waters

(14.00-15.15) Room - Arengo

11-11 14.00 – 14.15
Lotout C.*, Pitra P. & Van Den Driessche J.: CORDIERITE PSEUDOMORPHS IN A PERALUMINOUS GRANITE: AN UNEXPECTED EVIDENCE OF HIGH PRESSURE METAMORPHISM

11-12 14.15 – 14.30
Oalmann J., Möller A.* & Bousquet R.: UNRAVELLING THE P-T-t EVOLUTION OF THE GRUF COMPLEX BY *IN SITU* ACCESSORY MINERAL DATING AND THERMOMETRY COMBINED WITH P-T MODELING OF MICRODOMAINS

11-13 14.30 – 14.45
Chopin C.*, Guillot F. & Lanari P.: JADEITE AND NEPHELINE IN THE GRAN PARADISO MASSIF, W. ALPS: DECIPHERING THE HIGH-PRESSURE EVOLUTION OF CONTINENTAL CRUST

11-14 14.45 – 15.00
Bianco C., Godard G.*, Brogi A., Caggianelli A. & Liotta D.: THE LAWSONITE+

GLAUCOPHANE METAGABBROS FROM THE ELBA ISLAND (ITALY): NEW INSIGHTS INTO THE INNER NORTHERN APENNINES

11-15 15.00 – 15.15
Massonne H.-J.*, Cruciani G., Franceschelli M. & Musumeci G.: PRESSURE-TEMPERATURE-TIME EVOLUTION OF METAPELITES FROM THE PORTO VECCHIO REGION, VARISCAN CORSICA

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S15. Structural behavior and energetic properties of minerals

Conveners: Charles Arthur Geiger, Matteo Ardit and Alan Woodland

(14.00-15.15) Room - Marina

15-10 14.00 – 14.15
Beirau T.*, Nix W.D., Ewing R.C., Schneider G.A., Boatner L.A., Groat L.A. & Bismayer U.: MECHANICAL PROPERTIES OF RADIATION DAMAGED ZIRCON AND TITANITE

15-11 14.15 – 14.30
Lenz C.*, Lumpkin G.R., Thorogood G.J., Ionescu M. & Nasdala L.: CHARACTERISATION OF STRUCTURAL RADIATION DAMAGE BY MEANS OF REE^{3+} MICRO-LUMINESCENCE SPECTROSCOPY - THE EXAMPLE OF ZIRCON AND ZIRCONOLITE

15-12 14.30 – 14.45
Pina Binvignat F.A., Malcherek T., Paulmann C., Schlüter J., Angel R.J. & Mihailova B.*: PRESSURE-INDUCED STRUCTURAL ALTERATION IN METAMICT ZIRCON

15-13 14.45 – 15.00
Goethals J.*, Tarrida M., Fourdrin C., Bedidi A., Madon M. & Rossano S.: STRUCTURAL INVESTIGATION OF Nd INCORPORATION IN $CaSnO_3$ PEROVSKITE

15-14 15.00 – 15.15
Balitsky D.V., Balitsky V.S.*, Balitskaya L.V., Setkova T.V. & Nekrasov A.N.: EXPERIMENTAL STUDY OF THE INFLUENCE OF CRYSTALLIZATION CONDITIONS ON CAPTURE AND DISTRIBUTION OF GERMANIUM IN QUARTZ CRYSTALS AND THEIR CHARACTERISTIC

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S19. Gem materials

Conveners: Gaston Giuliani, Lee Groat and Federico Pezzotta

(14.00-15.15) Room - Tempio 2

19-10 14.00 – 14.15
Rondeau B.*, Fritsch E., Stéphant N., Boulet C. & Chauviré B.: GEM LAZULITE-BEARING BLUE QUARTZITE FROM ITREMO, MADAGASCAR: A POTENTIAL FOR NEW MINERAL SPECIES

19-11 14.15 – 14.30
Adamo I.*, Zullino A., Lorenzi R., Prosperi L. & Akkas B.: CHARACTERIZATION OF BLUE BANDED CHALCEDONY (AGATE) FROM YOZGAT PROVINCE, TURKEY

19-12 14.30 – 14.45
Chauviré B.*, Rondeau B., Mazzero F., Ayalew D. & Chamard-Bois S.: THE PEDOGENETIC MODEL FOR THE FORMATION OF PRECIOUS OPAL DEPOSIT OF WEGEL TENA, ETHIOPIA

19-13 14.45 – 15.00
Simmons W.*, Falster A., Francis C., Felch M. & Webber K.: ACQUISITIONS BY THE NEW MAINE MINERAL & GEM MUSEUM: RECENT AND HISTORIC GEM PRODUCTION FROM MAINE PEGMATITES

19-14 15.00 – 15.15
Pizzorusso A.C.*: PARADISE BEJEWELED: THE GEMS OF DANTE'S *DIVINE COMEDY*

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S21. Mineralogy, geochemistry and valorization of Industrial and mining wastes

Conveners: Jose Miguel Nieto, Salvador Morales and Rafael Pérez-López

(14.00-15.15) Room - Borgo

21-11 14.00 – 14.15
Kowalski P.R.*, Kasina M. & Michalik M.: ALUMINUM RICH PHASES IN MUNICIPAL SOLID WASTE INCINERATION (MSWI) BOTTOM ASH

21-12 14.15 – 14.30
Machiels L., Muchez P., Cappuyns V., Elsen J.*, Jones P.T. & Binnemans K.: KU LEUVEN RESEARCH PROGRAMME ON THE ZERO-WASTE RECYCLING OF MINE TAILINGS

21-13 14.30 – 14.45

Paris E., Grandinetti V., Stabile P., Radica F., Giuli G., Ansaloni F. & Carroll M.R.*: MUNICIPAL AND INDUSTRIAL GLASSES FOR THE PRODUCTION OF ECOSUSTAINABLE BUILDING MATERIALS

21-14 14.45 – 15.00
Tyszka R.*, Pietranik A. & Stankowska S.: MOBILITY OF POTENTIALLY TOXIC ELEMENTS IN THE ŚWIĘTOCHŁOWICE SLAG HEAP: EVIDENCE FROM MINERAL LIBERATION ANALYZES

21-15 15.00 – 15.15
Zanelli C.*, Iglesias C., Domínguez E. & Dondi M.: THE POTENTIAL RECYCLING OF BORON SLUDGES IN CERAMIC TILES

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S26. Mineral-hazards. The environmental and human health problem represented by raw and man-processed mineral phases

Conveners: Alessandro F. Gualtieri, Mickey Gunter and Marisa Rozalen

(14.00-15.15) Room - Parco

26-10 14.00 – 14.15
Mantovani L.*, Barraco V., Tribaudino M., Solzi M., De Munari E. & Pironi C. : MAGNETITE AS A POLLUTANT IN THE ATMOSPHERE: EVIDENCE FROM SEM-EDS AND MAGNETIC ANALYSIS OF LEAVES AND PARTICULATE FILTERS

26-11 14.15 – 14.30
Wilczyńska-Michalik W.*, Zimirska A., Dietrich A., Maszloch E. & Michalik M.: MAGNETIC COMPONENTS IN SOILS AS A RECORD OF ANTHROPOGENIC IMPACT

26-12 14.30 – 14.45
Giehl C.*, Brooker R.A., Marxer H. & Nowak M.: THE EFFECT OF VOLCANIC ASH

COMPOSITION AND GLASS CONTENT ON JET ENGINE SAFETY

26-13 14.45 – 15.00
Vigliaturo R.*, Dražić G. & Petruccione F.: HISTORICAL AND FUTURE ROLE OF HR-TEM AND AR-TEM IN MEDICAL MINERALOGY

26-14 15.00 – 15.15
D'Orazio M.*, Biagioni C., Vezzoni S. & Petrini R.: THALLIUM ACCUMULATION INSIDE PIPELINES OF DRINKABLE WATER DISTRIBUTION SYSTEMS: THE CASE OF THE SOUTHERN APUAN ALPS ABANDONED MINING SITES

Authors' Index

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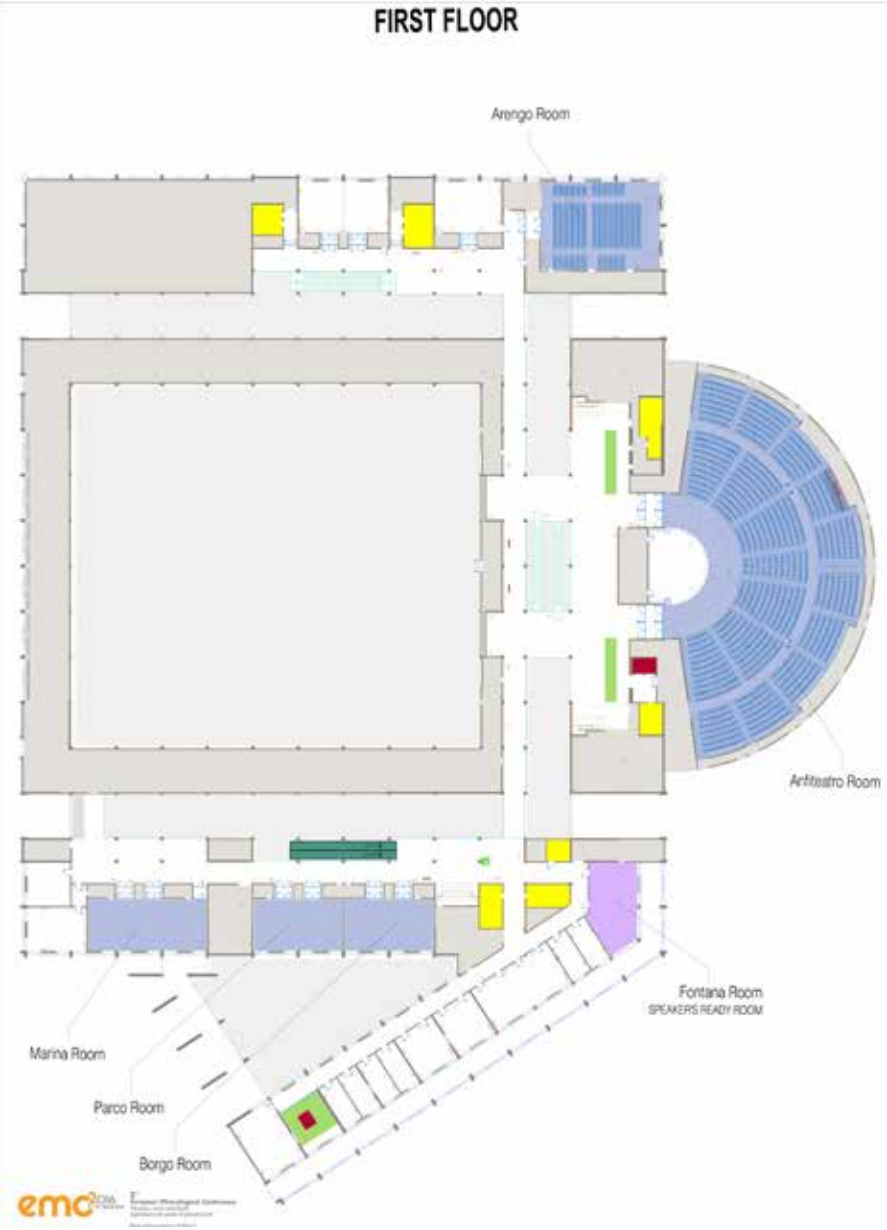
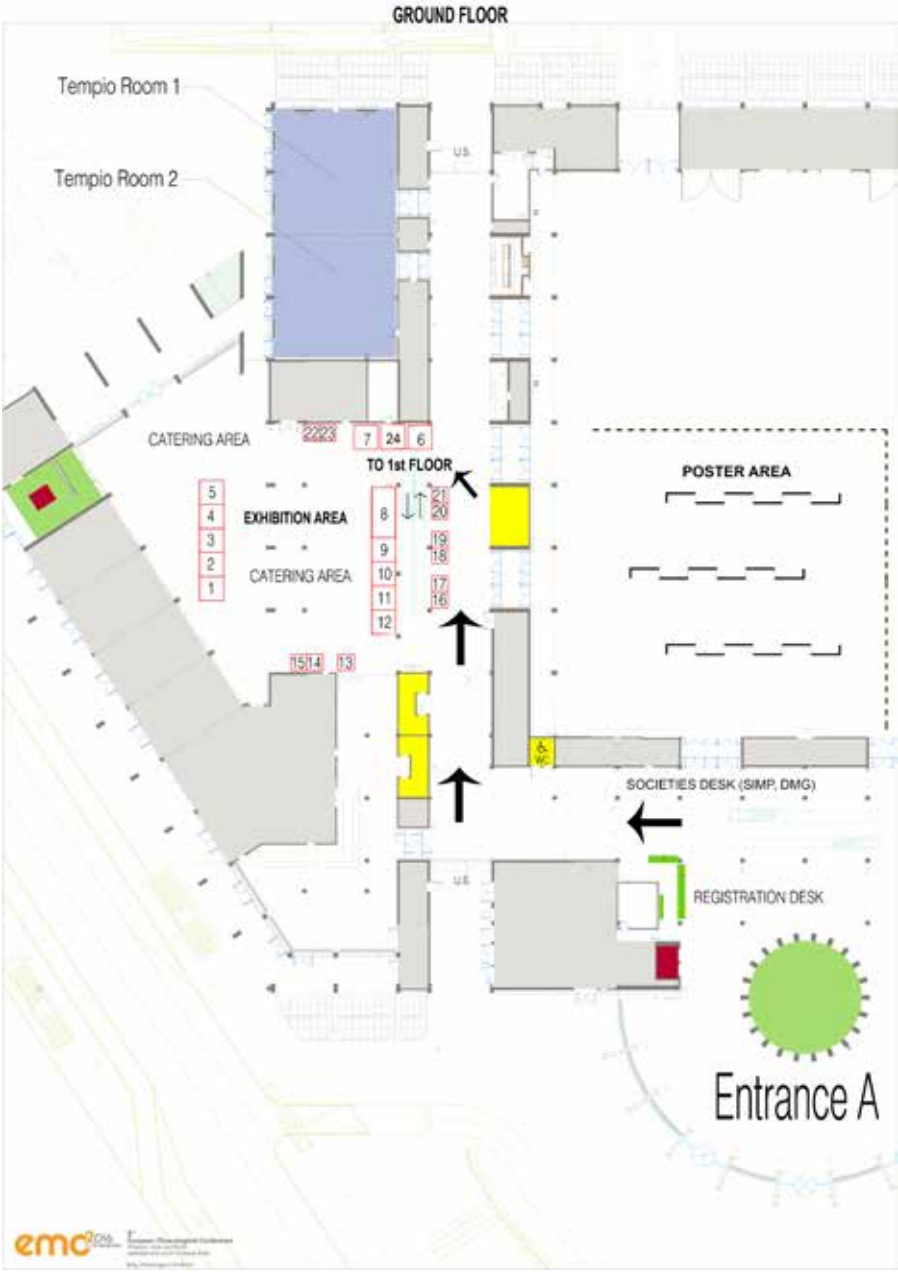


Map: ground floor



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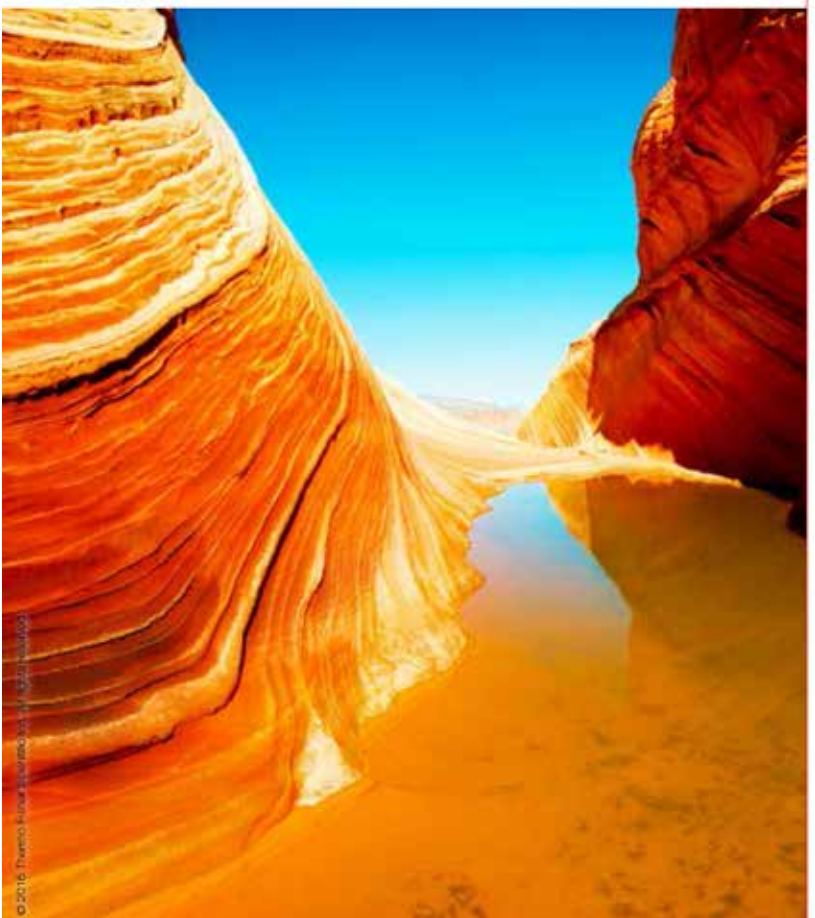

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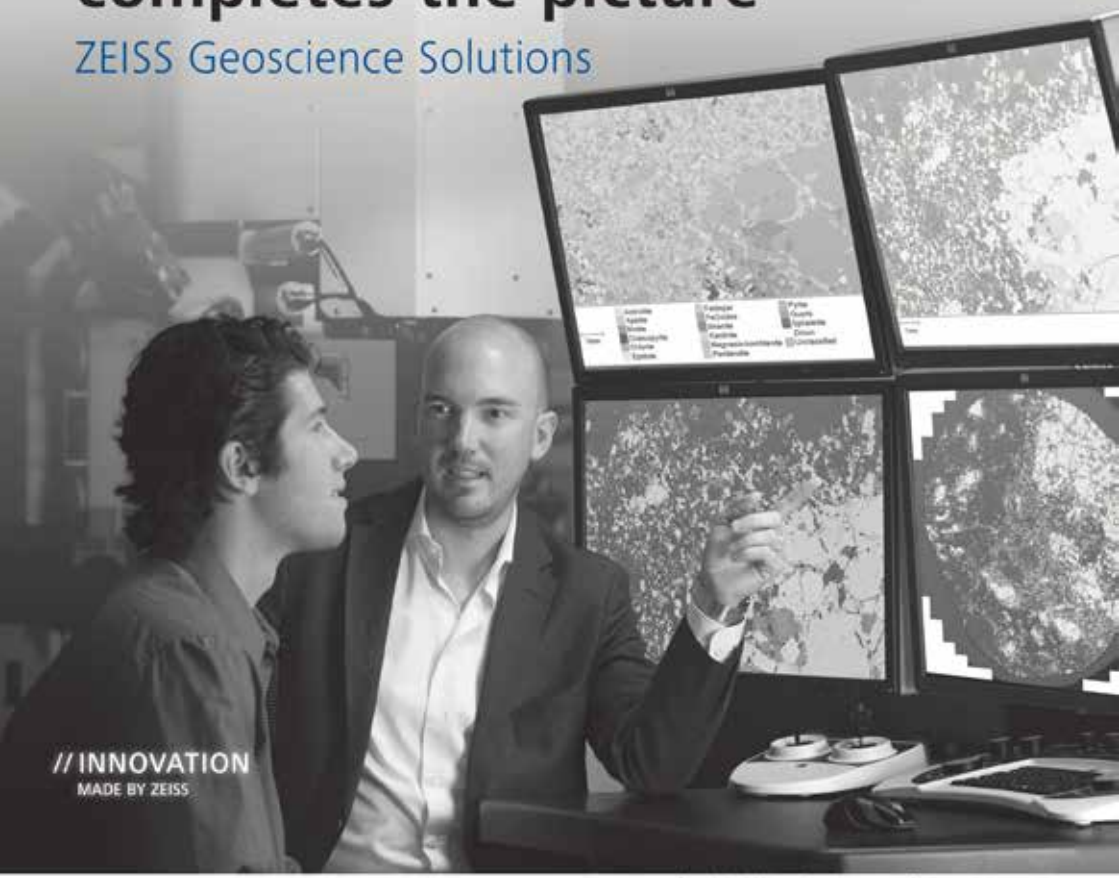

Images of a nickel sulphide ore. Sample courtesy of Leicester University, UK.

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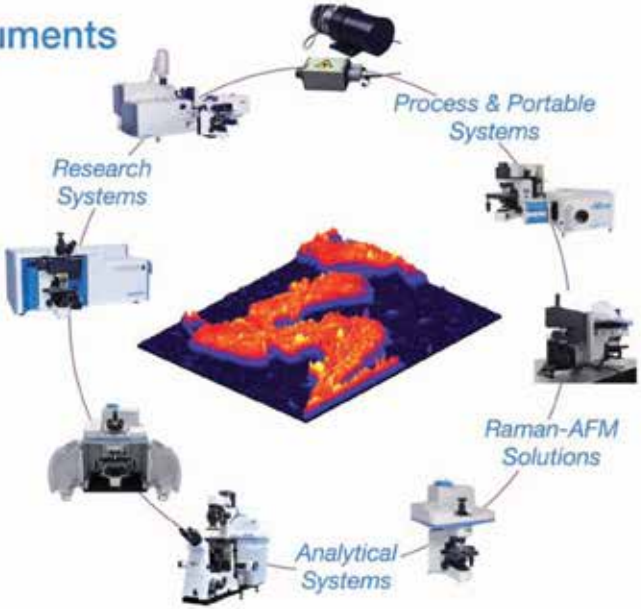

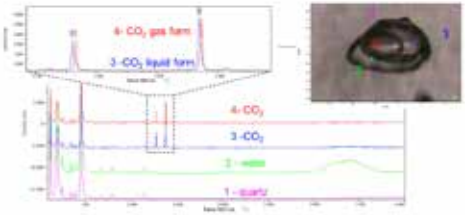

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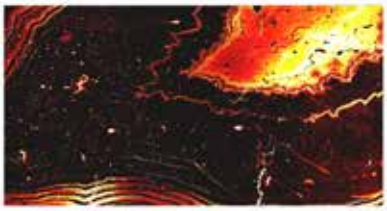

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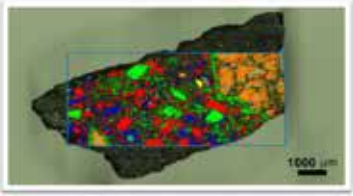

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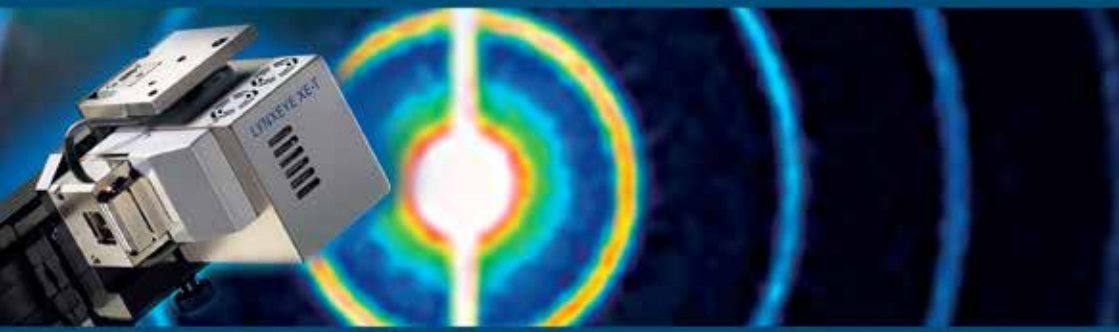

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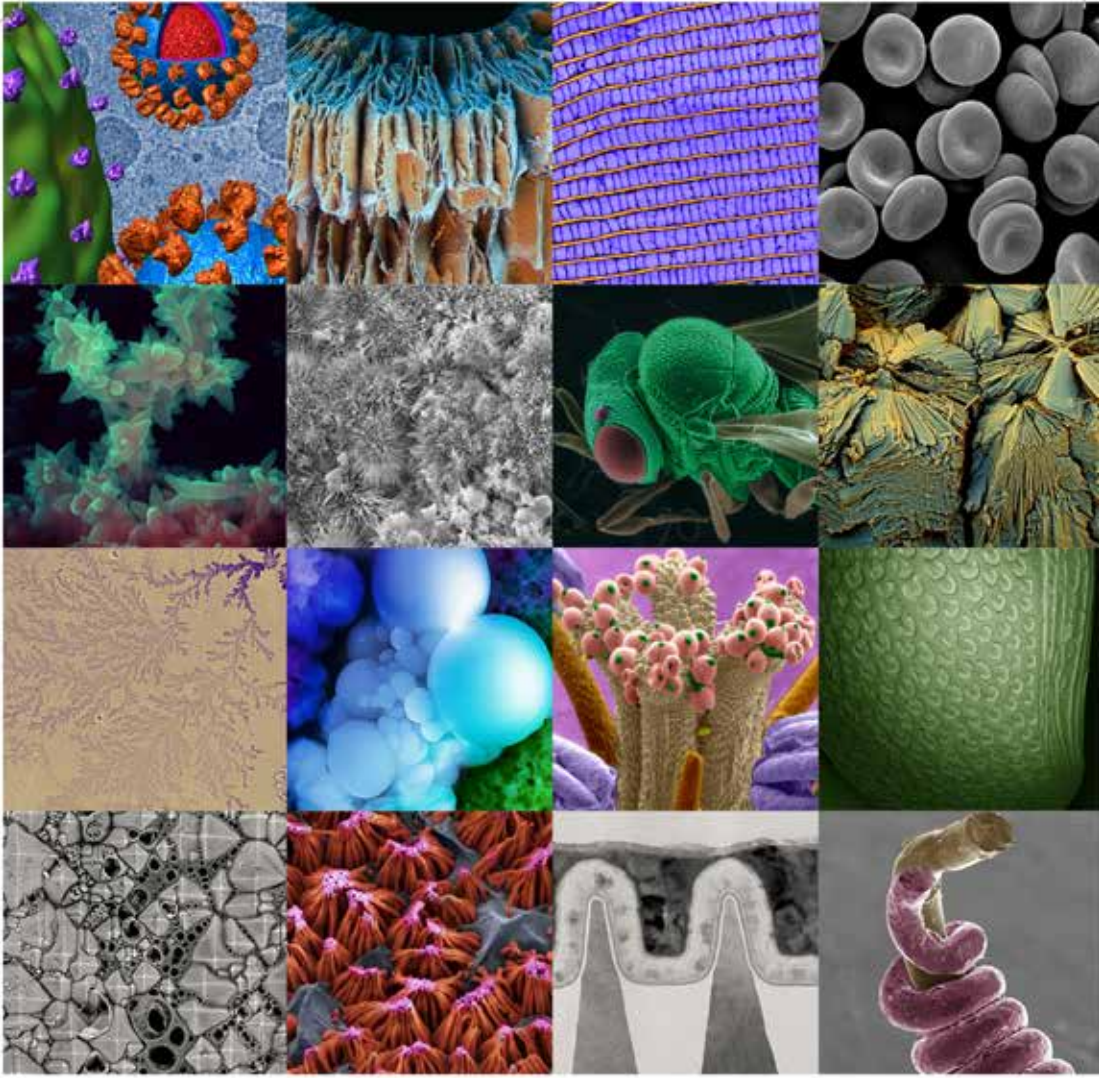

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Plenary Galàn
Plenary Appel
Awards Ceremony
Plenary Ewing
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Coffee Break
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Coffee Break
Oral Sessions
Oral Sessions
Oral Sessions
Oral Sessions
Lunch Break
Lunch Break
Lunch Break
Lunch Break
Registration
Oral Sessions
Oral Sessions
Oral Sessions
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Coffee Break
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Oral Sessions
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Oral Sessions
Plenary Scambelluri
Closing Ceremony
Poster Session
Poster Session
Poster Session
Ice Breaker
Annual National Society Meetings
Gala Dinner

DEEP CARBON OBSERVATORY

sessions of special interest at

emc2 2016
11 - 15 September
3rd European Mineralogical Conference
Rimini, Italy

S1
12 Sept.
14:00-17:00

Diamonds: open windows in the Earth's mantle

Fabrizio Nestola University of Padua
Sami Mikhail University of St Andrews
Hélène Bureau Pierre and Marie Curie University

S3
12 Sept.
09:30-12:30

Volatiles in the deep Earth: storage, mobility and implications

Marc Blanchard Pierre and Marie Curie University
Daniel Frost University of Bayreuth
István Kovács Geological and Geophysical Institute of Hungary

Keynote speaker
Nathalie Bolfan-Casanova
Blaise Pascal University

S4
13 Sept.
09:30-17:00

Fluids in the crust

Maria Luce Frezzotti University of Milano-Bicocca
Cristoph Heinrich ETH Zurich
Thomas Müller University of Leeds

Keynote speaker
Lukas Baumgartner
University of Lausanne

S5
14 Sept.
15:45-17:00
15 Sept.
09:30-15:15

The cycling of hydrogen, carbon, and mobile elements in the subduction factory

Oliver Beyssac Pierre and Marie Curie University
Marie Edmonds University of Cambridge
Jörg Hermann University of Bern
Timm John Free University of Berlin

Keynote speakers
Rajdeep Dasgupta
Rice University
Oliver Plümper
University of Utrecht

S14
14 Sept.
11:15-17:00

Advances in computational and experimental mineralogy: A journey from the surface to the deep Earth and beyond

Azzurra Zucchini University of Perugia
Catherine McCammon University of Bayreuth
Paola Comodi University of Perugia
Mainak Mookherjee Florida State University

Keynote speakers
Marc Blanchard
Pierre and Marie Curie University
Hauke Marquardt
University of Bayreuth

S17
12 Sept.
15:45-17:00
13 Sept.
09:30-12:30

Mineral diversity, complexity and evolution

Sergey Krivovichev Saint Petersburg State University
Edward Grew University of Maine

Keynote speaker
Robert Hazen
Carnegie Institution for Science

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