Symposium G04 Special Poster Session: 22am

Biogeochemistry

Convenors: Karl Föllmi, Maria Dittrich & Jorge Spangenberg

230 Arnosti C & Holmer M:
Carbon Cycling in a Continental Margin Sediment: Contrasts between Organic Matter Characteristics and Remineralization Rates and Pathways

231 Berg U, Donnert D, Song Y, Reinhardt M, Neumann T & Weidler PG:
Use of Calcite for the Retention of Phosphorus in Lake Sediments and P-recovery Applications

232 Borgendahl J & Westman P:
Natural Causes for Cyanobacterial Blooms in the Baltic Sea

233 Bosselmann K, Boettcher ME, Theune A, Hespenheide B & Lilienthal S:
S-Fe-Mn Biogeochemistry of Temperate Intertidal Sediments of the North Sea

234 Böttcher ME, Khim B, Suzuki A, Gehre M, Wortmann U & Brumsack H:
Microbial Sulfate Reduction in Deep Sediments of ODP Leg 181: Evidence from Stable Sulfur Isotope Fractionation and Pore Water Modeling

235 Cennamo P, Ciniglia C, Valentino GM & Stanzione D:
Interaction between Acidic Geothermal Waters and Algae Living in Pisciarelli (Naples, Italy)

236 Enel M:
Element Contents in the Ash of Dropwort Roots and in the Soil Around the Roots

237 Faivre D, Zuddas P, Agrinier P, Guyot F & Menguy N:
Significance of Oxygen Isotopic Signature in Magnetite [Fe_3O_4] Under Earth Surface Conditions: Preliminary Results

238 Gazit-Yaari N, Lazar B & Erez J:
Depletion Factor as a Paleodepth Indicator

239 Goldberg T, Guo Q, Liu C, Steiner M & Strauss H:
Isotopic Investigation of the Sulphur and Carbon Cycles in Sedimentary Rocks from the Yangtze Platform, Southern China

240 Juillet-Leclerc A & Yiou P:
The Measured Coral Oxygen Isotopes Result of the Superimposition of Two Fractionations

241 Kovac N, Bajt O, Faganeli J, Sket B & Orel B:
Spectroscopic Studies (FT-IR, ^{13}C and ^{1}H-NMR) of Macroaggregates in the Northern Adriatic

242 Kovalevskii A & Kovalevskaya O:
Physiological Role of Bioliths in Plants Life

243 Lysenko O & Merkylueva N:
The Role of Aminoacids for Technogenic Radionuclide Migration in Soils

244 Müller AB, Strauss H & Littke R:
Evolution of Late Paloeozoic Terrestrial Environments: The Early Permian Lake Systems in the Saar-Nahe Basin, Western Germany

245 Nilsson MR, Becker ML, Rasbury ET & Dobson C:
Analyses of Proteins in Natural Carbonates: Recent Aragonitic Ooids, Great Bahama Bank

246 Ouyang Z, Ji H, Wang S, Yang R & Wang S:
Geochemical Compositions of Carbonate Rocks and their Acid-insoluble Residues: Implications for the Genesis of Dolomite

247 Sah SP & Brumme R:
The Natural Abundance of ^{15}N and ^{13}C in the Soil and Needle of the Pine Forest (*Pinus roxburghii*) along Altitudinal Gradient in Nepal

248 Schneider C & Exley C:
Looking for Equilibrium: The Determination of an Equilibrium Constant to Describe the Formation of Hydroxyaluminosilicates (HAS)

249 Schroll E, Kucha H & Stumpfl E:
Bacteriogenic Lead-zinc Mineralization in the Bleiberg Deposit, Austria

250 Schubert CJ, Niggemann J, Ferdelman TF, Klockgether G & Joergensen BB:
The Chlorin-Index: A New Parameter for Organic Matter Freshness in Sediments

251 Schulz-Gade W & Peiffer S:
The Coupling of the Oxidation of Reduced Sulfur Compounds with the Reduction of Fe(III)-Minerals

252 Sobotovich E, Korkushko O, Lysenko O & Shatilo V:
Whether or not the Isotope Relation Among the Biogenic Elements is Being an Indicator of Organism's Functional State?

253 Strekopytov S & Larsen O:
Oxidation of Hydrogen Sulfide by Fe(III) in Phyllosilicates

254 Taunton A, Wood S & Gunter M:
The Thermodynamics of Asbestos Mineral Dissolution and Conversion in the Human Lung

255 Uchida M, Shibata Y, Harada N, Ahagon N & Yoneda M:
Compound-specific Radiocarbon Ages of Biomarkers in the Western North Pacific Marginal Sea Sediments

256 Waldner P, Schneebeli M, Schwikowski M, Stähli M & Flühler H:
Nitrate Release from a Melting Snowpack

257 Wersin P, Johnson CA & Furrer G:
Antimony Contamination in Soil and Ground Water by Shooting Range Activities

258 Yabuta H, Mita H & Shimoyama A:
Aliphatic Hydrocarbons in the K/T Boundary Sediments at Kawaruppu, Hokkaido, Japan

Symposium G05 Special Poster Session: 22pm

Igneous Geochemistry

Convenors: Alfons Berger, Alan Thompson & Helen Williams

037 **Alpaslan M, Otlu N, Ekici T, Temel A & Boztug D:**
Some Textural and Geochemical Evidences on Mixing and Mingling in the Genesis of Karamagara Volcanics, Saraykent-Yozgat, Central Anatolia, Turkey

038 **Arnaud N, Agranier A, Chazot G, Pin C, Poidevin J & Blichert Toft J:**
High-K Magmas from the French Massif Central: Crust-mantle Interaction during the Hercynian Orogeny

039 **Aslan Z, Kaygusuz A, Sen C & Arslan M:**
Petrographical and Geochemical Features of the Mafic Microgranuler Enclaves in the Upper Cretaceous Aged Torul (Gümüshane) and Sarihan (Bayburt) Granitoids, NE Turkey

040 **Dacheng J, Hu R & Lu Y:**
The Mantle Source of the Agpaitic Lamprophyre in Northeastern Hunan Province, China

041 **Day S & Wood S:**
The New Wave in Geochemistry Publishing - Electronic Journals

042 **Dobnikar M, Fioretti AM, Bellieni G & Dolenec T:**
Amphibole Mineral Chemistry of Rocks of Karavanke Granitic Massif

043 **Dobosi G, Kempton PD, Downes H & Embey-Isztin A:**
Formation of Lower Continental Crust by Tectonic Emplacement of Oceanic Crust. An Example: The Pannonian Basin

044 **Doe BR:**
The Ce/Yb vs. Ba/Ce Plot in Volcanic and Tectonic Classification

045 **Dolgopolova A, Dulski P, Seltmann R & Weiss D:**
REE Characteristics of Technogenic Products of the Orlovka Ta Granite

046 **Doucet S, Scoates JS, Weis D & Giret A:**
High-MgO Basalts and Picrites from the Kerguelen Archipelago: Inferences for the Composition of the Kerguelen Mantle Plume

047 **Ferrara G, Forte C, Petrini R, Slejko F & Tonarini S:**
Melt/biotite $^{11}B/^{10}B$ Isotopic Fractionation and the Boron Local Environment in the Structure of Volcanic Glasses

048 **Ghorbani MR, Rostami G & Ghaderi M:**
A Lamprophyric Dyke from Milakuh, SW Damghan, Iran

049 **Hegazy H:**
Petrogenesis and Solidification History of Late Pan-African Dykes Assemblage, Northern Eastern Desert, Egypt

050 **Hesse M & Grove T:**
Absarokites from the Western Mexican Volcanic Zone: Constraints on Mantle Wedge Conditions

051 **Ilbeyli N & Pearce JA:**
Geochemical Characteristics of Cretaceous Collision-related Plutonism in Turkey

052 **Kamenov B, von Quadt A & Peytcheva I:**
New Insight into Petrology, Geochemistry and Dating of the Vejen Pluton

053 **Kani T, Takahashi E & Nohda S:**
Isotope Geochemistry of Submarine Lavas from South Arch Volcanic Field, Hawaii

054 **Kaygusuz A, Aslan A & Sen C:**
Petrography and Petrology of Torul and Sarihan Plutons, the Eastern Pontides, Turkey

055 **Kwon S & Sagong H:**
Regional Nd-Sr-Pb Isotopic Differences of the Mesozoic Granitoids in South Korea: Implications for the Basement Structure

056 **Lassen B, Hattori K, Percival J & Waight T:**
Unusually Depleted Hf Isotopic Signatures in Late Archean Carbonatite: A Result of Carbonate Metasomatism

057 **Liu Y, Ye L, Li C & Liu J:**
Preliminary Study on Geochemistry of Nanwenhe Later-Silurian Granite, SE Yunnan, China

058 **Lustrino M, Melluso L, Morra V, Vannucci R & Zanetti A:**
Ultramafic Xenoliths from Nosy Be Island (N Madagascar)

059 **Ni P & Rankin AH:**
A Possible Magmatic Origin of Bayan Obo Fe-Nb-REE Deposit, China

060 **Obst K & Rehfeldt T:**
Mineral Chemistry of Mafic and Ultramafic Xenoliths from Jurassic Basalts in Southern Sweden

061 **Pertsev A, Batanova V, Ariskin A & Mochalov A:**
Plutonic Evolution of an Island-arc Picritic Magma: Galmoenan Massif, Koryak Highland, Far East Russia

062 **Pinto Ferreira V, Valley J, Sial A & Spicuzza M:**
Oxygen Isotopes and Granitoid Series Characterization in the Borborema Province, Northeastern Brazil

063 **Rao A:**
Rheology of the Proterozoic Massif Anorthosites

064 **Siebel W, Chen F & Satir M:**
Geochemistry and Zircon Ages of Variscan S-type Granites from the Western Bohemian Massif

065 **Souvent P, Fioretti A, Bellieni G & Dolenec T:**
Petrology of Tourmaline-rich Pegmatites from the Ravne District (Slovenia)

066 **Tavares Ferreira PL, Murton B & Munha J:**
Small Scale Geochemical Variability in the Basalts from the Lucky Strike Hydrothermal Field

067 **Varol E, Temel A & Yurur T:**
Petrology and Geochemistry of Çamlidere Volcanic Rocks, Central Anatolia, Turkey: Preliminary Results

068 **Vrabec M & Dolenec T:**
Some Genetic Characteristics of Pegmatite Veins from the Pohorje Mountains (Slovenia)

069 **Yilmaz H, Alpaslan M & Temel A:**
Petrographic and Geochemical Evidences Indicating the Crustal Assimilation in the Within-plate Basalts: Karasar Basalt (Divrisi-Sivas, Central Anatolia, Turkey

070 **Zhang H, Xu Z & Liu C:**
Geochemistry of Proterozoic Basic-ultrabasic Volcanics from the West of Yangtze Plate: Implications for the Crust-mantle Evolution

071 **Zhang Y & Xu Z:**
Cooling Rates and Temperature in Eruption Columns Inferred from the Hydrous Species Geospeedometer

072 **Zhi X, Reisberg L, Wagner C, Peng Z & Xu X:**
Longevity and Multistage Evolution of Subcontinental Lithospheric Mantle beneath Eastern China: Evidence from Re-Os Isotope Geochemistry of Mantle Peridotite Xenoliths from Jiangsu and Anhui Provinces, China

Symposium G06 Special Poster Session: 22pm

Metamorphic Geochemistry and Crustal Fluids

Convenors: Lucas Baumgartner & Stoeff Heinrich

163 **Boschi C, Frueh-Green GL & Kelley DS:**
Serpentinization and Carbonate Precipitation at the Lost City Vent Field (30°N, MAR)

164 **Brouwer FM & Sorensen SS:**
Whole-rock and Mineral Trace Element Distributions in Alpine and Franciscan Eclogites

165 **Fukuyama M, Nishiyama T & Urata K:**
Reaction Zones and Composite Veins Around the Metamorphosed Basic Dykes in the Hirao Limestone, Fukuoka, Japan

166 **Ge C & Ni P:**
Fluid Geochemistry of an Ancient Analog to the Modern Seafloor Polymetallic Massive Sulfides– Yongping Super-large Copper Deposit, Jiangxi Province, China

167 **Giorgis D, Rumble D & Cosca M:**
Negative $\delta^{18}O$ Signatures in Morphologically Complex Zircons: Evidence for Proterozoic Cold-climate Water/rock Interaction in the Qinglongshan UHP Meta-granite (Sulu Terrain, China)

168 **Handler M, Sorensen S & Vicenzi E:**
Microanalytical Characterisation of Hydrothermal Fluid Interaction with Feldspar Phenocrysts, Alta Andesite, Comstock Lode Region, Nevada

169 **Katzir Y, Bröcker M, Valley JW & Spicuzza MJ:**
Oxygen Isotope Variations in Cycladic Eclogites: Assessing the Significance of Zircon Ages

170 **Klemm L, Graeser S, Mullis J, Pettke T & Heinrich C:**
Metamorphic Pb-Ag Mineralization at Albrunpass (Central Alps)

171 **Koschinsky A, Halbach P, Sander S, Michaelis W & Seifert R:**
Hydrothermal Fluids in the North Fiji Basin and Lesser Antilles

172 **Kovalev K & Naumov E:**
Gold and Silver in Massive Sulfide Deposits in Asian Areas of Russia

173 **Petrov V:**
Metalliferous Black Shales in Precambrian of Siberian Platform

174 **Prakashnarasimha K & Srikantappa C:**
Geochemical Characteristics Across the Archaean Dharwar Craton and Late Archaean Nilgiri Granulites, South India

175 **Putnis C & Mezger K:**
Isotopic Tracing of a Mineral Replacement Reaction: The KCl-KBr-H_2O System as a Model Example

176 **Roselle GT, Bowman JR & Huang S:**
Modeling the Effects of Reaction Kinetics, Diffusion-dispersion, and Fluid Infiltration on Mixed-volatile (CO_2-H_2O) Metamorphic Reactions

177 **Shao S & Zhang Q:**
The Geochemistry of the Early Proterozoic Dahongshan Group, in Yunnan Province, West-south China

178 **Skublov S:**
REE Pattern of Amphibole Replacing Garnet

179 **Sohrin Y, Kishida K, Okamura K & Ishibashi J:**
Tungsten and Molybdenum in Hydrothermal Fluids of the Izu-Bonin Arc and the Okinawa Trough

180 **Steppan N, Kalt A & Altherr R:**
Partitioning of Li, Be and B between Minerals in Metapelitic Rocks – Case Studies of Ikaria Island (Greece), Künisches Gebirge (Germany), Campo Tencia (Swiss Alps)

Symposium G10 Special Poster Session: 22pm

Computational Geochemistry

Convenor: Thomas Driesner

275 **Dunkl I & Székely B:**
Component Analysis with Visualization of Fitting ? PopShare, a Windows Program for Data Analysis

276 **Li Z, Tu G, Li C, Hu R, Ni S & Wang J:**
Mineralization Processes Modeling of Shangmanggang Gold Deposit, Yunnan, China

277 **Palyanova G, Pavlova G, Borisenko A & Borovikov A:**
Au-Ag Mineralization Formation at Dukat Deposit (NE Russia)

278 **Sedano LA, Martin PL, Barcala JM, Campos R, Villar MV & Rivas P:**
Development of Advanced Tools for Modelling Wind's Tests

279 **Szocs T:**
1 D Geochemical Modelling using NETPATH and PHREEQCI (South-West Hungary)

280 **Velo A, Fernandez-Bastero S, Garcia T, Vilas F, Santos A & Gago-Duport L:**
Numerical Modelling of Competitive Nucleation Pathways

Symposium S03 Special Poster Session: 23pm

Early Differentiation of Earth and Other Planets

Convenors: Mini Wadhwa, Monica Grady, Kevin Zahnle & Kevin Righter

140 **Bizzarro M, Baker JA & Haack H:**
Hf-Nd Isotope Geochemistry of Chondrites

141 **Buhre S, Jacob D & Foley S:**
Experimental Evidence for Shallow Recycling of Ocean Crust in the Archean Earth

142 **Kadik A, Pineau F, Litvin Y & Javoy M:**
The Dissolution of Hydrogen and Carbon in the Reduced Silicate Melt

143 **Osmaston MF:**
Lunar Constraints on Core Formation: A New Model with Many Implications

144 **Sharkov E & Bogatikov O:**
Early Differentiation of the Earth and the Moon: Evidence from Development of Tectonic-magmatic Processes on These Planetary Bodies

Symposium S04 Special Poster Session: 23am

Impact Hazards from Comets and Asteroids

Convenor: Philippe Claeys

146 **Agrinier P, Alexander D, Urs S & Isabelle M:**
Short Lifetime for CO_2 in the Atmosphere after a Meteorite Impact on Sediments

147 **Rodriguez-Tovar FJ, Martinez-Ruiz F & Bernasconi SM:**
Carbon Isotope Composition of Bioturbation Infills as Indication of the Macrobenthic-colonization Timing Across the Cretaceous-Tertiary Boundary (Agost Section, SE Spain)

148 **Shukla P, Shukla A, Montanari A & Bhandari N:**
Silver, Osmium and Iridium Profiles in the Massignano Eocene-Oligocene Section

Symposium S08 Special Poster Session: 22pm

Komatiites

Convenors: Nicholas Arndt, Janne Blichert-Toft & Tim Grove

015 **Beresford S, Lahaye Y, Cas R, Jane M, Lambert D & Stone B:**
Re-evaluation of the Genesis of Kambalda-style Komatiite-hosted Ni-Cu-(PGE) ore Deposits

016 **Dowling SE, Hill R, Barnes S & Thordarson T:**
Decoupled Hybrid Boundary Layers at the Base of Komatiite Lava Pathways: Omnipresent Components of Actively Eroding Lava Pathways

017 **Hill R, Barnes S, Dowling S, Perring C & Thordarson T:**
Emplacement of Komatiite Flow Fields: An Inflationary Model Based on Field Evidence and Modern Mafic Analogues

018 **Lesher CM, Houle MG, Levesque M, Gibson HL, Williams DA & Kerr RC:**
Geochemical, Mineralogical, Textural, and Fluid Dynamic Constraints on Endogenous Growth in Differentiated Komatiite Flows

019 **Thompson PME, Kempton PD, White RV, Saunders AD, Kerr AC & Tarney J:**
Hf-Nd Isotope Systematics of the Gorgona Komatiites, and their Relationship with the Caribbean Plateau

020 **Trofimovs J, Cas R & Davis B:**
Intrusive Komatiites: Field Evidence from the Kalgoorlie Terrane, Yilgarn Craton, Western Australia

Symposium S10 Special Poster Session: 22am

Geodynamics and Deep Earth Reservoirs

Convenors: John Lassiter, Peter van Keken & John Brodholt

112 **Agranier A, Blichert-Toft J, Schilling J, Nelson B & Albarède F:**
Hf-Pb Isotope Systematics in MORB along the Reykjanes Ridge (50-64°N)

113 **Andres M, Blichert-Toft J & Schilling J:**
Evolution of the Depleted Asthenosphere beneath the Atlantic: Evidence from εHf in N-MORB from 80°N to 55°S

114 **Aulbach S, Griffin WL, O'Reilly SY & Kivi K:**
Sulfides from the Lower Mantle?

115 **Barry T, Kempton P & Saunders A:**
Hf Isotopes from the Ninetyeast Ridge

116 **Batanova V, Bruegmann G, Bazylev B & Sobolev A:**
PGE Abundances and Os Isotopes of the Depleted Mantle: Constraints from Ophiolite Peridotites

117 **Belyatsky B, Sushchevskaya N & Beltenev V:**
Enriched Tholeiitic Basalts of the Equatorial Atlantic: A Possible Role of the African Subcontinental Mantle

118 **Büchl A, Münker C, Mezger K & Hofmann AW:**
High-precision Nb/Ta and Zr/Hf Ratios in Global MORB

119 **Choi SH, Kwon S, Sagong H & Cheong C:**
Sr, Nd and Pb Isotopic Investigations of Late Cenozoic Alkali Basalts and their Ultramafic Xenoliths in South Korea: A Mixing Zone in the Source Mantle beneath East Asia

120 **Coussaert N, André L, Mercier JC & Demaiffe D:**
Geochemical Evidence for Metasomatic Clinopyroxenes in Lesotho Peridotites

121 **Escrig S, Doucelance R & Moreira M:**
Os, Sr, Nd, Pb Isotopic Systematics in Basalts and Carbonatites from Fogo Island, Cape Verde

122 **Ferrachat S & Kellogg LH:**
Simulating Partial Melting and Chemical Fractionation in Mantle Dynamics Models

123 **Galer SJ:**
New Perspectives on the Crust-mantle Invariant Ratio Mass Balance

124 **Gasperini D, Macera P, Maffei K, Morten L & Rizzo G:**
"Plum-cake" Subcontinental Mantle beneath SE Alps as Resulting from the Geochemistry of Mantle Xenoliths

125 **Ionov D & Weis D:**
Hf-Nd-Sr Isotope Relationships in Spinel and Garnet Facies Peridotite Xenoliths: Inferences for the Age and Evolution of the Lithospheric Mantle

126 **Jeffcoate AB, Elliott T & Ionov DA:**
Li Isotopes Fractionation in the Mantle

127 **Kamenetsky M, Sobolev A, Sobolev N & Pokhilenko N:**
Kimberlite Parental Melts: New Insights from Inclusions in Olivine

128 **Kempton PD, Thompson P & Saunders A:**
Did the Ancestral Hawaii Plume Interact with a Mid-ocean Ridge? The Isotopic Evidence

129 **Malfère J, Fontignie D, Blichert-Toft J & Schilling J:**
Hf and Pb Isotope Systematics in Basalts from the Iceland Neovolcanic Zones

130 **Morgan WJ & Phipps Morgan J:**
Rare Gases Suggest That the MORB Source was Made by OIB/EMORB Melt Extraction from the Mantle

131 **Nomade S, Feraud G, Renne P & Chen Y:**
New $^{40}Ar/^{39}Ar$ Ages for Central Atlantic Magmatic Province in French Guyana: A Younger Volcanism?

132 **Parkinson I, Schaefer B, ODP Leg 192 Shipboard Scientists & Arculus R:**
A Lower Mantle Origin for the World's Biggest LIP? a High Precision Os Isotope Isochron from Ontong Java Plateau Basalts Drilled on ODP Leg 192

133 **Pearson N, Griffin W, O'Reilly S & Delpech G:**
Magnesium Isotopic Composition of the Lithospheric Mantle: An In-situ Study of Mantle-derived Olivine

134 **Schaefer BF, Parkinson IJ, Hole MJ, Kerr AC, Scarrow JH & Rogers NW:**
Re-Os Isotope Systematics of the British Tertiary Volcanic Province; Multiple Mantle Sources in the Proto-Iceland Plume

135 **Shimoda G, Nohda S & Morishita Y:**
Role of Adakitic Magma in Producing EMI and EMII Reservoirs

136 **Simon NSC, Carlson RW, Pearson DG & Davies GR:**
The Lu-Hf Isotope Composition of Cratonic Lithosphere: Disequilibrium between Garnet and Clinopyroxene in Kimberlite Xenoliths

137 **van Keken P & Ballentine C:**
Helium Isotopic Evidence for Mantle Reservoirs: A Matter of Melting?

138 **Zartman RE & Richardson SH:**
Evidence from Kimberlitic Zircon for a Decreasing Mantle Th/U

139 **Zhou X, Wilde S, Sun M & Nimchin A:**
Local Response to Global Mesozoic Overturn: Inferred from SHRIMP Zircon Dating of Lower Crust Xenoliths, North China Craton

Symposium S16 Special Poster Session: 22pm

Magmatic Differentiation – Rates and Processes

Convenors: Charlie Bacon & Steve Blake

022 **Barmina GS & Ariskin AA:**
Simulating Primary Phase Equilibria for the Parental Magma and Early Cumulates of the Kiglapait Intrusion

023 **Costa F, Scaillet B & Pichavant M:**
Experimental Simulation of Interactions between Evolved Hydrous Liquids and Gabbroic Minerals at 200-400 MPa

024 **Gagnevin D, Daly JS & Poli G:**
Microchemical Investigation of K-feldspar Megacrysts: Clues to Magma Dynamics in a Plutonic Environment

025 **Hellevang B & Pedersen RB:**
Petrogenesis of Plagioclase Phyric Basalt from the Arctic Ridges

026 **Heumann A, Elliott T & Davies G:**
Testing the Internally Consistent Age Information of U-series Disequilibria in Rhyolites: Inyo Domes, CA

027 **Hora JM, Davidson J & Hobden B:**
The Role of Mixing in the Evolution of Andesites at Ngauruhoe Volcano, New Zealand: Constraints from Analyses of Crystal Growth Zones

028 **Knesel K:**
Gradients in Silicic Bodies Caused by Mixing Rather Than Chamber Differentiation

029 **Lackey JS, Hinke H & Valley J:**
Tracking Contamination in Felsic Magma Chambers with $\delta^{18}O$ of Magmatic Garnet and Zircon

030 **Marrocchino E, Coltorti M, Visonà D & Thirwall MF:**
Petrology of Pedrazzo Magmatic Complex (Trento, Italy)

031 **Renna MR, Tiepolo M, Tribuzio R & Vannucci R:**
Trace Element Behaviour during Magma Mingling: The Case Study of the Gabbro-granite Association of Ota (Western Corsica)

032 **Snyder DC, Widom E & Pietruszka AJ:**
Time Scales of Formation of Zoned Magma Chambers: U-series Disequilibria in the Fogo Trachytes

033 **Togashi S, Miyaji N, Yasui M, Ukawa M & Yoshida T:**
Geochemical Evolution of Magmas in Fuji Volcano, Japan

034 **Wagner C, Deloule E, Fialin M & Mokhtari A:**
Inferences About Magma Reservoir Dynamics from Zoned Clinopyroxenes of an Alkaline Suite in North Morocco

035 **Wilson CJN, Charlier BLA & Blake S:**
Chemical Versus Physical Origins of Rhyolite in a Magma Factory beneath Taupo Volcano, New Zealand

036 **Wolff JA, Ramos FC & Tollstrup DL:**
Crustal Transport of Flood Basalt Magma: The Record of Crystal Isotopic Zoning

Symposium S17 Special Poster Session: 23am

Magma Chambers and Ore-forming Processes at the Magmatic - Hydrothermal Interface

Convenors: Jim Webster & Werner Halter

001 **Bastrakov E, Kamenetsky V, Skirrow R & Mernagh T:**
Chemistry of High-temperature Fluids in Fe-oxide Cu-Au Systems

002 **Davidson P, Kamenetsky V, Hollings P, Cooke D & Frikken P:**
Magmatic Fluids Coexisting with Felsic Melts: An Example from Rio Blanco Rhyolite, Chile

003 **Deng H, Campbell AJ & Humayun M:**
Platinum Group Elements in Sulfides from Yangliuping Cu-Ni-Pt-Pd Deposit in Sichuan, China

004 **Freiberger R & Hecht L:**
Fluid Evolution and Mineralogy during Multi-stage Hydrothermal Alteration of Quartz-depleted Granites (Episyenites)

005 **Lüders V, Niedermann S & Halbach P:**
Helium Isotopic Composition of Fluid Inclusions Hosted in Massive Sulfides from Modern Hydrothermal Systems

006 **Peretyazhko I, Zagorsky V, Smirnov S, Mikhailov M, Prokofiev V & Madyukov I:**
The Model of Pocket Formation in Boron-rich Granitic Pegmatites

007 **Pokrovsky B, Sluzhenikin S, Kudriavtsev D, Krivolutskaya N & Vrublevsky V:**
Stable Isotope Geochemistry of the Siberian Traps

008 **Ponomarchuk V & Sotnikov V:**
$^{40}Ar/^{39}Ar$ Dating of the Stages of Endogenic Activity at the Paleozoic Cu-Mo-porphyry Deposits in Southern Siberia

009 **Qin X, Du Y, Zhou W & Zhang H:**
Petrologic and Mineralogical Study of Enclaves in Plutons in the Typical Mining Districts of Tongling, Anhui Province and its Bearing on the Process of Magmatism - Metallogeny

010 **Reyf F:**
Selective Mobilization of Metals from Granitic Melt into Exsolved Fluid and their Separate Deposition during Formation of the F-Be Deposit

011 **Schardt C, Yang DJ & Large PR:**
Numerical Modelling of Heat and Fluid Flow in Submarine Terrains

012 **Sotnikov V, Ponomarchuk V, Kiseleva V & Bersina A:**
$(^{8}Sr/^{86}Sr)0$ Isotope and Geochemical (F, Cl, REE) Heterogeneity in Apatite and Titanite Mineral Populations from Magmatites of Shakhtama Cu-Mo Porphyry Deposit, Eastern Transbaikalia, Russia

013 **Wu G, Deng J, Wen C, Zhao C & Du Y:**
Fluid Inclusion Study of Ore-forming Fluids and its Bearing on the Hydrothermal Minerization of the Datuanshan Copper Deposit of Skarn Type in the Tongling Area, Anhui Province

014 **Zhilong H, Chengming Z & Longfang L:**
The law of Gold Activities in Alkaline Basaltic Magma: Evidence from High Temperature and Ultrahigh Pressure Experiments

Symposium S18 Special Poster Session: 22pm

Properties of Geological Fluids and Solutes - From Experiment to Simulation

Convenors: Terry Seward & Craig Manning

150 **Fouquet S, Tagirov B, Schott J, Harrichoury J & Escalier J:**
Experimental Determination of the Stability of Aluminum-borate Complexes in Hydrothermal Solutions

151 **Masuda T, Nakashima S, Famin V & Kaneda H:**
Possible “Soft” Natures of S-containing Fluids

152 **Naumov E, Borovikov A & Borisenko A:**
Ore-Forming Fluids of Au-Hg Deposits

153 **Seward TM, Henderson CMB & Charnock JM:**
An EXAFS Study of Pd^{2+} Solvation in Aqueous Media and Chloride Complexing to 340°C at Saturated Vapour Pressure

154 **Wood R, Sharygin A, Balashov V, Grafton B & Xiao C:**
Determination of Multiple Ion Association and Ion Mobilities in Aqueous Li_2SO_4 and K_2SO_4 from Conductance Measurement at Temperatures from 523 K to 673 K

Symposium S19 Special Poster Session: 23am

Innovative Interpretations of Experimental and Field Geochemical Processes Using Reactive Transport Modeling

Convenors: C. Steefel, C. Ayora & P. Van Cappellen

155 **Arcos D, Bruno J & Karnland O:**
Geochemical Model of the Granite-Bentonite-Groundwater at Äspö (LOT Experiment)

156 **Corbella M & Ayora C:**
Fluid Mixing and Deep Dissolution of Carbonates

157 **Geiger S, Driesner T, Matthai S & Heinrich C:**
Combining Control Volume Finite Element Methods with Realistic Fluid Properties for High-resolution Simulations of Multiphase Flow in Magmatic-hydrothermal Systems

158 **Giambalvo ER, Steefel CI, Fisher AT, Rosenberg ND & Wheat CG:**
Effect of Fluid-Sediment Reaction on Seafloor Hydrothermal Fluxes of Solutes

159 **Jordana S, Guimera J, Duro L, Domenec JA & Subirana JM:**
Modelling an in situ Test of PCE Oxidation using Permanganate

160 **Jourabchi P, Van Cappellen P & Regnier P:**
Application of Reactive Transport Modelling to the Interpretation of pH Changes in Sediments

161 **Marcuello A, Gómez P, Saaltink M, Ayora C & Carrera J:**
Multi-component Reactive Transport Modelling at the Ratones Uranium Mine (Spain)

162 **Rumynin V & Hoehn E:**
Adsorption of ^{90}Sr and ^{137}Cs Under Elevated Temperature and Pressure Conditions

Symposium S21 Special Poster Session: 22pm

Erosion Factory I

Convenors: Nathalie Vigier & Ken Farley

284 **Batt GE & Hurford A:**
INV (U-Th)/He Dating and Thermotectonic Re-Evaluation of Red Sea Rift Development in Yemen

285 **Dequincey O, Chabaux F, Leprun J & Clauer N:**
Distribution of ^{238}U-serie Disequilibria in a Laterite. Geochemical Implications

286 **Fabel D, Stroeven A & Harbor J:**
Landscape Preservation Under Ice Sheets

287 **Han G & Liu C:**
Characterization of River Waters Draining Carbonate Terrain: A Study of the Rivers in Karst-dominated Terrains, Guizhou Province, China

288 **Kirstein L, Jamieson S & Sinclair H:**
Possible Tectonic Control on the Observed Asymmetry of Drainage Networks Across the Ladakh Batholith

289 **Kober F, Schlunegger F, Ivy-Ochs S & Wieler R:**
The Dependency of Cosmognenic Nuclides to Climate and Surface Uplift in Transient Landscapes

290 **Pacheco FAL & Van der Weijden CH:**
Geochemistry of Groundwater from the Morais Massif (NE.Portugal)

291 **Perg L, von Blanckenburg F & Kubik P:**
Cosmogenic Nuclide Budget in a Glaciated Mountain Range (W. Alps)

292 **Teng H:**
Controls of Undersaturation on Etch Pit Formation

293 **Xu Z, Liu C & Zhang H:**
Geochemistry of Dissolved and Suspended Loads of the Xijiang River, China: Weathering Processes and Erosion Rates

Symposium S22 Special Poster Session: 22am

Erosion Factory II

Convenors: Jerome Gaillardet & Bernhard Peucker-Ehrenbrink

294 **Durand S & Chabaux F:**
Groundwater Influences on the Chemical Budget of River Water: Clues from U Isotopic Ratios

295 **Foster DA, Staubwasser M & Henderson G:**
Ross Sea ^{226}Ra and Ba Profiles Measured by MC-ICP-MS

296 **Harouiya N & Oelkers E:**
An Experimental Study of the Affect of Aqueous Fluoride on Quartz, Kaolinite, and Alkali Feldspar Dissolution Rates

297 **Hattori Y, Suzuki K, Honda M & Shimizu H:**
Re-Os Isotopic Systematics of the Taklimakan Desert Sands, Moraines and River Sediments Around the Taklimakan Desert, and of Tibetan Soils

298 **Jeong GY:**
Biotite Oxidation in the Weathering Profiles of Granitic Rocks: Chemistry, Mineralogy, and Implications for Elemental Behavior

299 **Lee K, Ryu J & Chang H:**
Isotopic and Elemental Geochemistry of the Han River, Korea: Implications for Water-rock Interaction

300 **Li Y, Yang J, Zhang C, Deng B & Phelps T:**
Dissolution of Iron-rich Clay and Sulfur Sequestration by a Sulfate-reducing Bacterium

301 **Liebetrau V, Eisenhauer A, Frei R, Bock B, Kronz A & Hansen BT:**
Pb- and Nd-Isotope Records of Baltic Mn/Fe-Precipitates: Evidence for Anthropogenic Pollution and Temporal Variation of Circum Baltic Weathering during the Little Ice Age

302 **Liu C & Han G:**
Rare Earth Elements in River Waters Draining Karst Terrain, Guizhou, SW China

303 **Ma Y, Huo R & Liu C:**
Speciation and Fractionation of Rare Earth Elements in a Lateritic Profile from Southern China: Identification of the Carriers of Ce Anomalies

304 **Montagnac P, Köhler S, Dufaud F & Oelkers E:**
An Experimental Study of the Dissolution Stoichiometry and Rates of a Natural Monazite as a Function of Temperature from 5 to 50°C and pH from 1 to 12.3

305 **Negrel P & Petelet-Giraud E:**
Rare Earth Elements and Neodymium Isotopic Systematic in the Groundwaters of French Guiana

306 **Pierret M, Chabaux F, Clauer N & Causse C:**
Isotopic Variations in the Sediments of the Caspian Sea: A Record for the Quaternary Continental Weathering?

307 **Probst A, Godderis Y, Francois L, Labat D, Schott J & Viville D:**
Modelling Chemical Weathering at River Catchment Scale: Design and Calibration of the WiTCh Model

308 **Shibata S & Tanaka T:**
Experimental Study for the Dissolution of Rare Earth Elements in Water-rock Interaction

Symposium S25 Special Poster Session: 22am

Phanerozoic History of Greenhouse Gases

Convenors: Jerry Dickens, Mark Pagani & David Beerling

211 **Davis S, Fourel F, Stott A, Torn M, Hillaire-Marcel C & Bilodeau G:**
Monitoring Sources and Fluxes of CO_2 with High Precision Atmospheric Stable Isotopic Measurements

212 **Schovsbo NH:**
Carbon Isotope Stratigraphy of Middle Cambrian to Lower Silurian Shales from Baltoscandia: Implications for Presumed Climatic Stability

213 **Smith F & White J:**
The Development of Neogene Grasslands in Relation to Climate and Atmospheric CO_2: The Carbon Isotope Ratios of Fossil Phytoliths

Symposium S26 Special Poster Session: 23am

Mediterranean Sapropels and their Relationship to Global Climate Variations

Convenors: Gert J. De Lange, Hans-J. Brumsack, Philip A. Meyers & Judith A. McKenzie

201 **Arnaboldi M & Meyers PA:**
Geochemical Comparison of Late Pliocene Sapropels from the Vrica Land Section and ODP Sites 964 and 974

202 **Bar-Matthews M, Ayalon A, Gilmour M, Matthews A & Hawkesworth C:**
Implications for Post-sapropel Aridity on Land in the Eastern Mediterranean Region

203 **De Lange GJ:**
Palaeoceanographic and Diagenetic Aspects of Sapropel Formation in the Eastern Mediterranean

204 **Larrasoaña JC, Roberts AP, Stoner JS & Richter C:**
Gauging Bottom-water Ventilation in the Eastern Mediterranean by Combining Geochemical and Magnetic Data from Sapropel-bearing Sediments

205 **Meyers P & Arnaboldi M:**
High-resolution Comparison of Same-age Interrupted Sapropel Sequences from Four ODP Sites

66

Symposium S27 Special Poster Session: 23am

Sources and Sinks of Aerosols and Dust

Convenors: Bruno Hamelin, Sidney Hemming & Karen Kohfeld

222 **Fang J, Kawamura K, Ishimura Y & Matsumoto K:**
Carbon Isotopic Composition of Fatty Acids in the Marine Aerosols from the Western North Pacific: Implication for the Source and Atmospheric Transport

223 **Gleason J, Johnson T, Rea D, Moore T, Owen R & Blum J:**
Calibrating Eolian Dust Accumulation Rates in the Central North Pacific Pelagic Clay Province

224 **Hamamoto R & Yanagi T:**
Seasonal Variation of Sr Isotope Ratios of the Aeolian Dust in Rainwater

225 **Hamelin B, Touchard Y, Angeletti B & Rochette P:**
Tracking the Ethiopian Flood Basalt Fallout from Pb Isotopes in Indian Ocean Sediments

226 **Hemming SR:**
The State of the Northern Hemisphere Winds during Heinrich Events

227 **Kanayama S, Yabuki S, Yanagisawa F & Abe O:**
Sr-isotope Composition as a Tracer for Source Identification of Long-range Transported Asian Dust

228 **Pichat S & Abouchami W:**
Major Change in Pb Inputs to the Eastern Equatorial Pacific Since the Last Deglaciation

229 **Yabuki S, Ye W, Kanayama S, Honda M & Chang Q:**
Geochemistry of Loess Sections from High Altitude Region, Yili Basin, NW China

Symposium S28 Special Poster Session: 22am

Ice Age Terminations and Other Rapid Climate Changes

Convenors: Gideon Henderson, Claudine Stirling & Joerg Schaefer

214 **Bailey T & Rosenthal Y:**
Change in Seawater Chemistry Across the Pliensbachian-Toarcian Boundary: Pre-conditioning for an Oceanic Anoxic Event ?

215 **Beets CJ, Beets DJ & Cleveringa P:**
Rapid Climate Fluctuations during the Penultimate Deglaciation

216 **Kelly M, von Blanckenburg F, Kubik P & Schluechter C:**
Surface Exposure Ages of High Elevation Glacial Erosion Forms: An Attempt to Date Deglaciation of the Last Glacial Maximum Ice Cap in the Western Swiss Alps

217 **Muscheler R, Beer J, Laj C, Kissel C, Mazaud A & Kubik PW:**
^{10}Be and ^{14}C during the Last Deglaciation

218 **Rinterknecht V, Raisbeck G, Yiou F, Clark P, Bitinas A & Marks L:**
Preliminary ^{10}Be Chronology for the Last Deglaciation of the Southern Scandinavian Ice Sheet

219 **Tütken T, Kuznetsova TV, Vennemann TW & Pfretzschner H:**
Late Pleistocene-holocene Climate of Siberia Deduced from Oxygen Isotope Compositions of Mammoth and Horse Bone Phosphate

Symposium S31 Special Poster Session: 23am

Environmental Tracers for Groundwater Dating

Convenors: Gisela Winckler & Bernhard Lehmann

281 **Corcho Alvarado JA, Purtschert R, Hofer M, Aeschbach-Hertig W, Kipfer R & Hinsby K:**
Comparison of Residence Time Indicators (^{3}H/^{3}He, SF_6, CFC-12 and ^{85}Kr) in Shallow Groundwater: A Case Study in the Odense Aquifer, Denmark

282 **Deschamps P, Doucelance R, Ghaleb B, Hillaire-Marcel C & Michelot J:**
Evidence for Micro-scale U-mobility along Sedimentary Discontinuities in a Deep Limestone Formation as Inferred by ^{234}U/^{238}U Disequilibria

283 **Devivier K, Savoye S & Devol-Brown I:**
Has Iodide a Conservative Behaviour Towards Claystones? the Tournemire Argillite Case

Symposium S34 Special Poster Session: 23am

High-temperature Organic Geochemistry and the Thermal Alteration of Petroleum

Convenors: Jeff Seewald, Steve Larter & Everett Shock

314 **Cody G, Boctor N, Brandes J, Filley T, Hazen R & Yoder Jr H:**
INV Abiotic Carbon Fixation Promoted by Transition Metal Sulfides Under Hydrothermal Conditions

315 **Lavric JV & Spangenberg JE:**
Aromatic Hydrothermal Petroleum from a Mercury Deposit (Idrija, Slovenia)

316 **Leif R:**
INV Experimental Investigation into the Role of Water during the Thermal Alteration of Aliphatic Hydrocarbons

317 **Schwab V, Spangenberg JE & Hunziker J:**
Chemical and Isotopic Variations in Hydrocarbons from a Metamorphic Black Shale Sequence (100-500°C)

318 **Sugisaki R, Iida Y, Murayama M & Mimura K:**
INV Field Evidence for Abiotic Syntheses of Organic Matter in Hydrothermal Conditions

319 **Warton B, Grice K, Alexander R & Kagi RI:**
INV Subsurface Carbocation Processes Revealed by Detailed Study of the Aromatic UCM

Symposium S36 Special Poster Session: 23am

Biogenic Substances and their Effect on Trace Metal Cycling and Mineral Weathering

Convenors: Stephan Kraemer & Javiera Cervini-Silva

259 **Buerge-Weirich D & Sulzberger B:**
Formation of Cu(I) in Natural Waters

260 **Buss HL, Luttge A & Brantley SL:**
Etch Pits and Leached Layers on Iron-silicate Surfaces during Siderophore-promoted Dissolution

261 **Dahl A, Lalande M, Jackson B, Gaillard J & Stahl D:**
Correlating Bioavailability with Metal Toxicity using a Suite of Analytical Techniques

262 **Frazier S, Reichard PU, Kretzschmar R & Kraemer SM:**
Production and Isolation of Phytosiderophores

263 **Johnson K & Fein JB:**
Cd Partitioning in Metal-Mineral-Bacteria Systems: Testing the Surface Complexation Approach

264 **Kawano M & Tomita K:**
Bacterial Induced Mineralization in the Weathered Sediments

265 **Yamamoto K, Yoshida H, Yogo S, Tanaka S, Milodowski A & Metcalfe R:**
A HREE-enriched Biogenic Ferric Redox Band in Tuffaceous Sedimentary Rock

Symposium S37 Special Poster Session: 23am

Colloids: Their Nature, Reactivity, and Role in the Transport of Pollutants

Convenors: Gordon Brown & Daniel Grolimund

325 **Alonso U, Missana T, Patelli A, Rigato V & Ravagnan J:**
Size Effects on Colloids Diffusion in Granite Micro Fractures

326 **Christiansen BC & Stipp S:**
Morphological and Structural Changes during Transformation of Green Rust – Fe(II)(III)-hydroxide

327 **Dahlqvist R & Ingri J:**
Behaviour of Ca during Ultrafiltration of River Water

328 **Fukushi K, Sato T & Yanase N:**
Sorption of As(V) on Schwertmannite and its Effect on the Transformation

329 **Kristensen R & Stipp S:**
In situ Observations of Reductive Dissolution of Colloidal Lepidocrocite (γ-FeOOH) in Ascorbic Acid

330 **Lee SY & Kim SJ:**
Sorption of Naphthalene by Organo-clays

331 **Machesky M, Ridley M, Wesolowski D & Palmer D:**
The Influence of Temperature on ion Adsorption Phenomena

332 **Missana T, Garcia-Gutiarrez M, Alonso U & Quiñones J:**
Migration of Bentonite Colloids in a Granite Fracture

Symposium S38 Special Poster Session: 23am

Advances in Tracing Sources and Fates of Pollutants in Groundwaters

Convenors: Stefan Haderlein & Nadya Teutsch

333 **Dold B & Spangenberg JE:**
Study of Water-soluble Sulfates in Tailings Profiles from Porphyry Copper Deposits by Sulfur and Oxygen Isotopes

334 **Gassama N, Violette S, d'Ozouville N & Dia A:**
Multiple Origin of Water Salinization in a Coastal Aquifer, South India – Geochemical Point of View

335 **Huang W, Lerner D, Colin S, Zheng C & Oswald S:**
The Novel Application of an Oxygen Sensitive Fluorescent Indicator to Investigate Biodegradation Processes at a Plume Fringe in Porous Media

336 **Morales TA & Herbert R:**
Surface Chemistry and Acidic Dissolution of Forsterite

337 **Pfeifer H & Zobrist J:**
Arsenic in Deep Groundwater of Switzerland and their Environmental Impact and Health Risk

338 **Pombo SA, Schroth MH, Pelz O & Zeyer J:**
Tracing Microbial Activity in a Contaminated Aquifer at the Field Scale using ^{13}C-labeling of Bacterial Fatty Acids

339 **Segal-Rozenhaimer M, Shaviv A, Vengosh A, Gavrieli I, Mayer B & Shavit U:**
Sources and Processes of Nitrogen along the Lower Jordan River

340 **Temgoua E & Pfeifer H:**
Arsenic in Spring Waters and Soils in Southern Switzerland: Evidence of Complex Weathering and Re-deposition Processes

341 **Vokal B, Szaran J, Trembaczowski A & Dolenec T:**
The Isotopic Composition of Sulfates in Rivers the Ljubljanica and the Sava in Slovenia

Symposium S39 Special Poster Session: 22pm

New Geochemical Approaches to Energy, Waste and the Environment

Convenors: Reto Giere & Peter Stille

342 **Amram K & Ganor J:**
Dissolution Kinetics of Smectite Under Acidic Conditions

343 **Berner UR & Kulik DA:**
Ca-Al-hydrates: Solid Solutions?

344 **Bosbach D, Bosbach D, Rabung T & Luckscheiter B:**
Cm(III) / Eu(III) Coprecipitation With Powellite ($CaMoO_4$) during HLW Glass Corrosion

345 **Curti E & Berner UR:**
Solubility of Ra in a Radioactive Repository Environment

346 **Dolin V:**
Integral Parameter for Balance Estimation of Radionuclides Biogeochemical Current in the Soil-Plant System

347 **Ganor J, Cama J & Metz V:**
Coherency of Surface Protonation Data – Implication from Modelling of Dissolution Experiments

348 **Girard J, Fléhoc C, Gaucher E, Prinzhofer A & Chappellaz J:**
Isotopic Study of CO_2 and CH_4 Out-gassed from Argillites Investigated for Radioactive Waste Repository

349 **Hummel W:**
The Influence of Cyanide Complexation on the Speciation of Radionuclides

350 **Lavastre V, Javoy M & Jendrzejewski N:**
Stable Chlorine Isotopes as Tracers of Solute Transport in a Clay-rock Formation (Paris Basin, France)

351 **McKinley IG & Neall FB:**
Geochemical Optimisation of EBS Design for HLW

352 **Metz V, Cama J & Ganor J:**
Dependence of Smectite Dissolution Rate on Deviation from Equilibrium

353 **Molling P, Sunio E, Ching J, Parini M & Nordquist G:**
Multi-disciplinary Analysis of a Flow Barrier in the Tiwi Geothermal Field, Philippines

354 **Pabalan R, Yang L & Browning L:**
Effects of Salt Formation on the Chemical Environment of a High-Level Nuclear Waste Repository

355 **Rousset D & Clauer N:**
Acid-leaching of Clay Mineral: A New Dating Method of Fluid-flows?

356 **Saylor B, Matisoff G, Morrison P, Janda N & Zerai B:**
Geochemical Reactions during Geologic Sequestration of CO_2 in the Rose Run Formation, Ohio USA

357 **Schuessler W, Metz V, Kienzler B & Vejmelka P:**
Geochemically Based Source Term Assessment for the Asse Salt Mine – Modelling and Experimental Results

358 **Stille P, Gauthier-Lafaye F, Jensen K, Bracke G, Ewing R & Louvat D:**
REE Migration in Groundwaters Close to the Natural Fission Reactor of Bangombé (Gabon)

359 **Thoenen T, Berner U, Curti E, Hummel W & Pearson J:**
The Nagra/PSI Chemical Thermodynamic Data Base

360 **Tits J, Wieland E, Dobler J & Kunz D:**
The Uptake of Sr(II) by Calcium Silicate Hydrates: Adsorption Versus Co-precipitation

361 **Wellman D & Icenhower J:**
Direct Synthesis of Na-Autunite

362 **Yoshida H, Yamamoto K, Yogo S, Tanaka S, Milodowski A & Metcalfe R:**
A Redox Front Migration Process in Sedimentary Rock – Long-term Behavior of Nuclide Migration Relevant to Near-field Processes in Radioactive Waste Disposal

363 **Yudintsev S, Stefanovsky S, Jang Y & Ewing R:**
X-ray Study of Actinide Host-Phases Formation

364 **Zhu C, Winterle J & Love E:**
Groundwater Recharge in Late Pleistocene and Holocene at Yucca Mountain, Nevada USA

Symposium S40 Special Poster Session: 22pm

Noble Gases in Geochemistry and Cosmochemistry

Convenors: Don Porcelli, Chris Ballentine & Rainer Wieler

106 **Hanyu T, Dunai TJ, Davies GR, Nakai S, Kaneoka I & Fujii T:**
Rare Gas and Sr-Nd-Pb-Hf Isotope Systematics of Deccan Flood Basalts

107 **Kulongoski J, Hilton D & Izbicki J:**
Helium Studies in the Mojave Desert, California: Quantifying Mantle and Crustal Additions to the Regional Groundwater System

108 **Marrocchi Y, Toplis M, Pik R & Marty B:**
Solubility and Diffusion of Helium in Amorphous Diopside and Anorthite: Measurements Above and Below the Glass Transition

109 **Matsuda J & Matsumoto T:**
Helium Trapped in old Porcelain: on the Historical Variation of the He Isotopic Ratio in Air

110 **Pi T & Solé J:**
(U+Th)/Noble Gas Dating of Fluorite

111 **Yokochi R, Pik R, Marty B & Chazot G:**
Extension of the Afar Plume Material: He Isotope Constraints

Symposium S41 Special Poster Session: 22am

The Stable Isotope Geochemistry of "Heavy" Elements

Convenors: Jane Barling, Xiangkun Zhu, Tom Bullen & Chloé Marechal

101 **Cloquet C, Carignan J & Libourel G:**
High Precision Cadmium Isotopic Measurements by MC ICP-MS

102 **Lv Z, Liu C, Liu J & Zhao Z:**
Carbon and Boron Isotope Compositions of Ziyang Witherite Deposits in Southern Qinling, China

103 **Ohno T, Kouge I & Hirata T:**
Iron Isotopes in Human Blood

104 **Wiederhold JG & von Blanckenburg F:**
Iron Isotope Variations in a Complete Natural Soil Catena with Lateral Iron Mobilization and Reprecipitation

105 **Zhang H & Liu C:**
$^{87}Sr/^{86}Sr$ of Apatites from Altay No.3 Pegmatite and its Implications

Symposium S43 Special Poster Session: 22pm

The Isotope Geochemistry of Hydrogen

Convenors: John Eiler & Francois Robert

266 **Chikaraishi Y & Naraoka H:**
Hydrogen and Carbon Isotope Fractionation during Lipid Biosynthesis of Terrestrial Plants

267 **Kreutz K, Kang S, Mayewski P, Introne D, Qin D & Wake C:**
Spatial Deuterium Excess Patterns in High-elevation Asian Precipitation

Symposium S46 Special Poster Session: 22pm

Technique Developments in Cosmogenic Nuclides

Convenors: Susan Ivy-Ochs & Tim Jull

268 **Kubik PW & Ivy-Ochs S:**
INV An Update on the Köfels ^{10}Be and ^{26}Al Production Rates

269 **Niedermann S, Hermanns R & Hetzel R:**
Improving the Distinction of Cosmogenic ^{21}Ne from Other Neon Components in Quartz

270 **Shuster D, Farley KA & Vasconcelos PM:**
Cosmogenic ^{3}He in Goethite

271 **Siame L, Bellier O, Baroux E, Sébrier M, Cushing M & Braucher R:**
^{10}Be Down-concentration Profiles and High Denudation Rates: Diagnostic Criteria for Identifying Active Deformation?