

EGU General Assembly 2012
Programme Group Programme
ERE – Energy, Resources and the Environment

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Monday, 23 April

ERE1.1 – Energy, Resources & the Environment – Orals

Convener: M. Kühn | Co-Conveners: H. Held

Room: 19

Chairperson: n.n.

- 08:30–08:45 EGU2012-11733
A. Liebscher, M. Scheck-Wenderoth, and GeoEn Research Group
 GeoEn -Research on Geo-Energy
- 08:45–09:00 EGU2012-14063
A. Manzella, H. Milsch, B. Hahne, J.D. van Wees, and D. Bruhn
 Deep geothermal resources and energy: Current research and developments
- 09:00–09:15 EGU2012-10658
L. Basava-Reddi and A. Camps
 The Status, Potential and Research Progress of CO2 Storage Worldwide
- 09:15–09:30 EGU2012-2540
I.B Lambert
 How rich is Australia's minerals endowment and is it adequate to sustain a major role in meeting international demand?
- 09:30–09:45 EGU2012-4205
H Luick, A. Niemann, E. Perau, and U Schreiber
 Coalmines as Underground Pumped Storage Power Plants (UPP) - A Contribution to a Sustainable Energy Supply?
- 09:45–10:00 EGU2012-5681
M. Popp
 Ringwallspeicher - a geotechnical option for large storage capacities

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-11706
C. A. Gueymard
 A globally calibrated aerosol optical depth gridded dataset for improved solar irradiance predictions
- 10:45–11:00 EGU2012-434
M. Castelli, M. Petitta, and E. Emili
 Solar energy assessment in the Alpine area: satellite data and ground instruments integration for studying the radiative forcing of aerosols.
- 11:00–11:15 EGU2012-6430
G. Glatzel
 Liquid biofuels - can they meet our expectations?
- 11:15–11:30 EGU2012-7399
R. Prikryl, S. Siegesmund, A. Török, P. Brimblecombe, and M. Gomez-Heras
 Construction materials, monuments and environment
- 11:30–11:45 EGU2012-14237
S. Parey, P. Bernardara, and M.G. Donat
 Climate change impact on economical and industrial activities
- 11:45–12:00 EGU2012-8741
N. Ranger and S. Surminski
 The impact of climate change on the BRICS economies: The case of insurance demand.

ERE1.1 – Energy, Resources & the Environment – Posters

Convener: M. Kühn | Co-Conveners: H. Held

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL1 EGU2012-4992
J. Ballabrera, A. Garcia-Olivares, E. Garcia-Ladona, and A. Turiel
 A global renewable mix with proven technologies and common materials

- XL2 EGU2012-1781
N. Nakaten, T. Kempka, M. Green, A. Preshelkova, D. Merachev, R. Schlüter, and R. Azzam
Development of a technical-economic model for dynamic calculation of COE, energy demand and CO2 emissions of an integrated UCG-CCS process
- XL3 EGU2012-1141
A. Ribotti, M. Borghini, A. Cucco, E. De Domenico, V. Dibenedetto, L. Fazioli, L. Genovese, G. Iaria, A. Olita, F. Raffa, K. Schroeder, R. Sorgente, and N. Spanò
PRIAMO project: a feasibility study on Sicilian sites for sea power plants in coastal waters
- XL4 EGU2012-7091
G. Zodiatis, G. Galanis, D. Hayes, A. Nikolaidis, C. Kalogeri, A. Adam, G. Kallos, and G. Georgiou
Near Shore Wave Modeling and applications to wave energy estimation
- XL5 EGU2012-13853
B. Psiloglou, **C. Giannakopoulos**, A. Dagoumas, and K. Skourtis
Energy consumption and temperature correlations for 4 Greek Ionian Sea islands
- XL6 EGU2012-2658
C. Demain, M. Journée, and **C. Bertrand**
Evaluation of different models to estimate the global solar radiation on inclined surface
- XL7 EGU2012-2664
M. Journée, **C. Demain**, R. Müller, and C. Bertrand
Towards a climatology of surface incoming solar radiation over the Benelux by merging long time series of Meteosat-derived estimations and ground-based measurements
- XL8 EGU2012-6840
R. Davy and **A. Troccoli**
Interannual variability of solar energy generation in Australia
- XL9 EGU2012-1761
M. Cony, J. Polo, L. Martin, A. Navarro, and I. Serra
Analysis of Solar Irradiation Anomalies in Long Term Over India
- XL10 EGU2012-9421
M. Cony, **L. Singal**, L. Martin, and J. Polo
Modeling of Solar Resource from VIS Images of Meteosat First Generation over India
- XL11 EGU2012-12808
J. Badosa, M. Haeffelin, and N. Kalecinski
Solar radiation temporal and spatial variability and correlations with trade wind characteristics over Reunion Island (21S, 55.5E)
- XL12 EGU2012-7188
J.-B. Jee, S.-H. Jeon, Y.-J. Choi, and K.-T. Lee
Development of Solar Resources Map using Satellites and Numerical Prediction Data on Korean Peninsula
- XL13 EGU2012-10076
Ö. Bilgin
Turkey's High Temperature Geothermal Energy Resources and Electricity Production Potential
- XL14 EGU2012-9678
D. E. Bruno, S. D'Arpa, N. Lopez, A. Galgaro, E. Destro, S. Chiesa, and V. F. Uricchio
A parametric model for geothermal potential assessment on a regional scale
- XL15 EGU2012-7477
D. Bertermann, **H. Klug**, L. Morper-Busch, C. Bialas, and J. Rohn
ThermoMap - Spatial mapping of superficial geothermal energy resources using WebGIS for information distribution
- XL16 EGU2012-6374
R. Garcia-Gonzalez, **A. Verhoef**, P.L. Vidale, G. Gan, A. Chong, and D. Clark
Estimating the CO2 mitigation potential of horizontal Ground Source Heat Pumps in the UK
- XL17 EGU2012-8427
A. JesuBek, A. Westphal, C. Berlin, H. Würdemann, and A. Dahmke
Acceptance of Subsurface Heat Storage in Germany - Assessing the Impacts on Ground Water Quality
- XL18 EGU2012-4666
S. Jaber, K. Ibrahim, and M. Al-Muhtaseb
Phosphate Resources Estimation Using Kriging and Geographic Information Systems
- XL19 EGU2012-2544
I.B Lambert
Global Uranium And Thorium Resources: Are They Adequate To Satisfy Demand Over The Next Half Century?
- XL20 EGU2012-2231
K. Voit, K. Bergmeister, and I. Janotka
Reducing CO2-Emission by using Eco-Cements
- XL21 EGU2012-1779
B. Marker
Regulation of dust from minerals operations in England

- XL22 EGU2012-784
F. Mandija and F. Vila
Dust resuspension characteristics over several quarries of limestone
- XL23 EGU2012-3061
G. Walton and H. Datson
Dust sampling developments using sticky pads
- XL24 EGU2012-1100
S. M. B. Bittar, P. V. Straaten, M. de Fatima de Araujo Vieira Santos, Y. J. Agra Bezerra da Silva, M. da Silva, T. Saraiva de Melo Pinheiro, F. Gusmao Didier de Moraes, A. M. de Aguiar Accioly, S. R. Alves de Santana, H. A. dos Santos, D. M. de Carvalho, G. de Lima Ferreira, and C. de Carvalho Santos
Reforestation and landscape reconstruction in gypsum mine area from the semiarid region of NE Brazil
- XL25 EGU2012-45
K. Murray and C. Peterman
Soil Contamination as a Legacy of the U.S. Auto Industry, Southwest Detroit, Michigan USA
- XL26 EGU2012-5171
M. Noah, A. Vieth-Hillebrand, and H. Wilkes
Advanced characterisation of organic matter in oil sands and tailings sands used for land reclamation by Fourier transform-ion cyclotron resonance-mass spectrometry (FT-ICR-MS)
- XL27 EGU2012-7980
S. Delvoie, J.-P. Radu, I. Ruthy, and R. Charlier
Engineering geological mapping in Wallonia (Belgium) : present state and recent computerized approach
- XL28 EGU2012-1640
M. Lappé and J. Kallmeyer
A cell extraction method for oily sediments
- XL29 EGU2012-3628
M. Kaufman, D. Rogers, and K. Murray
Integrating Data from Geological Investigations into Urban Watershed Restoration Efforts
- XL30 EGU2012-4570
A. Pape, C. Knapp, and C. Switzer
The Impacts of Thermal and Smouldering Remediation on Soil Properties Related to Rehabilitation and Plant Growth
- XL31 EGU2012-13153
A Garcia Cantu Ros, S. Kriewald, D Rybski, and J P Kropp
Food security, growth and spatial organization of urban areas: a global perspective
- XL32 EGU2012-9287
A. Damm, J. Köberl, F. Pretenthaler, and C. Töglhofer
Economic Impacts of Climate Change on Winter Tourism: Challenges for Ski Area Operators
- XL33 EGU2012-10159
A. Bauwens, C. Sohler, D. Deraedt, and A. Degré
How could Mosan agriculture be impacted by climate change and future droughts ?
- XL34 EGU2012-10773
P. Brigode, P. Bernardara, E. Paquet, F. Garavaglia, J. Gailhard, and P. Ribstein
Prediction of future hydrological hazard via the SCHADEX method
- XL35 EGU2012-1538
J. Napieralski, K. Murray, G. Luera, K. Thomas Brown, and L. Reynolds Keefer
Broadening Diversity in the Geosciences through Teacher-Student Workshops that Emphasizes Community-Based Research Projects

ERE1.4 – GeoEnergy – Orals

Convener: A. Liebscher | Co-Conveners: S. Regenspurg

Room: 19

Chairperson: Axel Liebscher

- 15:30–15:45 EGU2012-4534
B. O. Kaiser, M. Scheck-Wenderoth, M. Cacace, A. Przybycin, and B. Lewerenz
Present-day thermal signatures of different heat transport mechanisms within the Northeast German basin and their sensitivity to the resolution of the computational mesh - results from coupled 3D numerical simulations
- 15:45–16:00 EGU2012-13001
S. Bernard, R. Wirth, A. Schreiber, H.-M. Schulz, and **B. Horsfield**
Formation of nanoporous pyrobitumen residues during maturation processes within the Barnett Shale (Fort Worth Basin)

- 16:00–16:15 EGU2012-5592
M. Bonte, B.M. van Breukelen, P.W.J.J. Van Der Wielen, and P.J. Stuyfzand
 Biogeochemical impacts of aquifer thermal energy storage at 5, 12, 25 and 60°C investigated with anoxic column experiments
- 16:15–16:30 EGU2012-8700
D. Oka, Y. Fujimitsu, J. Nishijima, Y. Fukuda, and M. Taniguchi
 Mass Balance Estimation from the Gravity Change at the Takigami Geothermal Reservoir, Oita Prefecture, Japan
- 16:30–16:45 EGU2012-5083
M. Nimtz, M. Klatt, and H.J. Krautz
 Modelling of CO₂ pipelines in dynamic CCS systems
- 16:45–17:00 EGU2012-8598
P. Sauer, C. Glombitza, and J. Kallmeyer
 Leaching of organic acids from macromolecular organic matter by non-supercritical CO₂

ERE1.4 – GeoEnergy – Posters

Convener: A. Liebscher | Co-Conveners: S. Regenspurg

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Simona Regenspurg

- XL36 EGU2012-1927
M. Cacace and W. Kissling
 Hot and Saline Spring Behaviour in the Taupo Volcanic Zone and the North-East German Basin
- XL37 EGU2012-4507
V. Noack, M. Scheck-Wenderoth, M. Cacace, and B. Lewerenz
 Assessment of the impact of moving fluids on the regional thermal field for the area of Brandenburg (North German Basin)
- XL38 EGU2012-8456
M. Harz
 Harz/Vesper: Acceptance Research with Logical Relations and Pragma-Dialectics
- XL39 EGU2012-4621
F. Ruiz-Mazarrón, J. Almoguera-Millán, J. García-Llaneza, and A. Perdignes
 Energy balance and economic feasibility of shallow geothermal systems for winery industry
- XL40 EGU2012-9086
K. Zemke, S. Fischer, A. Liebscher, and Ketzin Team
 Analysing petrophysical parameters of reservoir rock from the Ketzin pilot site (Germany) during long-term CO₂-exposure experiments under thermodynamic conditions relevant for the geological storage of CO₂
- XL41 EGU2012-8965
C. Schneider, S. Siegesmund, and C. Zeeb
 Hydraulic modeling and the evaluation of the representative elementary volume (REV) of a fractured geothermal vulcanite reservoir in the Northern German Basin
- XL42 EGU2012-9569
Y. Cherubini, M. Cacace, M. Scheck-Wenderoth, and I. Moeck
 Influence of faults on the thermal field and fluid system in a geothermal site (Groß Schönebeck, NE-German Basin)
- XL43 EGU2012-8816
 F. T. Schulz, **C. Glawe**, H. Schmidt, and A. R. Kerstein
 Toward modeling of supercritical CO₂ flow using the one-dimensional turbulence model
- XL44 EGU2012-10753
S. Ozel, G. Cifci, S. Okay, O. Atgin, O. Ozel, B. Bar?n, M. Er, D. Dondurur, K. Dae Choul, and B. Sung-Ho
 Eastern Black Sea Gas Hydrate Related Structures In Eastern Black Sea
- XL45 EGU2012-12183
S. Ladage, D. Franke, R. Pierau, U. Rogalla, A. Bahr, J. Erbacher, and U. Berner
 Volumetric gas-in-place assessment of shale gas potential in Germany
- XL46 EGU2012-13063
D. Kerschke, A. Mihailovic, H.-M. Schulz, and B. Horsfield
 The Shale Gas potential of Lower Carboniferous Sediments in Germany
- XL47 EGU2012-3101
S. Regenspurg, R. Naumann, E. Feldbusch, S. Wagner, and A. Saadat
 Mineral formation during production of highly saline geothermal fluids
- XL48 EGU2012-11624
A. Hübner, B. Horsfield, and I. Kapp
 Shale Gas Information Platform SHIP: the scientific perspective in all that hype

- XL49 EGU2012-1507
N. Herzog and C. Egbers
Modeling and simulation of a liquid jet in view of CO₂ atmospheric dispersion
- XL50 EGU2012-9859
T. Kangwanpongpan, M. Klatt, and H.J. Krautz
Challenges of oxyfuel combustion modeling for carbon capture
- XL51 EGU2012-8202
S. Lo Russo, G. Taddia, and L. Gnani
An open-loop ground-water heat pump system: transient numerical modeling and site experimental results
- XL52 EGU2012-12564
M. Procesi, B. Cantucci, M. Buttinelli, G. Armezzani, and F. Quattrocchi
Strategic use of the underground for an energy mix plan, synergies among CO₂ and CH₄ Geological Storage and Geothermal Energy: Italian Energy review and Latium case study

ERE1.6 – Deep geothermal energy – exploration, exploitation, characterisation and modelling – Orals

Convener: B. Hahne | Co-Conveners: D. Bruhn, A. Manzella, G. Blöcher, A. Bartetzko, I. Nardini

Room: 28

Chairperson: Guido Blöcher

- 10:30–10:45 EGU2012-346
D. Reyer and S.L. Philipp
Heterogeneities of mechanical properties in potential geothermal reservoir rocks of the North German Basin
- 10:45–11:00 EGU2012-7556
K. Bär, I. Sass, D. Arndt, and A. Hoppe
Depth Dependence of Geothermal Reservoir Parameters - Examples from the Rotliegend and Buntsandstein of the Northern Upper Rhine Graben (Germany)
- 11:00–11:15 EGU2012-5504
S. Homuth, A. E. Götz, and I. Sass
Facies related thermo-physical characterization of the Upper Jurassic geothermal carbonate reservoirs of the Molasse Basin, Germany
- 11:15–11:30 EGU2012-963
M. van Putten, J.D.A.M. van Wees, M.P.D. Pluymaekers, and L. Kramers
Finding a way to optimize drilling depths in clastic aquifers for geothermal energy
- 11:30–11:45 EGU2012-4519
T.S. Bording, N. Balling, and S.B. Nielsen
Estimating thermal conductivity from geophysical well logs: Selected boreholes in Danish sedimentary basins
- 11:45–12:00 EGU2012-7198
S. Fuchs and A. Förster
Thermal Conductivity Determination in the North German Basin: New Approaches - New Results.

LUNCH BREAK

Chairperson: Adele Manzella

- 13:30–13:45 EGU2012-137
E. Bozau and W. van Berk
Generic models of deep formation water calculated with PHREEQC using the "gebo"-database
- 13:45–14:00 EGU2012-13455
T. Tóth, G. Wórum, A. Nádor, A. Uhrin, I. Bíró, B. Musitz, M. Kóbor, G. Dövényi, F. Horváth, and N. Pap
Exploration of geothermal energy in the western Pannonian basin
- 14:00–14:15 EGU2012-8054
F. Bellotti, G. Falorni, J. Morgan, A. Rucci, and A. Ferretti
Advanced InSAR techniques for the management and characterization of geothermal resources
- 14:15–14:30 EGU2012-11002
G. Giordano, A. A. De Benedetti, P. Ramazzotti, A. Bonamico, and M. Mattei
Reappraisal of the geothermal potential at Colli Albani volcano (Italy): a new approach to the volume method
- 14:30–14:45 EGU2012-10789
M. R. Muller, A. G. Jones, J. Fulla, C. M. Yeomans, M. Loewer, D. Reay and the IRETherm Team
IRETherm: Research and Exploration Challenges in Assessing Ireland's Deep Low-Enthalpy Geothermal Energy Potential

- 14:45–15:00 EGU2012-8183
M. Brehme, Y. Kamah, H. Koestono, G. Zimmermann, S. Regenspurg, K. Erba?, B. Wiegand, and M. Sauter
 Characterization of a deep geothermal reservoir in an active volcanic area
 Chairperson: Dorothea Reyer
- 15:30–15:45 EGU2012-12839
A. Genter, N. Cuenot, J. Scheiber, and B. Melchert
 Current status EGS Soultz project during geothermal exploitation
- 15:45–16:00 EGU2012-3798
H. Asanuma, Y. Mkukuhira, S. Mitsumori, M. Haring, D. Wyborn, and M. Adachi
 Fault plane solutions of earthquakes from deep geothermal reservoirs
- 16:00–16:15 EGU2012-9157
J. Bartels, F. Wenderoth, T. Fritzer, B. Huber, M. Dussel, E. Lüschen, R. Thomas, and R. Schulz
 A new simulation model to evaluate interaction between neighbouring hydro-geothermal installations developing the deep Malm aquifer in the Munich region
- 16:15–16:30 EGU2012-1180
F. Baer and L. Overmeyer
 A Cost-efficient Well Construction for Deep Geothermal Resources
- 16:30–16:45 EGU2012-10850
L. Urpi, G. Zimmermann, G. Blöcher, J.D.A.M. van Wees, and B. Wassing
 Discrete fracture network modelling of Groß Schönebeck stimulation treatment
- 16:45–17:00 EGU2012-412
T. Krühn and L. Overmeyer
 Printed Circuit Boards with Integrated Heat Carrier Channels for Deep Geothermal Resources

ERE1.6 – Deep geothermal energy – exploration, exploitation, characterisation and modelling – Posters

Convener: B. Hahne | Co-Conveners: D. Bruhn, A. Manzella, G. Blöcher, A. Bartetzko, I. Nardini

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Isabella Nardini

- XL53 EGU2012-4225
 B. Hahne, **R. Thomas** and the gebo-Geosystem Team
 Combined geophysical, geochemical and geological investigations of geothermal reservoir characteristics in Lower Saxony, Germany
- XL54 EGU2012-495
C. Vogt and A. Widera
 Ensemble Kalman Filter Assimilation of Temperature Data to Estimate Permeability in Geothermal Reservoirs
- XL55 EGU2012-1876
V. Pasquale, P. Chiozzi, and M. Verdoya
 Thermal regime of the deep carbonate reservoir of the Po Plain (Italy)
- XL56 EGU2012-2056
A. Hesshaus, R. Kringel, G. Houben, and T. Tischner
 Characterisation of reservoir fluid conditions at geothermal well Gross Buchholz Gt1
- XL57 EGU2012-2615
A.E. Götz, Á. Török, M. Tóth, V. Hlavinka, and I. Sass
 Thermophysical properties of potential geothermal reservoir rocks: an outcrop analogue study of the sedimentary series of the Buda Mts., Hungary
- XL58 EGU2012-3043
M. Aleardi and A. Mazzotti
 A study on the seismic AVO signatures of deep fractured geothermal reservoirs in an intrusive basement.
- XL59 EGU2012-3379
H. Milsch, S. Regenspurg, R. Giese, M. Poser, and S. Kranz
 FluMo - A mobile fluid-chemical monitoring unit for geothermal plants
- XL60 EGU2012-3690
 Y.-C. Lu, **S.-R Song**, and C.-M. Liu
 Evidence of Formation Scaling Occurred in the Chingshui Geothermal Field, Taiwan
- XL61 EGU2012-4181
S. E. Poulsen, N. Balling, T. S. Bording, and S. B. Nielsen
 Regional geothermal 3D modelling in Denmark
- XL62 EGU2012-5335
N.M. Willmot Noller and J.S. Daly
 Constructing a model of 3D radiogenic heat production in Ireland

- XL63 EGU2012-6377
C. Dixit, B. Sanjuan, M. Brach, **M.-L. Bernard**, and S. Gaspard
Experimental study of the silica precipitation kinetics from geothermal fluids under the exploitation conditions of the Bouillante power station (Guadeloupe, French West Indies)
- XL64 EGU2012-7212
P. Mikisek, G. Bignall, F. Sepulveda, and I. Sass
Effect of Hydrothermal Alteration on Rock Properties in Active Geothermal Setting
- XL65 EGU2012-7541
A. Aretz, K. Bär, and I. Sass
Geothermal reservoir properties of the Rotliegend (Permocarboniferous) sediments in the Saar Nahe Basin (South-West Germany)
- XL66 EGU2012-7928
P. Lubrano Lavadera, J.M. Marthelot, M. Zillmer, and F. Cornet
Detection of fractures within the Soultz-sous-Forêts EGS geothermal reservoir by processing of Vertical Seismic Profile data
- XL67 EGU2012-9127
H. Sébastien, Y. Géraud, M. Diraison, and C. Dezayes
Petrophysical characteristics and fluid flow zones in the Buntsandstein sandstones reservoir according well cores and outcrop analysis (Upper Rhine Graben, France)
- XL68 EGU2012-9364
F. Deon, I. Moeck, T. Sheydt, and M.S. Jaya
Preliminary assessment of the geothermal system of the Tiris volcanic area, East Java, Indonesia.
- XL69 EGU2012-9405
S.W. Niasari, G. Muñoz, M. Kholid, E. Suhanto, and O. Ritter
Magnetotelluric Exploration of the Sipoholon Geothermal Field, Indonesia
- XL70 EGU2012-9681
I. Moeck
A new classification scheme for deep geothermal systems based on geologic controls
- XL71 EGU2012-9731
T. Fritschle, J.S. Daly, and B.J. McConnell
Geothermal potential of the buried Drogheda and Kentstown granites, Co. Meath, Ireland
- XL72 EGU2012-10409
S. Carlino, R. Somma, A. Troiano, M.G. Di Giuseppe, C. Troise, and G. De Natale
The geothermal potential of the Campania volcanic district and new heat exchanger technologies for exploitation of highly urbanised areas.
- XL73 EGU2012-11234
J. Fullea, **M. R. Muller**, A. G. Jones and the IRETherm Team
Exploring Geothermal Energy Potential in Ireland through 3-D Geophysical-Petrological Modelling of Surface Heat-Flow and Crustal and Upper-Mantle Structure
- XL74 EGU2012-11995
S. Hoyer, M. Bottig, F. Zekiri, M. Fuchsluger, G. Götzl, G. Schubert, and A. Brüstle
Geological and geothermal 3D modelling of the Vienna Basin, Austria - pilot area of the project TRANSENERGY
- XL75 EGU2012-12245
E. Rizzo, D. Delle Donne, A. Murratzu, G. Romano, M. Votta, S. Botteghi, A. Manzella, S. Fiaschi, and G. Olivieri
Deep Electrical Resistivity and Passive Seismic measurements for the characterization of a local geothermal resource at Canino (Viterbo, Italy)
- XL76 EGU2012-13504
A. Troiano, M. G. Di Giuseppe, C. Troise, A. Tramelli, and **G. De Natale**
Fluid injection and withdrawal in deep geothermal borehole.
- XL77 EGU2012-13829
E. Holzbecher and **P. Oberdorfer**
Modelling Hydraulic and Thermal Responses in a Benchmark for Deep Geothermal Heat Production
- XL78 EGU2012-13833
G. Montegrossi, G. Tsytkin, and C. Calore
Pure water injection into porous rock with superheated steam and salt in a solid state
- XL79 EGU2012-4041
G. Schaumann, T. Günther, P. Musmann, and M. Grinat
Application of electric and electromagnetic prospection methods for the investigation of geological fault zones
- XL80 EGU2012-4201
P. Musmann, U. Polom, H. Buness, and R. Thomas
Reflection seismic survey across a fault zone in the Leinetal Graben, Germany, using P- and SH-waves
- XL81 EGU2012-4833
S. Weides, I. Moeck, and J. Majorowicz
Geothermal investigation of Paleozoic formations in the Central Alberta Basin/Canada

- XL82 EGU2012-7525
S. Kristjansdottir, K. Agustsson, A. Franco, M. Adelinet, K. Arnason, C. Dorbath, C. Doubre, O. G. Flovenz, J. Fortin, L. Geoffroy, G. P. Hersir, R. Karlsdottir, A. Schubnel, and A. M. Vilhjalmsson
The Hydorift Experiment
- XL83 EGU2012-7765
L. Fusi, I. Borsi, and F. Rosso
Some new results on the mathematical modelling of geothermal exploitation.
- XL84 EGU2012-10009
M. Nukman and I. Moeck
Field based geothermal exploration: Structural controls in the Tarutung Basin/North Central Sumatra (Indonesia)
- XL85 EGU2012-10553
M. Piochi, M.A. Di Vito, A. Mormone, G. De Natale, A. Tramelli, C. Troise, and S. Carlino
The Campi Flegrei caldera-hosted high-temperature and high-saline geothermal system in the Southern Italy: the implication of the geothermal resource as derived by the present state of the knowledge through 70 years of volcanological, structural, petrolog
- XL86 EGU2012-12432
S. D'Arpa, N. Zaccarelli, D. E. Bruno, G. Leucci, V. F. Uricchio, and G. Zurlini
A geographically weighted regression model for geothermal potential assessment in mediterranean cultural landscape
- XL87 EGU2012-13687
I. Ghergut, J. Meixner, D. Rettenmaier, F. Maier, M. Nottebohm, T. Ptak, and M. Sauter
Expected fluid residence times, thermal breakthrough, and tracer test design for characterizing a hydrothermal system in the Upper Rhine Rift Valley
- XL88 EGU2012-4310
I. Ghergut, H. Behrens, S. Karmakar, and M. Sauter
Single-well tracer push-pull test sensitivity w. r. to fracture aperture and spacing
- XL89 EGU2012-4038
I. Ghergut, H. Behrens, S. Karmakar, T. Licha, M. Nottebohm, and M. Sauter
Tracer-based prediction of thermal reservoir lifetime: scope, limitations, and the role of thermosensitive tracers
- XL90 EGU2012-6142
I. Ghergut, H. Behrens, E. Holzbecher, R. Jung, M. Sauter, and T. Tischner
Single-well tracer test sensitivity w. r. to hydrofrac and matrix parameters (case study for the Horstberg site in the N-German Sedimentary Basin)
- XL91 EGU2012-5367
W. Rühaak, K. Bär, and I. Sass
Estimating the subsurface temperature of Hessen/Germany based on a GOCAD 3D structural model - a comparison of numerical and geostatistical approaches
- XL92 EGU2012-13820
G. Montegrossi, **B. Inversi**, D. Scrocca, M. Livani, and L. Petracchini
Characterization of medium enthalpy geothermal system in the Campania region (southern Italy): from geological data to resource modelling
- XL93 EGU2012-13827
E. Holzbecher and F. Maier
Single-Well Injection-Withdrawal Experiments for Ground Flow Estimation
- XL94 EGU2012-14244
M. Stibitz, H. Jirakova, and V. Frydrych
Low-Enthalpy Geothermal Potential of the Czech Republic with Particular Focus on Waters of Metalliferous Mining Districts in Crystalline Structures of the Bohemian Massif

ERE1.8 – Aspects of Biomass utilization from Forests and other Resources – Orals

Convener: V.J. Bruckman | Co-Conveners: E. Hochbichler, B. Veselinovic, V. Parravicini, S. Chauhan

Room: 19

Chairperson: n.n.

- 13:30–13:45 EGU2012-10518
E. Hochbichler, H. Hofmann, N. Bellos, C. Zeitlinger, and P. Liebhard
Short Rotation Coppice in Austria - Management and Productivity
- 13:45–14:00 EGU2012-7339
T. Terada
Biomass Potentials in Different Maintenance Scenarios of Satoyama Woodlands
- 14:00–14:15 EGU2012-1199
A. Repo, G. Kindermann, H. Böttcher, and J. Liski
Effects of forest biomass use for energy on the European forest litter and soil carbon stocks

- 14:15–14:30 EGU2012-8817
M.N. Futter, R.W. Lucas, G. Egnell, H. Holmström, H. Laudon, U. Nilsson, S.K. Oni, and T. Lämås
 Will more intensive forest harvesting for bioenergy cause unacceptable depletion of base cation pools - a modelling study using the Heureka decision support system
- 14:30–14:45 EGU2012-2093
M. Zessner, S. Thaler, F. Bertrán de Lis, W. Kaltenbrunner, and N. Kreuzinger
 Biomass and water: a critical review of the water footprint concept as sustainability criterion for biomass production
- 14:45–15:00 EGU2012-10715
I. Ostonen, P. Kupper, J. Söber, J. Aosaar, M. Varik, and K. Lõhmus
 The effect of increased air humidity on fine root and rhizome biomass and turnover of silver birch forest ecosystem - a FAHM study.

ERE1.8 – Aspects of Biomass utilization from Forests and other Resources – Posters

Convener: V.J. Bruckman | Co-Conveners: E. Hochbichler, B. Veselinovic, V. Parravicini, S. Chauhan

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bojana Veselinovic

- XL95 EGU2012-12535
V.J. Bruckman and G. Glatzel
 Lessons to be learned from the past: Forest biomass utilization and its belowground consequences
- XL96 EGU2012-7407
B. Veselinovic and H. Hager
 Influence of windthrows and tree species on forest soil plant biomass and carbon stocks
- XL97 EGU2012-5437
V.J. Bruckman, S. Yan, E. Hochbichler, and G. Glatzel
 Carbon pools and temporal dynamics along a rotation period in sessile oak dominated high forest and coppice with standards stands
- XL98 EGU2012-5205
S. Yan, V. J. Bruckman, G. Glatzel, and E. Hochbichler
 Assessment of forest nutrient pools in view of biomass potentials - a case study from Austria oak stands
- XL99 EGU2012-12477
P. B. Tsonkova, A. Quinkenstein, C. Böhm, and D. Freese
 Assessment of Carbon Sequestration in German Alley Cropping Systems
- XL100 EGU2012-4211
C. Ettmayer, K. Katzensteiner, and O. Eckmüllner
 The combination of Forest Site Maps, Site specific Growth Models and Nutrient Balance Models as a Basis for Sustainable Management in the Northern Limestone Alps
- XL101 EGU2012-722
 Lj. Brasanac-Bosanac, T. Cirkovic-Mitrovic, V. Popovic, and **D. Jokanovic**
 Biomass in Serbia - potential of beech forests
- XL102 EGU2012-450
I. Bjelanovic and M. Krstic
 Reclamation of coppice forests in order to increase the potential of woody biomass in Serbia
- XL103 EGU2012-6060
 S. Lebzien, **M. Veste**, H. Fechner, L. Koning, D. Mantovani, and D. Freese
 The Giant Knotweed (*Fallopia sachalinensis* var. *Igniscum*) as a new plant resource for biomass production for bioenergy
- XL104 EGU2012-9948
R. Sharma and S.K. Chauhan
 Efficient utilization of short rotation tree biomass for cooking in India
- XL105 EGU2012-10046
S.K. Chauhan and R. Soni
 Chemical composition and fuel wood characteristics of fast growing tree species in India
- XL106 EGU2012-11492
C. Ureña, J.M. Azañón, J.M. Caro, C. Irigaray, F. Corpas, A. Ramirez, F. Rivas, L.M. Salazar, and I. Mochón
 Use of Biomass Ash as a stabilization agent for expansive marly soils (SE Spain)
- XL107 EGU2012-4186
M. Veste, C. Böhm, A. Quinkenstein, and D. Freese
 Estimation of biological nitrogen fixation by black locust in short-rotation forests using natural ¹⁵N abundance method
- XL108 EGU2012-11654
C. Ureña, J.M. Azañón, F. Corpas, F. Nieto, and C. León-Buendía
 Improving the geotechnical properties of expansive soils by mixture with olive mill wastewater

- XL109 EGU2012-12445
A. Slazak and D. Freese
 Phosphorus kinetics in reclaimed lignite mine soils under short rotation coppices in NE Germany
- XL110 EGU2012-11710
A. Gioda, I.L. Monteiro, A.C. Almeida, S.S. Hacon, R. Dallacort, E. Ignotti, J.M. Godoy, A.L. Loureiro, F. Morais, and P. Artaxo
 Observations about chemical composition of aerosols in the Brazilian Amazon region - Case study: Biomass burning in the subequatorial Amazon region
- XL111 EGU2012-181
K.B. Baker and V.M.L LeMay
 Firewood Volume by Diameter Class: Estimates for *G. Sepium* and *C. Velutina* Using a Nonlinear Mixed-Effect Taper Model
- XL112 EGU2012-11600
E. I. Pissinati de Rezende, A. S. Mangrich, M. G. F. Batista, J. M. S. Toledo, and E. H. Novotny
 Production of bran castor biochar through slow pyrolysis
- XL113 EGU2012-8719
D. Mantovani, M. Veste, and D. Freese
 Biomass production and water use of Black Locust (*Robinia pseudoacacia* L.) for short-rotation plantation

Tuesday, 24 April

ERE2.4 – Modelling and upscaling of CO2 storage sites – Orals

Convener: T. Kempka | Co-Conveners: H. Class, M. Dentz, A. Niemi, J. Carrera

Room: 19

Chairperson: n.n.

- 08:30–08:45 EGU2012-9158
S.E. Gasda, H.M. Nilsen, and H.K. Dahle
 Effective models for CO2 migration and immobilization in large-scale geological systems
- 08:45–09:00 EGU2012-10115
S. Beretta, F. Moia, R. Guandalini, and F. Cappelletti
 Geological characterization of Italian reservoirs and numerical 3D modelling of CO2 storage scenarios into saline aquifers
- 09:00–09:15 EGU2012-10543
E. Jolie and I. Moeck
 Green field exploration in the NE German basin: A case study from the Beeskow-Birkholz anticline
- 09:15–09:30 EGU2012-501
E. Tillner, T. Kempka, B. Nakaten, E. Jolie, and M. Kühn
 Modeling of brine migration through fault zones as a result of CO2 injection into a saline aquifer
- 09:30–09:45 EGU2012-1985
A.R. Reveillere and J.R. Rohmer
 Semi-analytical model of brine leakage through an abandoned plugged well to determine the Area of Review for CO2 geological storages
- 09:45–10:00 EGU2012-8920
T.S. Mykkeltvedt and J.M. Nordbotten
 Estimating effective rates of convective mixing from commercial-scale injection

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-6743
F. Tong, A. Niemi, Z. Yang, and F. Fagerlund
 A solution scheme for simulating of tracer transport in a non-isothermal two-phase flow system
- 10:45–11:00 EGU2012-13373
B. J. Graupner, D. Li, K. Benisch, A. B. Mitiku, C. Beyer, and S. Bauer
 The effects of CO2 injection on Geochemistry and Aquifer properties investigated at a hypothetical storage site in the north German basin
- 11:00–11:15 EGU2012-12030
T. Illangasekare, M. Plampin, L. Trevisan, E. Agartan, H. Mori, T. Sakaki, A. Cihan, J. Birkholzer, Q. Zhou, R. Pawar, and G. Zyvoloski
 Multiple scale physical and numerical modeling for improved understanding of mechanisms of trapping and leakage of CO2 in deep geologic formations
- 11:15–11:30 EGU2012-11435
I. Neuweiler and V. Heiss
 Averaged fluid distribution and its variability in heterogeneous formations
- 11:30–11:45 EGU2012-1935
D. O'Malley and J.H. Cushman
 Adaptive renormalization of stochastic dynamics with application to data assimilation and numerical modeling
- 11:45–12:00 EGU2012-6220
J. J. Hidalgo, L. Cueto-Felgueroso, and R. Juanes
 Stochastic characterization of gravity currents in heterogeneous porous media

ERE2.4 – Modelling and upscaling of CO2 storage sites – Posters

Convener: T. Kempka | Co-Conveners: H. Class, M. Dentz, A. Niemi, J. Carrera

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- Z129 EGU2012-2051
S. Klapperer, I. Moeck, and T. Backers
 Geomechanical characterization of an Upper Triassic reservoir rock (Stuttgart Formation) in the NE German Basin (pilot site for CO₂ storage at Ketzin, Germany)
- Z130 EGU2012-3548
F. Magri, E. Tillner, E. Jolie, T. Kempka, O. Kolditz, I. Moeck, W. Wang, N. Watanabe, and G. Zimmermann
 3D numerical simulation of pore pressure and stress coupling for CO₂ storage in deep saline aquifers: A case study from the Northeast German Basin
- Z131 EGU2012-2918
K. Häberle and W. Ehlers
 Carbon-dioxide storage in the subsurface: towards an understanding of crack development in the cap-rock including phase transition processes
- Z132 EGU2012-9243
M. Ashraf, S. Oladyshkin, and W. Nowak
 Geological storage of CO₂: sensitivity analysis and risk assessment using arbitrary polynomial chaos expansion
- Z133 EGU2012-1531
A. Kissinger, L. Walter, M. Darcis, B. Flemisch, and H. Class
 Abstract: Competing Uses of Underground Systems Related to Energy Supply: Applying Single- and Multiphase Simulations for Site Characterization and Risk-Analysis
- Z134 EGU2012-6319
T. Kempka, B. Norden, E. Tillner, B. Nakaten, and M. Kühn
 Comparison of long-term numerical simulations at the Ketzin pilot site using the Schlumberger ECLIPSE and LBNL TOUGH2 simulators
- Z135 EGU2012-6334
 E. Klein, M. De Lucia, **T. Kempka**, E. Tillner, and M. Kühn
 A preliminary assessment of the contribution of CO₂ trapping mechanisms at the Ketzin pilot site
- Z136 EGU2012-11380
T.J. Tambach, M. Koenen, L.J. Wasch, D. Loeve, and J.G. Maas
 Reactive transport modeling of the long-term effects of CO₂ storage in the P18 depleted gas field
- Z137 EGU2012-5330
A.-C. Dieudonné, R. Charlier, and F. Collin
 Shaft sealing issue in CO₂ storage sites
- Z138 EGU2012-4227
R.N. Lassen, M. Looms, K.H. Jensen, T. Sonnenborg, and A. Cahill
 Monitoring CO₂ gas-phase injection in a shallow sand aquifer using cross borehole GPR.
- Z139 EGU2012-12192
W. Sargent and S. Benson
 A simple screening model for selecting CO₂ sequestration sites using a semi-analytical model for calculating pressure buildup and phase front movement in thick and heterogeneous geologic settings
- Z140 EGU2012-6194
A.A. Afanasyev
 Simulation of Multiphase Water-Carbon Dioxide Mixture Flows in Porous Media
- Z141 EGU2012-3510
N. Ahmad and A. Wörman
 Numerical-analytical studies of CO₂ leakage through fault with retardation due to matrix diffusion
- Z142 EGU2012-8658
A. K. Singh, N. Böttcher, U.-J. Görke, and O. Kolditz
 Thermodynamical effects during carbon dioxide release
- Z143 EGU2012-11575
H. Büsing and C. Clauser
 Exact Jacobians in an implicit Newton method for two-phase flow in porous media
- Z144 EGU2012-8225
Z. Ziabakhshganji and H. Kooi
 Equation of State for thermodynamic equilibrium of gas mixtures and brines to allow simulation of the effects of impurities in CO₂ storage
- Z145 EGU2012-6032
M. Dentz, P. Gouze, J. Dweik, A. Russian, and F. Delay
 Time-domain random walk modeling of heterogeneous diffusion and trapping in porous media
- Z146 EGU2012-12013
H. Ott and S. Berg
 Stability Analysis of CO₂-Brine Immiscible Displacement
- Z147 EGU2012-7997
K. Rasmusson, A. Niemi, F. Fagerlund, J. Carrera, and Y. Tsang
 Identification of scale effects in dissolution trapping from the response of a push-pull experiment

- Z148 EGU2012-7723
Z. Yang, A. Niemi, L. Tian, F. Fagerlund, and T.H. Illangasekare
 Macro-scale constitutive relationships for CO₂ migration in heterogeneous geological formations
- Z149 EGU2012-6056
O. Silva, I. Neuweiler, M. Dentz, M. Saaltink, and J. Carrera
 Upscaling of two-phase flow processes in CO₂ geological storage
- Z150 EGU2012-12143
M. Krause, R. Pini, and S.M. Benson
 Characteristics of Capillary Pressure Upscaling at the Capillary Limit
- Z151 EGU2012-7929
S. Sadhukhan, P. Gouze, M. Dentz, and T. Dutta
 Multiscale modeling of porosity, permeability, diffusivity and reactive surface changes during dissolution.

ERE3.3 – Traditional construction materials and monuments in modern society: present day threats and sustainable management – Orals

Convener: R. Prikryl | Co-Conveners: M. Gomez-Heras, Á. Török, S. Siegesmund, P. Brimblecombe

Room: 19

Chairperson: Prikryl, Gomez-Heras, Török, Siegesmund

- 13:30–13:45 EGU2012-2659
K. Heinrichs and R. Azzam
 An approach to better understanding of salt weathering on stone monuments - the "petraSalt" research project
- 13:45–14:00 EGU2012-1765
 R. Fort, **M. Alvarez de Buergo**, E.M. Perez-Monserrat, M.J. Varas-Muriel, M. Gomez-Heras, and D.M. Freire
 Evolution in the use of natural building stone in Madrid, Spain
- 14:00–14:15 EGU2012-5824
 S. Pirsakawetz, **S. Siegesmund**, F. Weise, Y. Rieffel, and R. Plagge
 Marble Deterioration and Climate: Examples from the Schlossbrücke Berlin
- 14:15–14:30 EGU2012-7274
M. Auras, S. Beer, P. Bundschuh, J. Eichhorn, M. Mach, D. Scheuven, M. Schorling, J. von Schumann, R. Snethlage, and S. Weinbruch
 Traffic-related immissions and their impact on historic buildings and monuments
- 14:30–14:45 EGU2012-6671
S.T. Sequeira and H. Varum
 Rammed earth construction in Portugal SW. An example of sustainable future.
- 14:45–15:00 EGU2012-10183
C.M. Grossi, P. Brimblecombe, and A. Bonazza
 Impact of a changing environment on the built heritage
- Chairperson: Prikryl, Gomez-Heras, Török, Siegesmund
- 15:30–15:45 EGU2012-6084
L. Toniolo, D. Gulotta, M. Bertoldi, and S. Bortolotto
 Managing the maintenance and conservation of the built heritage: a web-gis approach for the Richini courtyard in Milan
- 15:45–16:00 EGU2012-11472
L. Kubicar, D. Fidiriková, V. Štofanič, and V. Vretenár
 Monitoring of the temperature - moisture regime of critical parts in the tower of the St. Martin Cathedral in Bratislava.
- 16:00–16:15 EGU2012-10333
 E. Vasanelli, **A. Calia**, M.A. Aiello, M. Sileo, and G. Leucci
 Mechanical DT and NDT: characterisation of building stones and research of correlation for in situ analysis of ancient masonries
- 16:15–16:30 EGU2012-1048
R. Bellopede and P. Marini
 The ultrasonic technique for in situ investigations on stones: suggestions for uses
- 16:30–16:45 EGU2012-12461
M. Theodoridou and I. Ioannou
 Ancient gypsum mortars from Cyprus: characterization and reinvention
- 16:45–17:00 EGU2012-9550
T. De Kock, D. Vandevorde, M.A. Boone, J. Dewanckele, W. De Boever, M. Lanzón, G. De Schutter, L. Van Hoorebeke, P. Jacobs, and V. Cnudde
 Compatibility study and adaption of stone repair mortars for the Lede stone (Belgium)

ERE3.3 – Traditional construction materials and monuments in modern society: present day threats and sustainable management – Posters

Convener: R. Prikryl | Co-Conveners: M. Gomez-Heras, Á. Török, S. Siegesmund, P. Brimblecombe

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Prikryl, Gomez-Heras, Török, Siegesmund

- Z152 EGU2012-2122
A. Arizzi and G. Cultrone
Water transfer properties and shrinkage in lime-based rendering mortars
- Z153 EGU2012-2687
S. Vettori, E. Pecchioni, E. Cantisani, M. Ricci, F. Fratini, and C.A. Garzonio
The sandstone's chromatic alteration of the florentine cultural heritage
- Z154 EGU2012-2708
V. Shushakova, E. R. Fuller, Jr., F. Heidelberg, and **S. Siegesmund**
Marble decay due to microcracking
- Z155 EGU2012-3737
G. Leontakianakos, I. Baziotis, K. Sotiriadis, G. Goulas, S. Liakopoulos, and V. Karastathis
Slag of Greek provenance uses in materials science and geophysics: implications for a highly potential material in the service of the development of Greek economy
- Z156 EGU2012-3816
W. Wedekind, R. Lopez-Doncel, R. Dohrmann, and S. Siegesmund
Weathering and deterioration of volcanic tuff rocks used as natural building stone caused by moisture expansion
- Z157 EGU2012-4934
M. Morales Demarco, P. Oyhançabal, K-J. Stein, and S. Siegesmund
Black dimensional stones: Geology, technical properties and deposit characterization of the dolerites from Uruguay
- Z158 EGU2012-5160
R. Holzer, M. Bednarik, K. Kovarova, M. Laho, and M. Duncko
Façade mapping and data storage of historical structure ashlar
- Z159 EGU2012-5444
W. Wedekind, K. Jáuregui Arreola, and S. Siegesmund
Desalination of Walls and Façades
- Z160 EGU2012-5944
M. Gomez-Heras, I. Arce, P. Lopez-Arce, M. Alvarez de Buergo, and R. Fort
Characterization of historical mortars in Jordan
- Z161 EGU2012-7291
Z. Seidlova, **R. Prikryl**, and S. Sachlova
Microscopic examination of volcanic rocks subjected to alkaline leaching
- Z162 EGU2012-9011
N. Fusi, J. Martinez-Martinez, and **G.B. Crosta**
3D characterization of crack propagation in building stones
- Z163 EGU2012-9042
M. Morales Demarco, **P. Oyhançabal**, K-J. Stein, and S. Siegesmund
Slates from Uruguay: a traditional natural stone
- Z164 EGU2012-9095
M. Goossens, T. De Kock, J. Dewanckele, M. Boone, W. De Boever, L. Brabant, S. Louwye, M. De Ceukelaire, F. Vanhaecke, and V. Cnudde
Characterization of fieldstone for a provenance study of local building stones and artifacts
- Z165 EGU2012-9108
H. L. Stück and S. Siegesmund
Statistical analyses on sandstones: Systematic approach for predicting petrographical and petrophysical properties
- Z166 EGU2012-9188
G.F. Andriani and L. Germinario
Deterioration of the ornamental stones from Apulia (SE Italy) caused by thermal stresses
- Z167 EGU2012-9275
T. De Kock, J. Dewanckele, M.A. Boone, W. De Boever, G. De Schutter, P. Jacobs, and V. Cnudde
Wanted: suitable replacement stones for the Lede stone (Belgium)
- Z168 EGU2012-11155
T. Herbst, K. Rübner, and B. Meng
Integrated and holistic suitability assessment of recycling options for masonry rubble
- Z169 EGU2012-12299
I. Ioannou, R. Illampas, and D.C. Charnpis
Physico-mechanical characterization of adobe bricks from Cyprus

- Z170 EGU2012-12380
C. Hallmann, H. Friedenberger, and M. Hoppert
Endolithic diversity of microorganisms on sandstone and implications for biogenic weathering
- Z171 EGU2012-13661
A. Velosa, F. Rocha, C. Costa, and H. Varum
Preservation of adobe buildings. Study of materials
- Z172 EGU2012-1755
R. Fort, **M. Alvarez de Buergo**, C. Vazquez-Calvo, E.M. Perez-Monserrat, M.J. Varas-Muriel, and P. Lopez-Arce
Provenance of granites used to build the Santa Maria de Valdeiglesias Monastery, Pelayos de la Presa (Madrid, Spain), and conservation state of the monumental complex
- Z173 EGU2012-2418
L. S. Gomez-Villalba, P. López-Arce, A. Zornoza-Indart, M. Alvarez de Buergo, and R. Fort
Modern restoration products based on nanoparticles: The case of the Nano-Lime, interaction and compatibility with limestone and dolostones surfaces, advantages and limitations
- Z174 EGU2012-2654
B. Menendez, P. Brimblecombe, M. Deque, C.M. Grossi, A. Ionescu, and R.A. Lefevre
The monuments of the UNESCO List under threat in the 21st century: the Project "MONUNESCO-PARIS" (2012-2013)
- Z175 EGU2012-4703
J. Vlcko, Z. Kompanikova, M. Gomez-Heras, **V. Greif**, T. Durmekova, and M. Brcek
Surface roughness change on sandstone induced by temperature increase
- Z176 EGU2012-5264
W. Boever, V. Cnudde, J. Dewanckele, T. De Kock, M. Boone, M.N. Boone, G. Silversmit, E. Van Ranst, H. Derluyn, S. Peetermans, J. Hovind, P. Modregger, M. Stamparoni, K. De Buysser, and G. De Schutter
Durability of the Indian Kandla Grey sandstone under Western European climatic conditions.
- Z177 EGU2012-5913
M. Gomez-Heras, P. Lopez-Arce, F. Bala'awi, F. Ishakat, M. Alvarez de Buergo, R. Fort, and W. Wedekind
After three decades of research, is the Nabataean city of Petra still under threat?
- Z178 EGU2012-7206
M. Auras, R. Snethlage, and J. Meinhardt
Natural Stone Monitoring as a Tool for Sustainable Conservation of Cultural Heritage
- Z179 EGU2012-9250
P.M. Carmona-Quiroga, M.T. Blanco-Varela, and S. Martínez-Ramírez
Scaling on a limestone flooring
- Z180 EGU2012-9893
B. Graue, S. Siegesmund, T. Licha, K. Simon, P. Oyhantcabal, and B. Middendorf
The effect of air pollution on the stone decay of the Cologne Cathedral
- Z181 EGU2012-10111
J. Valach, R. Cacciotti, P. Kuneš, M. ?er?anský, and J. Bláha
A Knowledge-Based System For Analysis, Intervention Planning and Prevention of Defects in Immovable Cultural Heritage Objects and Monuments
- Z182 EGU2012-10617
M. Sileo and **A. Calia**
The built heritage in the Southern Italy: problems of decay and significant properties of the building materials with relation to their durability and conservation
DECAY AND SIGNIFICANT PROPERTIES OF THE BUILDING MATERIALS WITH RELATION TO THEIR DURABILITY
- Z183 EGU2012-12282
C. Hallmann, L. Stannek, D. Fritzlar, and M. Hoppert
Microalgae on dimension stone of a medieval castle in Thuringia
- Z184 EGU2012-13253
Á. Török
Surface strength and durability assessment of stones by using non-destructive tests, such as Schmidt hammer and Durosokop
- Z185 EGU2012-13408
J. Schork, C. Lombardo, and N.R. Weiss
Mortars for Pointing and Repair of Historic Structures: Two Laboratory Studies

Wednesday, 25 April

ERE2.1 – Long-term storage of CO₂ in geological systems: Results from laboratory studies – Orals

Convener: A. Amann | Co-Conveners: A. Busch, S. Krevor

Room: 19

Chairperson: n.n.

- 08:30–09:00 EGU2012-9379
S.J.T. Hangx, C.J. Spiers, C.J. Peach, A. ten Hove, and A.M.H. Pluymakers
 Mechanical behaviour and transport properties of anhydrite - implications for caprock integrity during long-term storage of CO₂
- 09:00–09:15 EGU2012-6248
S. Vialle and G. M. Mavko
 Geophysical signatures of carbonate rocks flooded with CO₂-rich water: effect of the presence of oil in the pore space
- 09:15–09:30 EGU2012-1783
Y. Gensterblum, A. Merkel, A. Busch, and B.M. Krooss
 A conversion of CO₂-ECBM related lab observations to reservoir requirements
- 09:30–09:45 EGU2012-9078
S.M. de Jong, C.J. Spiers, and A. Busch
 Strain development in smectite clays upon exposure to CO₂
- 09:45–10:00 EGU2012-11519
X. Li, E.S. Boek, G.C. Maitland, and J.P.M. Trusler
 Interfacial tension measurement between CO₂ and brines under high temperature and elevated pressure conditions

COFFEE BREAK

Chairperson: A. Amann, A. Busch, S. Krevor

- 10:30–10:45 EGU2012-9644
E. Chapman, J. Yang, J. Crawshaw, and E.S. Boek
 Capillary filling rules and displacement mechanisms for spontaneous imbibition of CO₂ for carbon storage and EOR using micro-model experiments and pore scale simulation
- 10:45–11:00 EGU2012-11375
R. Pini, S.C.M. Krevor, M.H. Krause, and S.M. Benson
 Capillary heterogeneity in sandstones rocks during CO₂/water core-flooding experiments
- 11:00–11:15 EGU2012-848
S. Fischer, A. Liebscher, K. Zemke, M. De Lucia, and the Ketzin Team
 Reservoir rock integrity of the Ketzin pilot storage site (Germany) during long-term CO₂-exposure experiments - Mineralogical, petrophysical and geochemical modeling results
- 11:15–11:30 EGU2012-5909
J. Cama, M. Garcia-Rios, J.M. Soler, and G. Dávila
 Experimental and modeling study of the hydrogeochemical properties of the Hontomin main reservoir rock under CO₂ subcritical conditions
- 11:30–11:45 EGU2012-8238
M. Wigley, M Bickle, B Dubacq, and N Kampman
 Hematite and K-feldspar dissolution rates in an exhumed CO₂reservoir, Green River, Utah
- 11:45–12:00 EGU2012-9309
S. Peuble, M. Godard, L. Luquot, B. Gibert, D. Mainprice, I. Martinez, and P. Gouze
 CO₂ Geological Storage in Olivine Rich Basaltic Aquifers: New Insights From Flow-Through Experiments

ERE2.1 – Long-term storage of CO₂ in geological systems: Results from laboratory studies – Posters

Convener: A. Amann | Co-Conveners: A. Busch, S. Krevor

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL1 EGU2012-7481
H. Marbler, K.P. Erickson, M. Schmidt, Ch. Lempp, and H. Pöllmann
The effects of impure CO₂ on reservoir sandstones: results from mineralogical and geomechanical experiments
- XL2 EGU2012-2973
H. Abdoulghafour, L. Luquot, and P. Gouze
Effect of flow rate and initial aperture on fractured cement plug subjected to CO₂
- XL3 EGU2012-4576
F. Dethlefsen, C. Dörr, D. Schäfer, and M. Ebert
Carbonate mineral dissolution kinetics in high pressure experiments
- XL4 EGU2012-9436
P. Humez, J. Lions, V. Lagneau, and Ph. Negrel
CO₂-water-mineral reactions during CO₂ leakage into glauconitic sands: geochemical and isotopic monitoring of batch experiments
- XL5 EGU2012-9835
M. Koenen, L.J. Wasch, T.J. Tambach, and J.H. ter Heege
Experimental and geochemical modelling study of cement degradation by CO₂
- XL6 EGU2012-11144
H. Chapman, M. Wigley, M. Bickle, N. Kampman, B. Dubacq, A. Galy, C. Ballentine, and Z. Zhou
CO₂-brine-mineral Reactions in Geological Carbon Storage: Results from an EOR Experiment
- XL7 EGU2012-10192
F. Huq, P. Blum, M. Nowak, S. Haderlein, and P. Grathwohl
Experimental study on rock-water interaction due to CO₂ injection under in-situ P-T condition of the Altmark gas reservoir, Germany
- XL8 EGU2012-4728
A.-K. Scherf, **A Vieth-Hillebrand**, C Zetzl, H.-M. Schulz, and Ketzin Group
Biogeochemical monitoring of geological CO₂ storage in saline aquifers
- XL9 EGU2012-8371
A. Amann, P. Weniger, P. Bertier, and B.M. Krooss
Two-phase matrix transport & sorption experiments on low-permeable mudstones and shales within the CO₂SEALS project
- XL10 EGU2012-8450
F. Basirat, P. Sharma, A. Niemi, and F. Fagerlund
Small scale laboratory design investigation of leakage of gaseous CO₂ through heterogeneous subsurface system
- XL11 EGU2012-13780
G. Battaia and D. Garcia
A 1D plug flow reactor as validation tool for reactive transport simulations
- XL12 EGU2012-13768
C. Kuo and S Benson
Simulation Studies of Effects of Flow Rate, Gravity and Sub-Core Scale Heterogeneities on CO₂/Brine Relative Permeabilities Measurements in Horizontal Corefloods
- XL13 EGU2012-12263
H. Ott, A. Bauer, S. Oedai, K. Eide, and A. van der Linden
CO₂-Brine Displacement and Reactive Transport in Limestone
- XL14 EGU2012-8495
J. Kummerow and E. Spangenberg
Capillary pressure experiments under simulated reservoir conditions
- XL15 EGU2012-6710
L. Zuo, C.Y. Zhang, R.W. Falt, and S.M. Benson
Pore-Scale Investigation of CO₂ Exsolution from Carbonated Water in Sedimentary Rocks
- XL16 EGU2012-10820
J. Samuelson
The importance of magnesite precipitation on the frictional strength and stability of CO₂ storage reservoir fault zones
- XL17 EGU2012-6499
M. Liu and R.J. Chalaturnyk
CO₂ injection induced chemical composition and mechanical property change of shaly caprock
- XL18 EGU2012-9442
S.J.T. Hangx, E. Bakker, and C.J. Spiers
Long-term effects of CO₂ on the mechanical behaviour of faults - a study of samples from a natural CO₂ analogue (Entrada Sandstone, Utah, USA)
- XL19 EGU2012-9912
L. Zinsmeister, J. Dautriat, A. Dimanov, J. Raphanel, M. Bornert, and N. Gland
Effect of retarded acid treatment on limestone hydro mechanical properties, a multi scale approach.

- XL20 EGU2012-8692
H. Goto, T. Tokunaga, H. Yamamoto, T. Ogawa, and T. Aoki
 Laboratory experiment on dynamic failure and degradation of sealing capacity of critically stressed cap rock due to gas infiltration
- XL21 EGU2012-4036
Y. P. Lan and L. L. Tsai
 A Study of Adsorptive Characteristics of Australian Coals
- XL22 EGU2012-7620
J. Zhang, J. Yang, F. Gao, Y. Li, H. Niu, and H. Gao
 Correlation between gas permeability and pore structure of coal matrix

ERE2.2 – Site Characterization for CO₂ Geological Storage Sites – Orals

Convener: A. Niemi | Co-Conveners: M. Sauter, M. Dentz, M. Kühn, J. Carrera, T. Tambach

Room: 19

Chairperson: n.n.

- 13:30–13:45 EGU2012-9595
E. L. Pueyo, J. Klimowitz, J. L. García-Lobón, P. Calvín, A. M. Casas, B. Oliva, and ALGECO₂ team
 CCS in the Southern Pyrenees?
- 13:45–14:00 EGU2012-5418
 M.F. Loreto, **F. Donda**, V. Volpi, D. Civile, and E. Forlin
 Geological modeling of a potential site suitable for CO₂ geological storage
- 14:00–14:15 EGU2012-7231
F. Fagerlund, A. Niemi, J. Bensabat, and V. Shtivelman
 Design of a two-well field test to determine in-situ residual and dissolution trapping of CO₂ in a deep saline aquifer
- 14:15–14:30 EGU2012-10260
L. Martinez-Landa, T.S. Roetting, and J. Carrera
 Hydraulic tests to identify the CO₂ saturation at a geological site
- 14:30–14:45 EGU2012-5181
M. W. Saaltink, V. Vilarrasa, F. De Gaspari, O. Silva, and J. Carrera
 A Method for Incorporating Chemical Reactions into Multiphase Flow Models for CO₂ Injection
- 14:45–15:00 EGU2012-2048
M. Schaffer, F. Maier, T. Licha, and M. Sauter
 Development of Kinetic Interface Sensitive Tracers (KIS-Tracer) for Supercritical Carbon Dioxide Injections into Deep Saline Aquifers
- Chairperson: n.n.
- 15:30–15:45 EGU2012-3643
M. Kühn, M. Wipki, S. Durucan, J.-P. Deflandre, S. Lüth, J. Wollenweber, A. Chadwick, and G. Böhm
 Key site abandonment steps in CO₂ storage
- 15:45–16:00 EGU2012-753
V Vilarrasa, J. Carrera, and S. Olivella
 High Pressure Injection Test for Hydromechanical and Onset of Induced Microseismicity Characterization of CO₂ Injection Sites
- 16:00–16:15 EGU2012-11102
M. Angeli, R. H. Gabrielsen, and J. I. Faleide
 Assessment of seal quality for potential storage sites in the Norwegian North Sea from well log data
- 16:15–16:30 EGU2012-8973
M.L. Buddensiek, E. Lindeberg, A. Mørk, D. Jones, J.F. Girard, O. Kuras, M. Barrio, K. Royse, F. Gal, P. Meldrum, P. Pezard, A. Levannier, J. Desroches, D. Neyens, J. Paris, G. Henry, A. Bakk, F. Wertz, E. Aker, and M. Børresen
 CO₂ Field Laboratory at Svelvik Ridge: Site characterization after the first injection experiment
- 16:30–16:45 EGU2012-10027
P. A. Pezard, N. Denchik, J. Lofi, H. Perroud, and D. Neyens
 SIMEx : a shallow integrated, multi-method hydrogeophysical monitoring experiment for CO₂ storage conducted at Maguelone (Languedoc coastline, France).
- 16:45–17:00 EGU2012-1832
A. Cahill and R. Jakobsen
 Hydro-geochemical impact of CO₂ leakage from geological storage on shallow potable aquifers: A field scale pilot experiment.

ERE2.2 – Site Characterization for CO₂ Geological Storage Sites – Posters

Convener: A. Niemi | Co-Conveners: M. Sauter, M. Dentz, M. Kühn, J. Carrera, T. Tambach

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL23 EGU2012-7823
M. Kitron-Belinkov, K. Rasmusson, M. Rasmusson, F. Fagerlund, A. Niemi, J. Bensabat, and **J. Bear**
Modeling wellbore and reservoir carbon dioxide flow for the Heletz experiment
- XL24 EGU2012-949
F. De Gaspari, J. Carrera, M. Saaltink, O. Silva, and T. Rötting
"Push-pull" reactive tracer tests simulations with reactive multirate models to infer geochemical processes during CO₂ injection
- XL25 EGU2012-8443
M. Rasmusson, K. Rasmusson, F. Fagerlund, A. Niemi, J. Bensabat, and V. Shtivelman
Analysis of alternative push-pull-test-designs for determining in-situ trapping of CO₂
- XL26 EGU2012-13549
I. Ghergut, H. Behrens, T. Licha, F. Maier, M. Nottebohm, M. Schaffer, and M. Sauter
Single-well and inter-well dual-tracer test design for quantifying phase volumes and interface areas in subsurface flow and transport systems
- XL27 EGU2012-9605
B. Cubillo, L. Martínez, J. Carrera, T. Roetting, and O. Silva
Application of Thermal response test to distributed fiber-optic temperature sensor (DTS) for CO₂ storage at Hontomín Technological Development Plant
- XL28 EGU2012-3709
T. S. Roetting, D. J. Casalinuovo, and J. Carrera
Joint evolution of hydraulic transport parameters during limestone dissolution
- XL29 EGU2012-4716
M. Pool, V. Vilarasa, and J. Carrera
Dynamics of dissolved CO₂ injection systems: Optimal design.
- XL30 EGU2012-11499
J.A.C. Barth, V. Becker, A. Myrntinen, M. Zimmer, and M. Nowak
Application of stable isotope techniques to characterize CO₂ storage sites
- XL31 EGU2012-4640
P. Sharma, C.F. Tsang, A. Niemi, and J. Bensabat
Flowing Fluid Electrical Conductivity Logging at the Heletz Site for Detailed Hydraulic Information for CO₂ injection
- XL32 EGU2012-9486
E. Konstantinovskaya, M. Malo, M. Claprood, T.D. Tran-Ngoc, E. Gloaguen, and R. Lefebvre
Structural, petrophysical and geomechanical characterization of the Becancour CO₂ storage pilot site (Quebec, Canada)
- XL33 EGU2012-2000
K. Edlmann
Evaluating and quantifying the potential for CO₂ leakage through the caprock during carbon sequestration using a Risk Matrix
- XL34 EGU2012-3645
G. Cohen, C. Loisy, and **A. Cerepi**
Geochemical monitoring of vadose zone retention ability on induced CO₂ leakage
- XL35 EGU2012-10213
N. Denchik, P. Pezard, J. Paris, M. Geeraert, G. Henry, L. Baqué, S. Barry, and D. Neyens
CO₂FieldLab project. Near-surface downhole electrical resistivity monitoring for CO₂ shallow injection at the Svelvik ridge (Norway).
- XL36 EGU2012-2795
M. Erlström and U. Sivhed
Characterization of the Lower Cambrian sandstone aquifer in the Swedish Baltic Sea area - assessment regarding its potential suitability for storage of CO₂
- XL37 EGU2012-12814
C. Király, M. Berta, Á. Szamosfalvi, G. Falus, and C. Szabó
A natural site for CO₂ storage in the Little Hungarian Plain (western Hungary)
- XL38 EGU2012-3003
D. Scradeanu and M. Pagnejer
Multivariate Geostatistical Analysis of Uncertainty for the Hydrodynamic Model of a Geological Trap for Carbon Dioxide Storage. Case study: Multilayered Geological Structure Vest Valcele, ROMANIA
- XL39 EGU2012-12714
A. P. Ivakhnenko
Gas condensate reservoir characterisation for CO₂ geological storage

- XL40 EGU2012-3896
S.-K. Hsu and T. A. Lin
The potential sites and capacity of CO₂ geo-sequestration off western Taiwan
- XL41 EGU2012-4399
L. Tian, Z. Yang, A. Niemi, A. Cliffe, and F. Fagerlund
Effect of Permeability Heterogeneity on Storage Capacity Estimation in CO₂ injection
- XL42 EGU2012-5177
M. W. Wuttke and C. M. Sperber
Numerical Approaches to CO₂-Sequestration in a Faulted and Low-Permeable Saline Aquifer in NW Germany
- XL43 EGU2012-6244
M. Erlström, A. Niemi, S. Lindström, N. Gunnarsson, and S. Bou Daher
Facies distribution, heterogeneity study and numerical 3D modeling of a multilayered Rhaetian-Lower Cretaceous aquifer succession in the Höllviken Halfgraben, SW Skåne, Sweden - assessment of suitability for storage of CO₂
- XL44 EGU2012-12684
C Sassier, J.I. Faleide, P. Aagaard, and R.H. Gabrielsen
Effect of salt tectonics on potential CO₂ reservoir and caprock in the Norwegian-Danish basin.

Thursday, 26 April

ERE2.6/SM3.8 – Geophysical imaging of CO₂ geological storage sites (co-organized) – Orals

Convener: S. Lüth | Co-Conveners: S. Buske, R. Pevzner, C. Juhlin

Room: 19

Chairperson: Stefan Lüth, Christopher Juhlin

- 08:30–08:45 EGU2012-2101
F. Wagner, M. Möller, C. Schmidt-Hattenberger, T. Kempka, and H. Maurer
 Monitoring brine migration in analog transport models using surface-to-hole ERT
- 08:45–09:00 EGU2012-2690
A. Ivanova, T. Kempka, B. Norden, S. Lüth, and Ch. Juhlin
 Seismic modeling based on reservoir simulation for quantitative interpretation of 3D time-lapse seismic measurements at the Ketzin pilot site
- 09:00–09:15 EGU2012-10758
X. Zhang, D. Santonico, J.A.C. Meekes, A.R. Verdel, and R.J. Arts
 Passive and Active Seismic Monitoring of CO₂-Storage at Ketzin
- 09:15–09:30 EGU2012-4327
J. Alcalde, D. Martí, C. Juhlin, A. Malehmir, A. Calahorrano, P. Ayarza, A. Pérez-Estaún, and R. Carbonell
 Characterization of the Hontomín Research Facility for Geological Storage of CO₂: 3D Seismic Imaging Results
- 09:30–09:45 EGU2012-5957
G. Rossi, R.A. Chadwick, and G.A. Williams
 Sleipner CCS site: velocity and attenuation model from seismic tomography
- 09:45–10:00 EGU2012-12933
 V. Oye, **P. Zhao**, I. Lecomte, A. Braathen, and S. Olaussen
 Microseismic monitoring and velocity model building at the Longyearbyen CO₂-Lab, Svalbard

ERE2.6/SM3.8 – Geophysical imaging of CO₂ geological storage sites (co-organized) – Posters

Convener: S. Lüth | Co-Conveners: S. Buske, R. Pevzner, C. Juhlin

Hall XL | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Stefan Buske, Stefan Lüth

- XL1 EGU2012-336
M. Gil, J. Götz, A. Ivanova, C. Juhlin, C.M. Krawczyk, S. Lüth, and C. Yang
 Enhanced imaging of CO₂ at the Ketzin storage site: Inversion of 3D time-lapse seismic data
- XL2 EGU2012-6620
M. Ivandic, C. Yang, S. Lüth, C. Cosma, and C. Juhlin
 Time-lapse analysis of sparse 3D seismic data from the CO₂ storage pilot site at Ketzin, Germany
- XL3 EGU2012-4659
A. Calahorrano, D. Martí, J. Alcalde, I. Marzán, P. Ayarza, R. Carbonell, and A. Pérez-Estaún
 The Hontomin CO₂ geologic storage site: results from 2D seismic survey
- XL4 EGU2012-5272
M. Escalas, P. Queralt, J. Ledo, and A. Marcuello
 Detection and characterization of cultural noise sources in magnetotelluric data: individual and joint analysis of the polarization attributes of the electric and magnetic field time-series in the time-frequency domain
- XL5 EGU2012-5297
X. Ogaya, P. Queralt, J. Ledo, A. Marcuello, and A.G. Jones
 Preliminary results of the 3D magnetotelluric characterization of the Research Laboratory on Geological Storage of CO₂ in Hontomín (Burgos, Spain)
- XL6 EGU2012-5425
E. Vilamajó, P. Queralt, J. Ledo, and A. Marcuello
 A detectability study of CO₂ migration at the Research Laboratory on Geological Storage of CO₂ in Hontomín (Burgos, Spain) using a deep controlled electromagnetic source
- XL7 EGU2012-5657
M. Möller, C. Schmidt-Hattenberger, F. Wagner, and S. Schröder
 First results of an integrated monitoring concept to detect brine migration processes in freshwater aquifers
- XL8 EGU2012-10118
 E. Roux and **X. Garcia**
 Optimizing an experimental design for an electromagnetic experiment

- XL9 EGU2012-12807
G. Muñoz and O. Ritter
 Electromagnetic monitoring of CO₂ dissemination: a case study in the North Eastern German Basin
- XL10 EGU2012-13054
A. Romdhane, C. Ravaut, and E. Querendez
 CO₂ Monitoring at the Sleipner Field with Full Waveform Inversion

ERE3.1 – Mineral systems: from geological, geochemical and geophysical data to metallogenic systems simulation – Orals

Convener: C. Juhlin | Co-Conveners: P. Weihed

Room: 19

Chairperson: Chris Juhlin

- 10:30–10:45 EGU2012-1306
P. G. Lelièvre, A. Carter-McAuslan, C. Tycholiz, C. G. Farquharson, and C. A. Hurich
 Refining 3D Earth models by unifying geological and geophysical information on unstructured meshes
- 10:45–11:00 EGU2012-6443
Z. Benko, A. Mogessie, F. Molnar, M. Severson, S. Hauck, P. Lechler, and G. Arehart
 Contact metamorphism, partial melting and fluid flow in the granitic footwall of the South Kawishiwi Intrusion, Duluth Complex, USA
- 11:00–11:15 EGU2012-7156
N. Jemmali, F. Souissi, E.J.M. Carranza, and T.W. Vennemann
 Lead and sulfur isotopes of Guarn Halfaya and Bou Grine deposits associated to salt dome cap rocks (Diapirs zone, Northern Tunisia): sources of metals and genetic model
- 11:15–11:30 EGU2012-14048
A. Malehmir, C. Juhlin, and C. Wijns
 3D reflection seismic imaging in the Kevitsa Ni-Cu-PGE deposits, northern Finland
- 11:30–11:45 EGU2012-11554
C. Prazeres, M.J. Batista, M. Gonçalves, and A. Pinto
 Exploration tools applied to Nisa and Tarabau uranium deposits, Portugal
- 11:45–12:00 EGU2012-294
O. Ahmadi and C. Juhlin
 High Resolution 2D Seismic Exploration of Poly-Metallic Massive Sulfide deposits at Garpenberg, Central Sweden

ERE3.1 – Mineral systems: from geological, geochemical and geophysical data to metallogenic systems simulation – Posters

Convener: C. Juhlin | Co-Conveners: P. Weihed

Hall XL | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Karin Högdahl

- XL11 EGU2012-2236
E. Asakawa, F. Murakami, Y. Sekino, T. Okamoto, K. Ishikawa, H. Tsukahara, and T. Shimura
 Vertical Cable Seismic Survey for Hydrothermal Deposit
- XL12 EGU2012-1309
P. G. Lelièvre, P. Zheglova, T. Danek, and C. G. Farquharson
 Parameterization of the Earth's subsurface to flexibly emphasize distinct rock units
- XL13 EGU2012-4100
N. Arvanitidis, C. Michael, G. Perantonis, V. Bakalis, D. Ballas, and C. Christidis
 Using 3D/4D modeling tools in exploration for orogenic gold-polymetallic mineralisations in Greece
- XL14 EGU2012-13161
O. P. Ivakhnenko
 New petrophysical magnetic methods MACC and MAFM in permeability characterisation of petroleum reservoir rock cleaning, flooding modelling and determination of fines migration in formation damage
- XL15 EGU2012-14412
T. Bauer, P. Skyttä, T. Hermansson, and P. Weihed
 Ore body shapes versus regional deformation patterns as a base for 3D prospectivity mapping in the Skellefte Mining District, Sweden
- XL16 EGU2012-14336
K Högdahl, E. Jonsson, K Nilsson, and V Troll
 The Kiruna-type apatite-iron oxide system in central Sweden: geology and geochemical character

- XL17 EGU2012-14235
P. Dahlin
Palaeoproterozoic metavolcanic and metasedimentary succession hosting the Dannemora iron ore deposits, Bergslagen region, Sweden
- XL18 EGU2012-14187
M Dehghannejad, T Bauer, A Malehmir¹, and C Juhlin
Reflection seismic imaging to construct a 3D geological model of the central Skellefte district, northern Sweden
- XL19 EGU2012-14182
M de los Angeles García Juanatey, J Hübner, A Tryggvason, C Juhlin, and LB Pedersen
Imaging the western Skellefte Ore District with MT and reflection seismics
- XL20 EGU2012-14180
P Skyttä, T Bauer, S Tavakoli, T Hermansson, J Andersson, and P Weihed
Evolution of early-orogenic deformation zones and their significance for the development of contrasting structural domains within the Palaeoproterozoic Skellefte District, Sweden
- XL21 EGU2012-10718
A. Mormone, M. Piochi, M.A. Di Vito, C. Troise, and G. De Natale
Secondary hydrothermal mineral system in the Campi Flegrei caldera, Italy
- XL22 EGU2012-14047
S. Cheraghi, **A. Malehmir**, and G. Bellefleur
2D and 3D reflection seismic investigations in the Brunswick No. 6 area, Bathurst Mining Camp, New Brunswick, Canada
- XL23 EGU2012-14045
G. Bellefleur, A. Malehmir, and C. Müller
Elastic finite-difference modeling of volcanic-hosted massive sulphide deposits, Halfmile Lake, New Brunswick, Canada
- XL24 EGU2012-13417
T. Gołbowski, A. Pieczka, and B. Gołbowski
Geophysical research for the recognition of polymetallic mineralization in the quarry in Rędziny (Poland)

GMPV1.4/ERE3.5 – Elements critical to 21st century economies (co-sponsored by the Society of Economic Geologists (SEG), Society for Geology Applied to Mineral Deposits (SGA), and by the European Association of Geochemistry (EAG)) (co-organized) – Orals

Convener: R. Herrington | Co-Conveners: L. Fontbote, Y. Watanabe

Room: 31

Chairperson: R. Herrington

- 08:30–08:45 EGU2012-11889
L. Lerchbaumer and A. Audétat
The metal content of molybdenum-mineralizing fluids
- 08:45–09:00 EGU2012-11073
M. Kesraoui, **C. Marignac**, A. Hamis, and M. Cuney
A Ta-rich low-P peraluminous granite: the Rechla cupola (Hoggar, Algeria) and associated pegmatites, the result of extreme fractionation of a A2-type magma.
- 09:00–09:15 EGU2012-8709
K.N. Malitch, E.A. Belousova, I.Yu. Badanina, and W.L. Griffin
Zircon and baddeleyite from the economic ultramafic-mafic Noril'sk-1 intrusion (Russia): Hf-isotope constraints on source composition
- 09:15–09:30 EGU2012-9302
N. Ekimova, P. Serov, and T. Bayanova
The dating of ore genesis with using of sulfides: new opportunities of Sm-Nd method
- 09:30–09:45 EGU2012-12105
R.R. Hark, **R.S. Harmon**, J.J. Remus, L.J. East, M.A. Wise, B.M. Tansi, K.M. Shughrue, K.S. Dunsin, and C. Liu
Application of laser-induced breakdown spectroscopy (LIBS) as a tool to determine the origin of 'conflict minerals'
- 09:45–10:00 EGU2012-4075
o. vidal, p. christmann, d. Bol, b. Goffé, m. Groth, e. Kohler, k. Persson Nelson, and k. Schumacher
ERA-MIN: The European network (ERA-NET) on non-energy raw materials

COFFEE BREAK

Chairperson: L. Fontbote

- 10:30–10:45 EGU2012-4223
Y. Watanabe
Exploration of dysprosium: the most critical element for Japan
- 10:45–11:00 EGU2012-7418
K. Sanematsu, K. Yoshiaki, and Y. Watanabe
Genesis of ion-adsorption type REE ores in Thailand
- 11:00–11:15 EGU2012-8541
S. Broom-Fendley, F. Wall, A.G. Gunn, and E. Dowman
Targeting heavy rare earth elements in carbonatite complexes
- 11:15–11:30 EGU2012-13888
R. Herrington
Potential for cobalt recovery from lateritic ores in Europe
- 11:30–11:45 EGU2012-14380
F.-W. Wellmer
Sustainable Management of Mineral Resources—another view on criticality.
- 11:45–12:00 EGU2012-14383
R L Moss
Critical Metals in Strategic Low-carbon Energy Technologies

ERE5.2 – Measurement of Greenhouse Gases at the Urban Scale – Orals

Convener: E. Crosson | Co-Conveners: P. Ciais

Room: 28

Chairperson: Eric Crosson

- 13:30–13:45 EGU2012-7015
E.A. Kort, C.E. Miller, R Duren, A Eldering, S Sander, and S Newman
Megacity Carbon: Observing system study for tracking Los Angeles greenhouse gas emission trends
- 13:45–14:00 EGU2012-13707
J. Whetstone, PB Shepson, KJ Davis, C. Sweeney, KR Gurney, NL Miles, S. Richardson, T. Lauvaux, I. Razlivanov, Y. Zhou, Y. Song, JC Turnbull, A. Karion, ML Cambaliza, W. Callahan, **E. Novakovskaia**, E. Crosson, C. Rella, and A. Possolo
Urban-Dome GHG Monitoring: Challenges and Perspectives from the INFLUX Project
- 14:00–14:15 EGU2012-13689
E. Novakovskaia and C. Sloop
A Tale of Two Cities - Differences and Similarities in GHG Observations for Two Coastal Sites from Earth Networks
- 14:15–14:30 EGU2012-11623
A Grant, S O'Doherty, AJ Manning, PG Simmonds, RG Derwent, JB Moncrieff, and WT Sturges
A new UK Greenhouse Gas measurement network providing ultra high-frequency measurements of key radiatively active trace gases taken from a network of tall towers
- 14:30–14:45 EGU2012-12895
W. R. McGillis, G. Jacobson, P. Culligan, S. Gaffin, T. Carson, D. Marasco, D. Hsueh, and C. Rella
Surface emissions of heat, water and GHGs from a NYC greenroof
- 14:45–15:00 EGU2012-13419
I. Xueref-Remy, S. Pal, M. Lopez, M. Schmidt, E. Dieudonné, C. Vuillemin, M. Darding, and B. Wastine
Atmospheric investigation of the role of the different emission sectors in the total CO₂ emission plume from the Paris megacity.

ERE5.2 – Measurement of Greenhouse Gases at the Urban Scale – Posters

Convener: E. Crosson | Co-Conveners: P. Ciais

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Eric Crosson

- XL25 EGU2012-13656
A. Fornaro, M.F. Andrade, R.Y. Ynoue, W. Galichio, R. Astolfo, and R.M. Miranda
Greenhouse gases measurements in road tunnel in São Paulo Megacity, Brazil
- XL26 EGU2012-13492
J.B. Leen, N. Bramall, M. Gupta, and **D. Baer**
High-Resolution Urban Monitoring of Greenhouse Gases and Pollutants
- XL27 EGU2012-2881
M. Zimnoch, D. Jelen, **M. Galkowski**, T. Kuc, J. Necki, L. Chmura, Z. Gorczyca, A. Jasek, and K. Rozanski
Apportionment of carbon dioxide over central Europe: insights from combined measurements of atmospheric CO₂ mixing ratios and carbon isotope composition

- XL28 EGU2012-6986
S. Newman, Y. K. Hsu, **E. A. Kort**, S. P. Sander, A. Elderling, R. M. Duren, C. E. Miller, and Y. L. Yung
Initial results from a CO₂ monitoring network in the Los Angeles megacity
- XL29 EGU2012-13156
C. Rella and G. Jacobson
Measurements of Carbon Dioxide, Carbon Monoxide, and Other Related Tracers at High Spatial and Temporal Resolution in an Urban Environment
- XL30 EGU2012-11854
D. Lowry, R.E. Fisher, G. Zazzeri, M. Lanoisellé, and E.G. Nisbet
Use of Carbon 13 data to Verify Urban Methane Inventories: A London Regional Case Study
- XL31 EGU2012-13401
J. Mønster, P. Kjeldsen, and C. Scheutz
Measurements of methane emissions from landfills using mobile plume method with trace gas and cavity ring-down spectroscopy

ERE5.3/GMPV6.7/HS8.2.8/SSS5.22 – Coupled Physical and Chemical Transformations Affecting the Performance of GeoSystems (co-organized) – Orals

Convener: H. Holländer | Co-Conveners: P. Alt-Epping, J. M. Soler, J. Taron, G. Kosakowski

Room: 19

Chairperson: Hartmut Holländer

- 13:30–14:00 EGU2012-6910
M.C. Hill, D. Kavetski, M.P. Clark, M. Ye, C.R. Tiedeman, M. Arabi, and D. Lu
Knowledge, transparency, refutability, and consequences: Using models to evaluate geologic repositories
- 14:00–14:15 EGU2012-5069
M. Kelly, **A. Carter**, L. Bailey, and M. Wellstead
Development of an Insight Model for Post-closure Radiological Risks from the Disposal of High-level Waste and Spent Fuel
- 14:15–14:30 EGU2012-1665
J.-O. Selroos, H. Cheng, S. Painter, and P. Vidstrand
Radionuclide transport during glacial cycles: Comparison of two different approaches for handling flow transients
- 14:30–14:45 EGU2012-9217
K. Beerten, M. De Craen, and S. Brassinnes
Constraints for estimating the future burial depth of host rocks for geological waste disposal: a case study from the Boom Clay, Campine area, Northern Belgium
- 14:45–15:00 EGU2012-3812
V.M. Yarushina, D. Bercovici, and M.L. Oristaglio
Effect of rock rheology on fluid leak-off during hydraulic fracturing
- Chairperson: Peter Alt-Epping
- 15:30–15:45 EGU2012-1758
Y. Gensterblum, M. Sartorius, A. Busch, D. Cumming, and B.M. Krooss
CO₂-ECBM related coupled physical and mechanical transport processes
- 15:45–16:00 EGU2012-363
P. Gamazo, J. Carrera, M.W. Saaltink, L. Slooten, C. Ayora, and S. Bea
Modeling the influence of geochemical processes on multiphase fluid dynamics for concentrated solutions under dry conditions.
- 16:00–16:15 EGU2012-11374
K. De Pourcq, C. Ayora, J. Carrera, M. García-Gutiérrez, T. Missana, and M. Mingarro
Reactive transport modeling for Cs retention: from batch to field experiments
- 16:15–16:30 EGU2012-2640
L. Haffert and M. Haeckel
The effect of strong salinity and temperature gradients on transport processes and the formation of bathyal authigenic gypsum at a marine mud volcano
- 16:30–16:45 EGU2012-6242
A. Budek and P. Szymczak
Network models of dissolution and precipitation of porous media
- 16:45–17:00 EGU2012-10509
P. Hron, D. Jost, C. Engwer, O. Ippisch, and P. Bastian
Numerical Simulation of Microbiological Growth in the Capillary Fringe

ERE5.3/GMPV6.7/HS8.2.8/SSS5.22 – Coupled Physical and Chemical Transformations Affecting the Performance of GeoSystems (co-organized) – Posters

Convener: H. Holländer | Co-Conveners: P. Alt-Epping, J. M. Soler, J. Taron, G. Kosakowski

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL32 EGU2012-4849
L. Bailey, **H. Clark**, and M. Wellstead
Development of an Environmental Safety Case for a Geological Disposal Facility in the UK
- XL33 EGU2012-7131
M.-H. Derron and M. Jaboyedoff
Regional scale mapping of sub-surface water-rock interactions
- XL34 EGU2012-9627
M. Biafore and the REWARD Team
Real Time Wide Area Radiation Surveillance System
- XL35 EGU2012-8208
B. Leterme
Climate change in safety assessment of a surface disposal facility
- XL36 EGU2012-5029
H. Clark, L. Bailey, and A. Parkes
Interpretation and Modelling of Data from Site Investigations for a Geological Disposal facility located in the UK
- XL37 EGU2012-7080
Y. Jin, Y. Konno, and J. Nagao
Spectroscopic study of formation and dissociation processes of methane hydrate in porous media
- XL38 EGU2012-7129
Y. Konno, Y. Jin, and J. Nagao
Measurements of Gas-Water Relative Permeability for Methane-Hydrate-Bearing Sediments using X-ray Computed-Tomography
- XL39 EGU2012-7496
J. Nagao, H. Oyama, Y. Konno, and Y. Jin
Development of a Large-Scale Laboratory Vessel for Methane Hydrate Production Tests
- XL40 EGU2012-7196
M. Gedeon, K. Vandersteen, and B. Rogiers
Estimation of aquifer radionuclide concentrations by postprocessing of conservative tracer model results
- XL41 EGU2012-7241
M. Gedeon and D. Mallants
Comparison between a steady-state and a transient flow model and related radionuclide concentration predictions
- XL42 EGU2012-9341
C. Bube, V. Metz, D. Schild, E. Bohnert, and B. Kienzler
Long-term cement-corrosion in chloride-rich solutions - a thermodynamic interpretation
- XL43 EGU2012-2651
M. E. Houben, **B. Laurich**, G. Desbois, and J.L. Urai
Microstructure and porosity of Opalinus Clay at the Mont Terri rock laboratory (Switzerland)
- XL44 EGU2012-941
S. De Simone, V. Vilarrasa, and J. Carrera
Fracture instability caused by cold water injection
- XL45 EGU2012-1094
J. M. Soler
Reactive transport modeling of concrete-clay interaction: The DM borehole at Tournemire.
- XL46 EGU2012-2642
G. Kosakowski, D.A. Kulik, and H. Shao
OpenGeoSys-GEMS: Hybrid parallelization of a reactive transport code with MPI and threads
- XL47 EGU2012-1760
H. Shao, **G. Kosakowski**, U. Berner, D. Kulik, U. Mäder, and O. Kolditz
Is the clogging process in Maqarin natural analogue controlled by accessory clay minerals? A reactive transport study with new data.
- XL48 EGU2012-12088
P. Alt-Epping, B.S.G. Almqvist, and L.W. Diamond
Coupled numerical simulations of CO₂ injection into the carbonate aquifer of the Upper Muschelkalk, N-Switzerland
- XL49 EGU2012-2650
M. Hayek, **G. Kosakowski**, A. Jakob, and S. Churakov
Benchmarking of numerical codes against analytical solutions for multidimensional multicomponent diffusive transport coupled with precipitation-dissolution reactions and porosity changes

- XL50 EGU2012-4605
N. Blundell, **M. O. Cuthbert**, M. S. Riley, S. Handley-Sidhu, and J. C. Renshaw
Engineering biomineralised groundwater flow barriers for inhibiting radionuclide transport in fractured rocks
- XL51 EGU2012-9340
T. Gimmi and A. Jakob
Assessing conceptual errors and parameter errors of a transport model used for analysing a field diffusion experiment
- XL52 EGU2012-1607
J. M. Soler, M. Vuorio, and A. Hautajärvi
High-pH plume from fracture grouting. Application to low-pH-cement grouting at ONKALO (Finland).
- XL53 EGU2012-13444
J Samper, A. Mon, L. Montenegro, A. Naves, and B. Pisani
Thermal-hydrodynamic-geochemical models of engineered clay barriers
- XL54 EGU2012-3090
M. G. Davila Ordoñez, M. García Rios, J.M Soler, and J. Cama
Modeling dolomite - brine interaction in the context of geological CO2 sequestration
- XL55 EGU2012-5097
E. Torres, C. Ayora, J.L. Arias, E. Garcia_Robledo, S. Papaspyrou, and A. Corzo
Diffusion-reaction modelling of early diagenesis of sediments affected by acid mine drainage.
- XL56 EGU2012-6368
J. M. Galíndez and C. Steefel
Incorporating surface phenomena into solute transport through compacted clays - Application of the Poisson-Nernst-Planck set of equations
- XL57 EGU2012-10965
J. Schikora, J. Kulenkampff, M. Gründig, and J. Lippmann-Pipke
Modelling and Simulation of 4D GeoPET Measurements with COMSOL Multiphysics 4.2a

SM5.2/ERE5.6 – Induced Seismicity: Theory and Observation (co-organized) – Posters

Conveners: J. C. Groos, P. Jousset | Co-Conveners: G. Kwiatek, M. Bohnhoff, J.R.R. Ritter, R. Gritto

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P. Jousset

- A355 EGU2012-686
E. Bazhenova, A. Troyanov, Yu. Astrakhantsev, N. Nachapkin, and A. Vdovin
Seismoacoustic Emission and Lunar-Solar Tidal Deformation Processes in the Geo-Environment Volume
- A356 EGU2012-652
E. Bazhenova, A. Troaynov, Yu. Astrakhantsev, N. Beloglazova, A. Vdovin, and N. Nachapkin
Results of researches Seismoacoustic Emission and Electromagnetic Radiation of Fractured Rocks in Deep Wells
- A357 EGU2012-5589
J. Vleck and T. Fischer
Seismicity induced by hydraulic stimulation - seismic efficiency of injection and spatiotemporal analysis
- A358 EGU2012-12050
M. Bischoff, M. Keyser, T. Plenefisch, U. Wegler, E. Wetzig, L. Ceranna, and C. Bönnemann
Microseismic survey at the geothermal site GeneSys in Hannover, Germany
- A359 EGU2012-9039
E.A. Gudnason, K. Agustsson, and O.G. Flovenz
The GEISER project: Analysis of induced seismicity in the Reykjanes geothermal system, SW-Iceland
- A360 EGU2012-2956
N. Sharma, V. Convertito, N. Maercklin, and A. Zollo
Modeling of Strong Ground Motion in "The Geysers" Geothermal Area
- A361 EGU2012-6690
R. Gritto and S. Jarpre
Reservoir Changes Derived from Seismic Observations at The Geysers Geothermal Field, CA, USA
- A362 EGU2012-6609
M. L. Andersen, **T. B. Larsen**, and M. Nettles
Analysis of seismogenic rumblings from Helheim Glacier, South East Greenland
- A363 EGU2012-5806
L. Dimitrova, G. Georgieva, S. Nikolova, **D. Solakov**, S. Simeonova, I. Asparuhova, and I. Popova
Tectonic and induced seismicity in the region of Mirovo salt deposit, NE Bulgaria
- A364 EGU2012-6936
A. Kozyrev, Iu. Fedotova, and **O. Zhuravleva**
Methods of seismic zone localization in the highly stressed geological environment in mining natural-engineering system

- A365 EGU2012-6975
Iu.V Fedotova and **S. A. Zhukova**
Interrelation of rock mass seismicity change and subsoil hydrogen emanation
- A366 EGU2012-8758
N. Gestermann and T. Plenefisch
Microseismic events in the vicinity of the natural gas fields of Verden in Northern Germany
- A367 EGU2012-10482
J. C. Groos, M. Grund, and J. R. R. Ritter
Automated detection of microseismic events in the Upper Rhine valley near the city of Landau/South Palatinate
- A368 EGU2012-1660
B. Homuth, G. Rümpker, and M. Kracht
Microseismic monitoring in the northern Upper-Rhine Graben
- A369 EGU2012-11183
K. Plenkers, J. Ritter, and M. Schindler
Detecting weak seismicity in urban areas using waveform stacking and cross correlation: Application to a stimulation experiment
- A370 EGU2012-10190
E. Gaucher
Effective sensitivity estimate of the microseismic monitoring network deployed in Bruchsal geothermal field
- A371 EGU2012-11827
T. Megies and J. Wassermann
Microseismicity Observed at a Non-Pressure-Stimulated Geothermal Plant
- A372 EGU2012-2957
T. Kraft, S. Wiemer, and S. Husen
GeoBest - A contribution to the long term development of deep geothermal energy in Switzerland.

Friday, 27 April

ERE1.2 – Wind Power Meteorology – Orals

Convener: G. Giebel | Co-Conveners: AM Sempreviva, Dr. Baidya Roy

Room: 19

Chairperson: n.n.

- 08:30–08:45 EGU2012-8708
G. V. Iungo, Y.-T. Wu, and F. Porté-Agel
 Multi-component wind measurements of wind turbine wakes performed with three LiDARs
- 08:45–09:00 EGU2012-3975
S. Bradley
 The Gust SODAR
- 09:00–09:15 EGU2012-11844
R. Calif and F.G. Schmitt
 Estimating of a nonlinear power curve for a Wind Turbine Generator
- 09:15–09:30 EGU2012-11101
F. Porté-Agel, Y.T. Wu, and H. Lu
 Interactions between wind farms and the atmospheric boundary layer
- 09:30–09:45 EGU2012-10022
A. Bichet, M. Wild, D. Folini, and C. Schär
 Causes for decadal changes in wind speed on the North Hemispheric land surfaces
- 09:45–10:00 EGU2012-3065
S. Jerez, R. M. Trigo, J. P. Montavez, R. Lorente-Plazas, and D. Pozo-Vazquez
 The North Atlantic Oscillation and the Wind Power in the Iberian Peninsula

COFFEE BREAK

Chairperson: Gregor Giebel

- 10:30–10:45 EGU2012-4235
A. Devis, M. Demuzere, and N.P.M. van Lipzig
 A statistical model to downscale GCM output to wind speeds at turbine rotor height
- 10:45–11:00 EGU2012-10524
P. A. Jimenez and J. Dudhia
 Improving the representation of resolved and unresolved topographic effects on surface wind in the WRF model
- 11:00–11:15 EGU2012-13936
J. Jiang, D. Koracin, R. Hamilton, D. Hagen, and K.C. King
 Modeling Feasibility of a Proposed Renewable Energy System with Wind and Solar Resources and Hydro Storage in Complex Terrain
- 11:15–11:30 EGU2012-13715
 G. U. Bhaskar and **C. A. Schlosser**
 Characterization of wind, solar and combined resource in Europe
- 11:30–11:45 EGU2012-10634
C. Stathopoulos, A. Kaperoni, G. Galanis, and G. Kallos
 New Dynamical-Statistical Techniques for Wind Power Prediction
- 11:45–12:00 EGU2012-6052
LM Miller, F Gans, and A Kleidon
 Jet stream wind power as a renewable energy resource: little power, big impacts

ERE1.2 – Wind Power Meteorology – Posters

Convener: G. Giebel | Co-Conveners: AM Sempreviva, Dr. Baidya Roy

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Gregor Giebel

- XL1 EGU2012-318
F. Prattico, F. Petroni, and G. D'Amico
 First and second order semi-Markov chains for wind speed modeling

- XL2 EGU2012-957
N. Kirchner Bossi, S. Salcedo Sanz, L. Carro Calvo, L. Prieto, and R. Garcia Herrera
Surface Wind Speed Patterns from Synoptic Pressure Series employing different soft-computing algorithms
- XL3 EGU2012-976
E. Unal, E. Tan, S. S. Menten, F. Caglar, M. Turkmen, Y. S. Unal, B. Onol, and E. T. Ozdemir
A Comparison Of Primitive Model Results Of The Short Term Wind Energy Prediction System (Sweeps): WRF vs MM5
- XL4 EGU2012-2667
A. Hidalgo, J. F. González-Rouco, P. A. Jiménez, J. Navarro, E. García-Bustamante, E. E. Lucio-Eceiza, J. P. Montávez, A. Y. García, and L. Prieto
Onshore and offshore wind resource evaluation in the northeastern area of the Iberian Peninsula: quality assurance of the surface wind observations
- XL5 EGU2012-2756
K. Starosta, J. Linkowska, and A. Mazur
Local wind conditions in Poland.
- XL6 EGU2012-4787
B.-K. Seo, S.-W. Lee, J.-Y. Byon, S.-H. Jeon, Y.-S. Park, and Y.-J. Choi
Development and improvement of the wind resources map over South Korea
- XL7 EGU2012-5497
E. Avolio, S. Federico, A.M. Sempreviva, C.R. Calidonna, and M. Courtney
Testing the data assimilation technique for short-term wind forecast in the PBL: a case study
- XL8 EGU2012-10767
G. Kallos, G. Galanis, C. Spyrou, C. Kalogeri, A. Adam, and P. Athanasiadis
Offshore Energy Mapping for Northeast Atlantic and Mediterranean: MARINA PLATFORM project
- XL9 EGU2012-11241
Y.T. Wu and F. Porté-Agel
Effect of atmospheric turbulence on wind turbine wakes: An LES study
- XL10 EGU2012-11394
E. Stuetz, G. Steinfeld, D. Heinemann, and J. Peinke
Parameterization of wind farms in COSMO-LM
- XL11 EGU2012-13019
W. Zhang, C.D. Markfort, and F. Porté-Agel
Wind-tunnel experiments of scalar transport in aligned and staggered wind farms
- XL12 EGU2012-13238
C.D. Markfort, W. Zhang, and F. Porté-Agel
Turbulent flow and scalar flux through and over aligned and staggered wind farms
- XL13 EGU2012-13636
M. H. Rosgaard, **G. Giebel**, T.S. Nielsen, A. Hahmann, P. Sørensen, and H. Madsen
Integrated Wind Power Planning Tool
- XL14 EGU2012-4964
K. Baumann-Stanzer, H.V. Tran, H. Kaufmann, E. Koch, C. Lotteraner, and M. Piringer
Site assessment for wind farms in Austria - ground-based remote-sensing and modelling
- XL15 EGU2012-979
E. E. Lucio-Eceiza, J. F. González-Rouco, J. Navarro, H. Beltrami, P. A. Jiménez, E. García-Bustamante, and A. Hidalgo
A quality assured surface wind database in Eastern Canada
- XL16 EGU2012-2784
T. Sile, J. Sennikovs, and U Bethers
Estimation of wind regime from combination of RCM and NWP data in the Gulf of Riga (Baltic Sea)
- XL17 EGU2012-3515
J. Reuder and M. Jonassen
The potential of micro-UAS for turbulence measurement in wind parks
- XL18 EGU2012-5353
F. Petroni, **G. D'Amico**, and F. Prattico
A reward semi-Markov process with memory for wind speed modeling
- XL19 EGU2012-12718
M. Boquet and L. Thobois
Wind Resource Assessment Campaign with Lidars and Met Mast in Large and Complex Sites
- XL20 EGU2012-10387
B. Witha, G. Steinfeld, D. Heinemann, and **E. Stütz**
High-resolution offshore wake simulations with the LES model PALM
- XL21 EGU2012-2409
J. Courtney, C. Sweeney, and P Lynch
High resolution probabilistic forecasting for wind energy applications.

- XL22 EGU2012-11757
R. Lorente-Plazas, J.P. Montavez, J.A. García-Valero, J.J. Gómez-Navarro, S. Jerez, R. Baró, P.A. Jiménez, and P. Jiménez-Guerrero
 Spatial and temporal wind variability over Spain and its relationship with synoptic weather types

ERE1.12 – Sustainability transitions of the socio-ecologic system – Orals

Convener: D. E. Reusser | Co-Conveners: J. Kropp, D. Rybski, A. Cerdà, A. Ferreira

Room: 19

Chairperson: Cerda, Reusser

- 13:30–14:00 EGU2012-14156
J. Rotmans
 Sustainability Transitions as new perspective
- 14:00–14:15 EGU2012-10614
D. Neubersch, H. Held, A. Lorenz, and E. Kriegler
 Conceptual Challenges in Assessing Climate Targets under Uncertainty and Learning
- 14:15–14:30 EGU2012-9484
M. Fischer Kowalski, W. Haas, D. Wiedenhofer, and F. Krausmann
 Socio-metabolic transitions during the 20th century and their impacts on the scale of human resource use
- 14:30–14:45 EGU2012-4839
J.P. Kropp, L. Costa, and D. Rybski
 Reconciliation of climate protection & development: the role of OECD & developing countries
- 14:45–15:00 EGU2012-13679
M. Carreiras, A.J.D. Ferreira, T.C.J. Esteves, F. Delgado, F. Andrade, J. Franco, and C.D. Pereira
 How can LCA approaches contribute to improve geo-cycles management

ERE1.12 – Sustainability transitions of the socio-ecologic system – Posters

Convener: D. E. Reusser | Co-Conveners: J. Kropp, D. Rybski, A. Cerdà, A. Ferreira

Hall XL | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Cerda, Ferreira, Kropp, Rybski, Reusser

- XL23 EGU2012-14302
A.J.D. Ferreira
 Geosciences for sustainability
- XL24 EGU2012-3410
A.-M. Burlea and I. Muntele
 Infant mortality evolution in Romania: perspectives from a country in transition
- XL25 EGU2012-4109
D. E. Reusser, F.A.P. Siabatto, A. Garcia Cantu Ros, C. Pape, T. Lissner, and J.P. Kropp
 Modelling interactions between mitigation, adaptation and sustainable development
- XL26 EGU2012-4988
D. Rybski, L. Costa, and J.P. Kropp
 Projecting Human Development and CO2 emissions employing correlations
- XL27 EGU2012-11536
S.J. Singh and H. Haberl
 Long term socio-ecological research across temporal and spatial scales
- XL28 EGU2012-3851
M.D. Taylor, A.D. Mackay, E. Dominati, and R.B. Hill
 Towards Integrating Soil Quality Monitoring Targets as Measures of Soil Natural Capital Stocks with the Provision of Ecosystem Services
- XL29 EGU2012-13693
A.N.S. Muacahila, A.J.D. Ferreira, and C.O.A. Coelho
 Geosciences knowledge to improve the livelihood of the Arcos Region in the Namibe Desert , South of Angola
- XL30 EGU2012-7335
C. Schleupner, U.A. Schneider, P. Havlik, and T. Stacke
 Development of a Global Wetland Sustainability Index for comprehensive land use planning
- XL31 EGU2012-13499
T.C.J. Esteves, P. Cabral, A.J.D. Ferreira, and J.C. Teixeira
 Multi-criteria decision analysis for bioenergy in the Centre Region of Portugal

- XL32 EGU2012-13520
I. Jacquemin, C. M. Fontaine, N. Dendoncker, L. François, R. De Vreese, A. Marek, D. Mortelmans, A. Van Herzele, and G. Devillet
 Dynamic modelling of future land use change under urbanization and climate change pressures: application to a case study in central Belgium
- XL33 EGU2012-13617
J. Gregg and A. hvid
 Future Diet Scenarios and Their Effect on Regional and Global Biofuel Potential
- XL34 EGU2012-14049
P. Pradhan, D.E. Reusser, and J.P. Kropp
 Food transitions in last 50 years and related environmental implications

GMPV1.4/ERE3.5 – Elements critical to 21st century economies (co-sponsored by the Society of Economic Geologists (SEG), Society for Geology Applied to Mineral Deposits (SGA), and by the European Association of Geochemistry (EAG)) (co-organized) – Posters

Convener: R. Herrington | Co-Conveners: L. Fontbote, Y. Watanabe

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Y Watanabe

- XL188 EGU2012-1031
A. Jimenez
 Sulfur isotope study of the Velardeña skarn (Zn-Pb), Durango, Mexico
- XL189 EGU2012-5157
M. Kumral, A. Karada?, M. Soyal, ?. Caran, A.K. Akay, S.B. Karabel, N. Elmas, M. Karaman, and M. Budakoglu
 Excess Nd and Eu Concentrations Discovered in Chromite Deposits from the Beyagaç District, Denizli region, SW Turkey
- XL190 EGU2012-6294
E. L. Iatan and Gh. C. Popescu
 Preliminary mineralogical data on epithermal ore veins associated with Rosia Poieni porphyry copper deposit, Apuseni Mountains, Romania
- XL191 EGU2012-8442
T.M. Sushchevskaya, J.A. Popova, T.A. Velivetskaya, A.V. Ignatiev, S.S. Matveeva, and O.A. Limantseva
 Mixing of fluids in hydrothermal ore-forming (Sn,W) systems: stable isotope and rare earth elements data
- XL192 EGU2012-11387
K. Högdahl, E. Jonsson, V. Troll, and J. Majka
 The mineral treasure that almost got away: Re-evaluating yesterday's mine waste
- XL193 EGU2012-11611
A. Vishiti, S. Petersen, C.E. Suh, and C.W. Devey
 Arsenian pyrite-bearing altered volcanics dredged SE of Cheshire Seamount Woodlark Basin, Papua New Guinea.
- XL194 EGU2012-10315
A. Sakaguchi, T. Sugiyama, A. Usui, and Y. Takahashi
 Enrichment mechanisms of tellurium in ferromanganese crusts
- XL195 EGU2012-4402
M. E. Cioaca and M. Munteanu
 The present state of knowledge on the high-technology elements in porphyry copper deposit from Romania
- XL196 EGU2012-2280
J.L. Vigneresse, O. Bachmann, C. Huber, A. Parmigiani, J. Dufek, and E. Campos
 Ore formation in porphyry-type deposits during incrementally built magma chamber and fluid sparging
- XL197 EGU2012-3978
M. Hoshino, Y. Watanabe, H. Murakami, Y. Kon, and M. Tsunematsu
 Crystallization process of zircon and fergusonite during hydrothermal alteration in Nechalacho REE deposit, Thor Lake, Canada
- XL198 EGU2012-11121
C. Marignac and M. Cuney
 Evidence of Nb-Ta mobility in high temperature F-rich fluids evidenced by the La Bosse quartz-Nb-ferberite stockwork (Echassières, French Massif Central).
- XL199 EGU2012-730
S. Moldoveanu, O.G. Iancu, and H.U. Kasper
 Mineralogy and geochemistry of trace and Rare Earth Element from the Manaila massive sulphide deposit (Eastern Carpathians, Romania)

- XL200 EGU2012-4587
A.S Walters, H.S.R Hughes, K.M Goodenough, A.G Gunn, and A Lacinska
 Rare earth mineralisation in the Cnoc nan Cuilean intrusion of the Loch Loyal Syenite Complex, northern Scotland
- XL201 EGU2012-9271
T. Takagi
 The modes of occurrence of rare-earth ores and the issues on their beneficiation processes
- XL202 EGU2012-7482
N. Mondillo, M. Boni, G. Balassone, and G. Rollinson
 REE in karst bauxites: the Campania example (southern Italy)
- XL203 EGU2012-7589
C. Oztürk, E. Varol, and T. Ünlü
 Geochemistry of Chromite Occurrences of Divrigi Area, Turkey
- XL204 EGU2012-6673
M. Calibo, R. Ong, J. Leong, P. Benavidez, C. Arcilla, and J. Rafols
 Investigation of Philippine Garnierites: a close look on their mineralogy, geochemistry, morphology, and nature of nickel association

SM3.10/EMRP2.10/ERE5.5 – Seismo-electromagnetic conversions: observations, theory and modelling (co-organized) – Orals

Convener: J. Holzhauer | Co-Conveners: E. Slob, M. Dietrich

Room: 2

Chairperson: n.n.

- 08:30–08:45 EGU2012-5255
S. Warden, S. Garambois, P. Sailhac, L. Jouniaux, M. Bano, and M. Dietrich
 Curvelet-based seismoelectric data processing
- 08:45–09:00 EGU2012-6725
H. Hu, W. Guan, and W. Zhao
 Theoretical studies of permeability inversion from seismoelectric logs
- 09:00–09:15 EGU2012-13450
P. Sammonds, D. Eccles, and P. Meredith
 Influence of elevated temperature and pore fluid chemistry on electrokinetic signals generated during the deformation of sandstone
- 09:15–09:30 EGU2012-1648
B. Kröger and A. Kemna
 Characteristics of seismoelectric interface responses at dipping boundaries
- 09:30–09:45 EGU2012-10011
N. Grobde, J.W. Thorbecke, and E.C. Slob
 ESSEMOD - Electroseismic and Seismoelectric Flux-Normalized Modeling for Horizontally Layered, Radially Symmetric Configurations
- 09:45–10:00 EGU2012-286
F. I. Zyserman, P. M. Gauzellino, and J. E. Santos
 Electroseismics as a methane hydrate prospecting tool

SM3.10/EMRP2.10/ERE5.5 – Seismo-electromagnetic conversions: observations, theory and modelling (co-organized) – Posters

Convener: J. Holzhauer | Co-Conveners: E. Slob, M. Dietrich

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: M. Dietrich & J. Holzhauer

- XY520 EGU2012-12652
V. Allègre, P. Sénéchal, C. Bordes, L. Jouniaux, and S. Warden
 On the use of a combined geophysical approach to estimate the seismoelectric amplitude dependence on water content
- XY521 EGU2012-12939
M. Dietrich, F. Delprat-Jannaud, and S. Garambois
 Transient electrokinetic response of finely layered, fluid-filled porous media
- XY522 EGU2012-6770
C. Yin, J. Wang, A. Qiu, X. Liu, and H. Hu
 A Circuit Model for the Measurement of the Streaming Potential in a Rock Sample

- XY523 EGU2012-8193
P. Sénéchal and **C. Bordes**
On the relevance of the acquisition configuration for seismoelectric recording
- XY524 EGU2012-7469
C. Bordes, P. Sénéchal, S. Garambois, J. Holzhauer, and D. Brito
On the convenience of static and dynamic transfer functions in seismoelectric data: the role of permeability
- XY525 EGU2012-6792
Z. Wang, **W. Guan**, Y. Gao, and H. Hu
2-D FDTD computation of seismoelectric fields excited by an underground double couple in a horizontally layered formation
- XY526 EGU2012-13876
J. Holzhauer, T. Günther, and U. Yaramanci
Consideration of the first Fresnel zone characterisation while investigating on seismoelectric interfacial conversions
- XY527 EGU2012-6253
J. Holzhauer, C. Bordes, F. Oppermann, D. Brito, and U. Yaramanci
Impact of permeability on seismoelectric transfer function of P waves
- XY528 EGU2012-1676
B. Kröger and A. Kemna
Anatomical and morphogenetic analysis of seismoelectric conversion patterns at geological units
- XY529 EGU2012-10636
N. Grobbe, F.C. Schoemaker, M.D. Schakel, S.A.L. de Ridder, E.C. Slob, and D.M.J. Smeulders
Electrokinetic Fields and Waves: Theory, Experiments and Numerical Modeling
- XY530 EGU2012-3539
S. Park and N.H. Sung
Induced Polarization Responses of the Specimen with Sulfide Ore Minerals

SM5.2/ERE5.6 – Induced Seismicity: Theory and Observation (co-organized) – Orals

Conveners: J. C. Groos, P. Jousset | Co-Conveners: G. Kwiatak, M. Bohnhoff, J.R.R. Ritter, R. Gritto

Room: 27

Chairperson: P. Jousset

- 08:30–08:45 EGU2012-2235
G. Kwiatak, F. Bulut, M. Bohnhoff, and G. Dresen
High-resolution analysis of seismicity induced at Berlín geothermal field, El Salvador
- 08:45–09:00 EGU2012-11332
K. Ágústsson and Ó. Flóvenz
Induced seismicity during circulation loss in geothermal drilling at Hengill, Iceland
- 09:00–09:15 EGU2012-12584
J. Albaric, N. Langet, M. Hasting, V. Oye, I. Lecomte, M. Messeiller, K. Iranpour, P. Reid, and E.M. Llanos
Induced seismicity at the Paralana Enhanced Geothermal System, South Australia
- 09:15–09:30 EGU2012-2830
N. Deichmann, **T. Kraft**, and K.F. Evans
Mapping of faults activated by the stimulation of the Basel enhanced geothermal system
- 09:30–09:45 EGU2012-13298
D. Kraaijpoel, D. Nieuwland, B. Wassing, and B. Dost
Induced seismicity at an underground gas storage facility in the Netherlands
- 09:45–10:00 EGU2012-855
P. Blascheck, M. Häge, and M. Joswig
Monitoring hydrofrac-induced seismicity by surface arrays - the DHM-Project Basel case study

COFFEE BREAK

Chairperson: J. Groos

- 10:30–10:45 EGU2012-153
P. Jousset and **J. Rohmer**
Evidence for remotely triggered micro-earthquakes during salt cavern collapse
- 10:45–11:00 EGU2012-2758
K. F. Evans, **A. S. Zappone**, T. Kraft, N. Deichmann, and F. Moia
A survey of the induced seismic responses to fluid injection in geothermal and CO2 reservoirs in Europe

- 11:00–11:15 EGU2012-354
C. Meller, Th. Kohl, and E. Gaucher
Estimation of the failure probability during EGS stimulation based on borehole data
- 11:15–11:30 EGU2012-4473
B. Derode, F. Cappa, and Y. Guglielmi
Seismicity triggered by stress transfer from a fluid injection-induced fracture activation
- 11:30–11:45 EGU2012-7483
V. Gischig, B. P. Goertz-Allmann, C.E. Bachmann, and S. Wiemer
Effect of non-linear fluid pressure diffusion on modeling induced seismicity during reservoir stimulation
- 11:45–12:00 EGU2012-10944
S. Murphy, G. O'Brien, C. Bean, J. McCloskey, and S. Nalbant
Seismicity and fluid injections: numerical modelling of fault activation

SSS11.7 – “Dynamic Landscapes”: Causality, Interaction and Long Term Modelling of Soil Surface Processes (co-listed) – Orals

Convener: R. Ciampalini | Co-Conveners: S. Follain, T. Peng, F. Gobattoni

Room: 3

Chairperson: R. Ciampalini, S. Follain

- 08:30–09:00 EGU2012-6616
J. Wainwright
Making Other Worlds: Modelling Past Interactions of Agriculture and Erosion
- 09:00–09:15 EGU2012-8152
J.E.M. Baartman, A.J.A.M. Temme, J.M. Schoorl, M.H.A. Braakhekke, and A. Veldkamp
Did tillage erosion play a role in millennial scale landscape development? - an evaluation in SE Spain using a landscape evolution model
- 09:15–09:30 EGU2012-2477
M. Dotterweich
Human impact and past soil erosion dynamics in central Europe
- 09:30–09:45 EGU2012-13141
L.P.H. van Beek, H. Feiken, T.W.J. van Asch, and **M.F.P. Bierkens**
Modelling Landscape Dynamics in a Highland Mediterranean Catchment: Establishing the impact of Climate Variation and Human Activity
- 09:45–10:00 EGU2012-4651
N. Guzel
Agricultural landscapes dynamic at the North-West of Russia

COFFEE BREAK

Chairperson: T. Peng

- 10:30–10:45 EGU2012-3142
D. Ford
Alvar soils and ecology in the boreal forest and taiga regions of Canada.
- 10:45–11:00 EGU2012-3347
X.B. Zhang, X.Y. Bai, and Y. Long
Soil movements and surface erosion rates on rocky slopes in the mountain areas of the karst region of Southwest China
- 11:00–11:15 EGU2012-14335
SH Doerr
Determining soil formation rates in limestone terrain using elemental fingerprinting
- 11:15–11:30 EGU2012-423
X. Chen, Z.C. Zhang, P. Shi, and Q.B. Cheng
Measurement of soil and rock fractural hydraulic conductivities using falling head infiltration experiment of single-ring permeameter
- 11:30–11:45 EGU2012-1082
C Zeng and **Z Liu**
The characteristics of water-carbon regime of Banzhai karst subterranean stream system covered by virgin forest with soil deficiency
- 11:45–12:00 EGU2012-13814
X. Lee, Y. Xing, B. Fang, L. Zhang, F. Yang, and H. Zhou
The potential of Biochar technology in combating rocky desertification in the Karst area of south China*

SSS11.7 – “Dynamic Landscapes”: Causality, Interaction and Long Term Modelling of Soil Surface Processes (co-listed) – Posters

Convener: R. Ciampalini | Co-Conveners: S. Follain, T. Peng, F. Gobattoni

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: F. Gobattoni

- XY587 EGU2012-9333
J.M. Schoorl, P.A. Finke, A.J.A.M. Temme, and M.P.W. Sonneveld
 Linking soil forming processes, geomorphological dynamics and human activity to understand past and future patterns of landscape change
- XY588 EGU2012-13387
S. De Alba
 Long-term effects of soil redistribution by tillage on the landscapes transformation
- XY589 EGU2012-14343
P. Billi, E. Salemi, and E. Preciso
 River response to land use change and sediment control works: the case of the Reno river in Italy
- XY590 EGU2012-9109
P. Ondr, M. Koupilová, J. Moravcová, T. Pavlíšek, J. Peřenka, and J. Váchal
 The development of the size of land blocks affected by the process of land consolidation over a longer time horizon
- XY591 EGU2012-622
S. Solodyankina
 Land use changing and land use optimization of Lake Baikal basin on the example of two key areas
- XY592 EGU2012-12727
J. P. Nunes
 Impacts of long-term erosion rates on Portuguese wheat croplands under future climate scenarios
- XY593 EGU2012-4610
Y. Chahor, R. Giménez, and J. Casali
 AnnAGNPS model as a potential tool for seeking adequate agriculture land management in Navarre (Spain)
- XY594 EGU2012-13037
L.S. Esteves, J. Foord, and H. Draux
 A methodological framework to assist decision-making on prioritising conflicting uses in multi-functional environments
- XY595 EGU2012-12687
I. Díaz-Carrión, A. Sastre-Merlín, S. Martínez-Pérez, E. Molina-Navarro, and R. Bienes-Allas
 Limno-reservoirs as a new landscape, environmental and touristic resource: Pareja Limno-reservoir as a case of study (Guadalajara, Spain)
- XY596 EGU2012-2907
E. Yeshaneh Ayehu, G Blöschl, W Wagner, M Exner-Kittridge, and D Legesse
 Identifying land use and land cover dynamics in the Koga Catchment, Ethiopia, from multi-scale data and implications for environmental change
- XY597 EGU2012-11304
R. Ciampalini, B. Cheviron, S. Follain, and Y. Le Bissonnais
 LandSoil, a model for evaluating soil erosion on mid-term agricultural landscape evolution: Sensitivity analysis
- XY598 EGU2012-11001
F. Kunth and J. Schmidt
 Model-based assessment of erosion risks on man-made slopes in recultivation areas
- XY599 EGU2012-3671
A. Cerdà, S.H. Doerr, and M. Burguet
 Water resources under threat in citrus farms in Spain
- XY600 EGU2012-415
P. Shi, X. Chen, Z.C. Zhang, and S.M. Qu
 A simple semi-distributed hydrological model for karst area
- XY601 EGU2012-489
Z.-c. Zhang
 Study of the hydrodynamic characteristics of hillslope epikarst zone by means of combined time series analysis and field investigation
- XY602 EGU2012-1042
T. Peng
 Multi-scale research on the hydrology processes and soil loss on the karst peak-cluster depression in southwest of China
- XY603 EGU2012-4046
X.Y. Bai and S.J. Wang
 The impacts of karst background on land degradation in China

- XY604 EGU2012-9103
J. Kirstein and R. Gaupp
 Quantifying and timing of long-term carbonate mobilisation in a limestone aquifer
- XY605 EGU2012-14315
 J.Z. Cheng, X.Q. Lee, and **H. Zhou**
 Soil-atmosphere exchange of carbon dioxide, methane and nitrous oxide from a typical karst region under different land use in southwest China
- XY606 EGU2012-14317
D.A. Xiao and H. Xu
 The geochemical characteristics of soil water and epikarst springs and their response to vegetation-soil degradation in a karst area

TS3.2 – Salt and Evaporites – Tectonics, Mechanics and Rheology (co-listed) – Orals

Convener: F. Strozyk | Co-Conveners: S. Burchardt, H.W. van Gent, J. Urai, J. Schmatz

Room: 20

Chairperson: Frank Strozyk, Joyce Schmatz

- 08:30–08:45 EGU2012-10365
H. Koyi, S. Burliga, and Z. Chemia
 Salt supply to and significance of asymmetric salt diapirs
- 08:45–09:00 EGU2012-822
P. Santolaria Otin, A.M. Casas Sainz, and R. Soto Marín
 Geometry of the Naval diapir (western end of the Sierras Marginales, Southern Pyrenees), based on gravimetric, surface and seismic data.
- 09:00–09:15 EGU2012-2069
G. Desbois, J.L. Urai, and J.H.P. De Bresser
 Fluid distribution in grain boundaries of natural fine-grained rock salt deformed at low shear stress: implications for rheology and transport properties
- 09:15–09:30 EGU2012-1615
O. R. Clausen, D.L. Egholm, and R. Wesenberg
 Salt movements and faulting of the overburden - can numerical modeling predict the fault patterns above salt structures?
- 09:30–09:45 EGU2012-10877
P.A. Kukla
 Integrated Salt Basin Evaluation
- 09:45–10:00 EGU2012-6854
R. Goteti and C. Beaumont
 Initiation of Salt Minibasins under Uneven Sedimentation

TS3.2 – Salt and Evaporites – Tectonics, Mechanics and Rheology (co-listed) – Posters

Convener: F. Strozyk | Co-Conveners: S. Burchardt, H.W. van Gent, J. Urai, J. Schmatz

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Steffi Burchardt

- A415 EGU2012-1625
C. Leitner, F. Neubauer, J. Urai, J. Genser, B. Borojevic-Sostaric, and J. Schoenherr
 Salt rock of the Alpine Haselgebirge Formation - ages, temperatures and structures
- A416 EGU2012-4455
O. Ferrer, B. C. Vendeville, and E. Roca
 Impact of pre- and/or syn-tectonic salt layers in the hangingwall geometry of a kinked-planar extensional fault: insights from analogue modelling and comparison with the Parentis basin (bay of Biscay)
- A417 EGU2012-5063
E.-M. Krejci, B.C. Biehl, F. Strozyk, L. Reuning, and P. Kukla
 Geometry of Z3 carbonate-anhydrite stringer and kinematic restoration, onshore northern Netherlands using 3D seismic data
- A418 EGU2012-5095
B.C. Biehl, E.-M. Krejci, L. Reuning, F. Strozyk, and P. Kukla
 Stratigraphy, sedimentology and diagenesis of the Zechstein carbonate-evaporate cycles onshore northern Netherlands
- A419 EGU2012-6404
M. Rubinat, E. Roca, B. Beamud, and R. Soto
 Application of the paleomagnetism analysis in the kinematics characterization of salt diapirs: the Bicorn-Bicorb-Quesa salt diapir case (Prebetic Zone, SE Spain)

- A420 EGU2012-8841
S. Becker, L. Reuning, J. Morwinski, P.A. Kukla, S. Abe, S. Li, J.L. Urai, S. Farqani, G. Lopes Cardozo, and Z. Rawahi
 Understanding Reservoir Quality in Ara Stringers of the Ediacaran - early Cambrian Petroleum System of the South Oman Salt Basin: Diagenetic relationships in space and time
- A421 EGU2012-9659
P. Arbués, O. Ferrer, E. Roca, K. Giles, M. Rowan, M. De Matteis, and J.A. Muñoz
 The Bakio salt wall and its effects on synkinematic deepwater sedimentation (Basque Pyrenees, Northern Spain)
- A422 EGU2012-9840
 H. van Gent, **F. Strozyk**, J.L. Urai, M. de Keijzer, and P.A. Kukla
 The large scale structures of the Late Permian Zechstein 3 intra-salt stringer, northern Netherlands
- A423 EGU2012-11161
A. Schorn, F. Neubauer, and M. Bernroider
 Polyhalite microfabrics in an Alpine evaporite mélange: Hallstatt, Eastern Alps
- A424 EGU2012-11261
P. Feldens, M. Schmidt, N. Mitchell, and A.S. Basaham
 Subsea salt flows in the Atlantis II Deep and Thetis Deep, Red Sea
- A425 EGU2012-12002
J. Schmatz, M. Sadler, G. Desbois, and J. Urai
 On the distribution and morphology of grain boundary fluids in natural rock salt

