

TUESDAY, 14.04.2009

15:00 - 17:00 **Early registration** Pick up of conference documents, accompanied by drinks in the SA Museum (Science Building behind the Museum)

WEDNESDAY, 15.04.2009

8:30 - 9:00 **Introduction**
 Prof J. McWha Kaurna Welcome and Opening Address by the Vice-Chancellor and President of the University of Adelaide

9:00 – 10:30 **Session 1** **Mt Isa Mineralising Systems**
 10:30 - 11:15 **Tea / Coffee**
 11:15 – 13:00 **Session 2** **Pb-Zn, Au and U**
 13:00 - 14:00 **Poster Session** **Lunch**
 14:00 – 15:30 **Session 3** **Methods and Experiments**
 15:30 - 17:00 **Poster Session** **Tea / Coffee**
 17:00 – 17:45 **Session 4** **Methods and Experiments continued**

Evening

17:45 – 19:30

Cocktail Function / Wine tasting in the Australian National Wine Centre

THURSDAY, 16.04.2009

9:00 – 10:30 **Session 1** Computational Modelling
 10:30 - 11:00 **Tea / Coffee**
 11:15 – 13:00 **Session 2** Computational Modelling continued
 13:00 - 14:00 **Poster Session** Lunch
 14:00 – 15:30 **Session 3** Deep fluids and magmatic fluid system
 15:30 - 17:00 **Poster Session** Tea / Coffee
 17:00 – 17:45 **Session 4** CO₂ Sequestration

Evening

Conference Dinner at Jolleys Boathouse
 (separate booking required)

FRIDAY, 17.04.2009

9:00 – 10:30 **Session 1** Hydrocarbon Fluids
 10:30 - 11:15 **Tea / Coffee**
 11:15 – 12:00 **Session 2** Computational Modelling continued
 12:00 – 13:00 **Session 3** Crustal Fluids
 13:00 - 14:00 **Lunch**
 14:00 – 15:15 **Session 3** Crustal Fluids continued
 15:15 - 16:00 **Tea / Coffee**
 16:00 – 17:15 **Session 4** CO₂ Sequestration
 17:15 **Closing Note**

SATURDAY, 18.04.2009

9:00 Departure for Excursion "South Australian IOCG Deposits" (18.04.-22.04.09)

2009 GEOFLUIDS VI SPEAKERS PROGRAM

WEDNESDAY, 15.04.2009

8:30 - 9:00 Prof J. McWha Kurna Welcome and Opening Address by the Vice-Chancellor and President of the University of Adelaide

Session 1		Mt Isa Mineralising Systems	
9:00 -9:30	Keynote	Nick Oliver	Very rapid subsurface hydrothermal ore deposition mechanisms and the origin of breccia-hosted iron-oxide copper-gold deposits
9:30 -9:45		Rowena Duckworth	Trace Element Geochemistry and Mineralogy of the Mount Isa Copper ores, Queensland, Australia
9:45 -10:00		Ryan D Long	The Geology and Mineralogy of the Paroo Fault and its role in the Mineralisation of the Deep Copper Ore bodies, Mount Isa, Queensland
10:00-10:15		Gustav S Nortje	Fault-related mineralization in the Western Fold Belt, Mt Isa: Targeting copper using an integrated approach
10:15-10:30		Kazuo Kawasaki	Preliminary paleomagnetic results for the Century Zn-Pb-Ag deposit, Australia
10:30-11:15	Tea / Coffee		
Session 2		Pb-Zn, Au and U	
11:15-11:45	Keynote	Michel Cuney	Physical and chemical characteristics and of the fluids involved in the genesis of unconformity related uranium deposit and the dynamic of their circulation
11:45-12:00		Peter Schaub	The effects of deformation and permeability variation in controlling the formation of uranium deposits in the Alligator Rivers region, Northern Territory, Australia
12:00-12:15		David T.A. Symons	Starting to track the Upper Mississippi Valley zinc-lead MVT fluid flow event, WI, USA
12:15-12:30		Katharina Pfaff	Fluid Mixing Recorded by Mineral Assemblage and Mineral Chemistry in a Mississippi Valley-Type Pb-Zn-Ag Deposit in Wiesloch, SW Germany
12:30-12:45		Galina Palyanova	Genesis of gold and silver sulphides at Yuny and Ulakhan deposits (North-East of Russia)
12:45-13:00		Martin Griessmann	Gold Mineralisation in the Adelaide Fold Belt - Preliminary Results
13:00-14:00	Lunch		POSTER SESSION
Session 3		Methods and Experiments	
14:00-14:30	Keynote	Joel Brugger	Towards Molecular-level Understanding of Geochemical Processes in Mineral Exploration
14:30-14:45		Pascal Grundler	Tellurium speciation under hydrothermal conditions
14:45-15:00		Stacey John Borg	Zn speciation in acetate-rich hydrothermal solutions, an X-ray absorption spectroscopy study.
15:00-15:15		Thorsten Geisler	A preliminary in situ Raman spectroscopic study of the oxygen isotope exchange kinetics between H ₂ O and (PO ₄) _{aq}
15:15-15:30	Martina Menneken		An evaluation of the potential of using Raman spectroscopy to determine the carbon isotope composition of CO ₂ inclusions
15:30-17:00	Tea / Coffee		POSTER SESSION
Session 4		Methods and Experiments continued	
17:00-17:15		Boriana G Kotzeva	LA-ICP-MS analysis of single fluid inclusions in a quartz crystal. A methodological survey.
17:15-17:30		Jean Cauzid	Quantification of fluids hosted in opaque minerals using synchrotron radiation X-ray fluorescence
17:30-17:45		Julien Bourdet	Fluorescence and FT-IR signature of a water inhibition process in an oil reservoir

Cocktail Function/Wine National Australian Wine Centre

Thursday, 16.04.2009

Session 1		Computational Modelling
9:00 - 9:30	Keynote Chongbin Zhao	Critical Role of Geofluid Flow in Ore Forming Processes of Hydrothermal Systems: Theoretical Analysis and Computational Simulation
9:30 - 9:45	Klaus Gessner	3D visualization and analysis of fractured rock using digital photogrammetry
9:45 - 10:00	Brent McInnes	Numerical modelling of magmatic-hydrothermal systems constrained by U-Th-Pb-He time-temperature histories
10:00 - 10:15	Jianwen Yang	Three-dimensional numerical modelling of salinity variations in driving basin-scale fluid flow related to the formation of the Mount Isa SEDEX deposits, northern Australia
10:15 - 10:30	Guoxiang Chi	Geochemical evidence and hydrodynamic modelling of two fluid systems involved in sandstone-hosted uranium mineralization in the northeast of the Ordos basin, China
10:30 - 11:15	<i>Tea / Coffee</i>	
Session 2		Computational Modelling continued
11:15 - 11:30	Michael Kühn	Reactive transport models of the Mount Isa Copper mineralisation show that fluid mixing is only feasible in free convection
11:30 - 11:45	Liangming Liu	Computational Modeling on Coupled MTH Processes for Forming Skarn Cu Deposits and its Significance for Deep Ore Exploration: Examples from Tongling-Anqing District, China
11:45 - 12:00	Edgar Santoyo	A new improved mathematical method to estimate stabilized formation temperatures using thermal recovery data of geothermal boreholes
12:00 - 12:15	Thomas Poulet	Assessing the Perth Basin geothermal opportunity: Preliminary results from simulations of heat transfer and fluid flow
12:15 - 12:30	Peiming Wang	Modeling Phase Equilibria and Thermophysical Properties in Electrolyte Systems Using a Speciation-Based Model
12:30 - 12:45	Jianguo Wang	Numerical simulation for geofluid focusing and penetration due to hydraulic fracture
12:45 - 13:00	Yanhua Zhang	Numerical simulation of extensional fault reactivation and fluid flow: generic models related to the Timor Sea
13:00 - 14:00	LUNCH	POSTER SESSION
Session 3		Deep fluids and magmatic fluid system
14:00 - 14:15	John Walshe	Origins of the chemical potential of major mineral systems: Links to Earth degassing
14:15 - 14:30	Berit Lehrmann	The association between skarn mineralisation and granite bodies in the Chillagoe region, North Queensland, Australia
14:30 - 14:45	Adam Tedesco	Late-stage orogenic model for Cu-Au mineralisation at Kanmantoo mine: new insights from titanium in quartz geothermometry, fluid inclusions and geochemical modelling
14:45 - 15:00	Hashem Bagheri	Rare earth and trace element mobility by CO ₂ bearing fluids in five-element deposits of the Anarak area, Central Iran
15:00 - 15:15	Robert Hough	Relating quantitative microstructure in ore minerals to fluid chemistry
15:15 - 16:45	<i>Tea / Coffee</i>	POSTER SESSION
Session 4		CO ₂ Sequestration
16:45 - 17:00	Allison Hortle	The impact of formation water flow on the CO ₂ storage capacity in the Offshore Gippsland Basin, Australia.
17:00 - 17:15	Fenjin Sun	The Origin and Formation of CO ₂ gas pools in Songliao Basin, China
17:15 - 17:30	Benjamin J Rostron	8+ years of characterization, monitoring, and risk assessment at the IEA GHG Weyburn-Midale CO ₂ Monitoring and Storage Project, Saskatchewan, Canada.

Conference Dinner (extra booking required)

Friday, 17.04.09

Session 1		Hydrocarbon Fluids	
9:00 - 9:30	Keynote	Hanneke Verweij	Overpressure generation and preservation in salt-dominated basins of the Netherlands offshore area
9:30 - 9:45		Stephen Sestak	Pyrolysis of Jamison Sandstone Solid Bitumen from the Mesoproterozoic Roper Superbasin
9:45 - 10:00		Herbert Volk	Tracking petroleum systems in the Perth Basin by integrating microscopic, molecular and isotopic information of petroleum fluid inclusions
10:00 - 10:15		Xia Luo	The Origin of Deep layer Gases in the Jiyang Depression of Bohaibay Basin, China
10:15 - 10:30		Xinong Xie	Abnormally pressured environments and their control on hydrocarbon migration: case study on the Sanzhao depression of the Songliao basin, China
10:30 - 11:00	Tea / Coffee		
Session 2		Computational Modelling	
11:00 - 11:15		Fiona Whitaker	Pervasive subsurface dolomitization of the Devonian Nisku Formation, Canada - new insights from Reaction Transport Modeling
11:15 - 11:30		Kosei Yamaguchi	Box modelling to estimate the degree of water-rock interaction during the Paleoproterozoic Lateritization of the Hekpoort Basalt, South Africa
11:30 - 11:45		Fadi Henri Nader	Reactive geochemical transport modelling of hydrothermal dolomite fronts: the case of Marjaba dolomite front (Jurassic, Lebanon)
11:45 - 12:00		Ge Lin	Numerical Simulation of the Controlling Role of Geofluids in the Thinning Process of the North China Craton
Session 3		Crustal Fluids	
12:00 - 12:15		Bruce E Hobbs	Emergence in Crustal Plumbing Systems
12:15 - 12:30		Stephen Grasby	Controls on the distribution and geochemistry of thermal springs in the McKenzie Mountains, Northwest Territories, Canada
12:30 - 12:45		Vinyet Baques Almirall	Relationship between fluid flow and tectonic brecciation in the Neogene extensional Vallès-Penedès basin (Catalan Ranges, NE Iberian)
12:45 - 13:00		Rosemarie Mohais	On the effect of permeable magmatic foam on heat transfer in channelized lava flow
13:00 - 14:00	Lunch		
Session 3 cont.		Crustal Fluids continued	
14:00 - 14:15		Tom Raimondo	Sources, thermal conditions and mechanisms of fluid ingress during regional rehydration of Alice Springs Orogeny intracratonic shear systems
14:15 - 14:30		Irene Cantarero	Pedogenetic processes coeval with Neogene faults evolution in the Barcelona's Plain, NE Spain
14:30 - 14:45		Florian Fusseis	The 'granular fluid pump' - a new model for fluid transfer through the middle crust based on creep cavitation
14:45 - 15:00		Sebastian Staude	Hydrothermal vein formation by extension-driven dewatering of the middle crust: An example from SW Germany
15:00 - 15:15		Susanne Schmid	Impact of sill emplacement on sandstones in the Northern Atlantic region
15:15 - 16:00	Tea / Coffee		
Session 4		Low T Fluids	
16:00 - 16:15		Isaac Berwouts	Quartz-vein system development during progressive deformation in low-grade siliciclastic sediments. Evidence from the Palaeozoic of the Armorican Massif (Brittany, France)
16:15 - 16:30		Maria Cioppa	Magnetizations in the Ashern Formation and Interlake Group, Williston Basin: fluid infiltration or subsurface fluid flow?
16:30 - 16:45		Alison Ord	Chemical and Biological Transport in Deforming Porous Media
16:45 - 17:00		Liesbeth Breesch	Fluid flow reconstruction in a complex paleocave system reservoir in Wordiekammen, Central Spitsbergen
17:00 - 17:15		Ihsan Al-aasm	Vein calcite in Cretaceous carbonate reservoirs of Abu Dhabi: record of fluid flow

GEOFLUIDS VI POSTER PROGRAM

Wednesday, April 15th

#	Author	Poster Session Mineral Deposits
1	Yong Hwan Ahn	Genetic Environment of the Geumeum Mo(-Cu) Mineralization in Korea
2	Antoni Camprubi	Fluid inclusion and S isotope study in the San Carlos epithermal vein of the Fresnillo district, Zacatecas, Mexico
3	Antoni Camprubi	Ore-forming fluids in the Lucy porphyry Cu-Mo deposit and its regional significance in the Cananea district (Sonora, Mexico)
4	Antoni Camprubi	Structure and stratigraphy of the Sabinas Basin and the role of sedimentary brines in the formation of MVT deposits in Northeastern Mexico
5	Antoni Camprubi	The Francisco I. Madero Zn-Cu-Pb-(Ag) deposit, Zacatecas, Mexico: mineral chemistry and fluid inclusion data
6	Gulcan Bozkaya	Fluid inclusion and stable isotope (O, H and S) evidence for the origin of the Balclair vein type barite-galena mineralisation in Çanakkale, Biga peninsula, NW Turkey
7	M Griessmann	The mineralising system of the Mt. Mulga barite-magnetite-Cu-Au mineralisation, Olary Domain, South Australia
8	A Schmidt Mumm	Pressure, temperature and fluid composition variation of the mineralising system at the Kanmantoo Cu-Au deposit: combining fluid inclusion analysis with Ti-in-quartz thermometry
9	Seon-Gyu Choi	Evolution of the Mugeug Gold-Silver vein system in Korea
10	A. Schmidt Mumm	Application of Ti-in-quartz thermometry to Au and Cu-Au mineralising systems
11	L. G Fairbrother	Effect of the cyanide-producing bacterium <i>Chromobacterium violaceum</i> on ultraflat gold surfaces
12	Susanne Schmid	Significance of carbonaceous shales and vanadium geochemical haloes in the exploration for rock phosphate deposits in the southern Georgina Basin, central Australia.
Poster Session Methods and Experiments		
13	Weihua Liu	A synchrotron X-ray absorption spectroscopic study of copper solubility and speciation in supercritical water
14	Isaac Berwouts	Reequilibrated fluid inclusions as proxy for PTX-conditions of deformation and recrystallisation in vein quartz
15	M.A. Caja Rodriguez	Fluorescence quantification of oil fluid inclusions and oil shows: implications for oil migration (Armancies Fm, south-eastern Pyrenees, Spain)
16	Fang Xia	Mechanism of pseudomorphic mineral replacement reactions revealed by a combined textural and kinetic study
17	Fang Xia	Preservation of multiscale lamellar twinning texture and crystallographic orientation in the replacement of leucite by analcime
18	Fang Xia	Experimental synthesis of auriferous arsenian pyrite/marcasite by pseudomorphic replacement of pyrrhotite
19	Gujie Qian	Replacement of magnetite by pyrite under hydrothermal conditions
20	Jingzhou Zhao	Hydrothermal calaverite decomposition using the Orthogonal Experimental Design Method
21	Keyu Liu	Experimental study on the factors controlling secondary oil migration
22	Keyu Liu	Cautions in the interpretation of petroleum fluid inclusion data in petroleum system analysis: insight from spectroscopic analyses of natural and synthetic inclusions
23	Joel Brugger	Metal Speciation in Fluid Inclusions using Microbeam X-ray Absorption Spectroscopy
24	Galina Palyanova	Gold fineness and Au/Ag ratios of pyrite-containing ores as additional indicators of physico-chemical conditions of hydrothermal ore formation
25	Blake Alfred Tooth	Experimental observation of gold scavenging by bismuth melts coexisting with hydrothermal fluids
Poster Session Crustal Fluids		
26	Miguel A Caja Rodriguez	Different degree of albization in the syn-rift Lower Cretaceous sandstones, Maestrat Basin, Iberian Range: burial temperature or composition/provenance influence?
27	Benjamin J Rostron	Unusual Ca-rich formation-waters from Devonian-aged aquifers in western Canada: implications for seawater chemistry.
28	Irina N. Plotnikova	Reduced fluids in the crystalline basement and the sedimentary basin (on an example of Romashkino and Verkhne-Chonskoye oil fields)
29	Irina N. Plotnikova	Groundwater of the crystalline basement in the eastern part of the east-European platform
30	Susanne Schmid	Impact of sill emplacement on sandstones in the Northern Atlantic region
31	Xue Bin Du	Hydrogeochemistry of formation water in relation to overpressures and fluid flow in the Qikou depression of the Bohaiwan basin, China

- 32 Yanchao Zhao Controls of paleofluid movement in high quality reservoirs and prolific zones within the tight sandstones of H2 and H3 members of the Lower Permian in the Daniudi gasfield, Ordos basin, China
- 33 John G McLellan *Convection stability in the Taupo Volcanic Zone, New Zealand*
- 34 Rudy Swennen *Evidence of repeated hot fluid pulses along the Ranero fault system (Cantabrian Mountains, North Spain)*

Thursday, 16.04.

#	Author	Poster Session Hydrocarbon Systems
1	Laurent Langhi	Fluid flow behaviour in reactivated hydrocarbon traps: assessing fluid circulation along natural complex fault systems using numerical fluid flow simulation
2	M A Caja Rodriguez	Carbonate precipitation in an ancient oil shale mine (SE Pyrenees): evolution of fluid chemistry and its relationship with oil expulsion
3	M A Caja Rodriguez	Linking organic geochemistry, oil shows, oil fluid inclusions and tectonic structure to unravel oil migration history (SE Pyrenees, Spain)
4	Ping Hongwei	Using Systematic Fluid Inclusion Measurements to Trace Hydrocarbon Migration Pathway in the Unconformity Reservoirs of Caoqiao Oilfield of Dongying Depression, Bohai Bay Basin
5	Cheng Zhang	Petroleum systems of continental margin basins in the northern South China Sea
6	Jingzhou Zhao	Dynamic Petroleum Migration-Accumulation Systems : Concept, Division and Application in West-China Basins
7	Tao Jiang / Jianye Ren	Deepwater turbidites and their implications for hydrocarbon exploration in Qiongdongnan Basin, northern South China Sea
8	Chen Dongxia	Experimental Investigation of Secondary Oil Migration along Subtle Pathways: A Mechanism for hydrocarbon accumulation in Lenticular Basinal Turbidite Reservoirs
9	Chunquan Li	Coupling Relationship between Hydrocarbon Charging Events and Palaeopressure Cycles in the Es3 Member of the Shahejie Formation, Minfeng Sag, Bohai Bay Basin, East China
10	Chuanbo Shen	Characteristics of fluid inclusions in the southern Dabashan fold-thrust belt and their implications for petroleum exploration potential, central China
11	Feng Yong	Fluid Inclusion Evidence for a Coupling Response between Hydrocarbon Charging and Structural Movements in Yitong Basin, Northeast China
12	Honghan Chen	Quantitative evaluation of transporting efficiencies for hydrocarbon migration along different unconformities in a Cainozoic lacustrine basin: examples from the Dongying Depression, Bohai Bay Basin, East China
13	Irina N. Plotnikova	Investigation of the up to date process of the replenishment of hydrocarbon reserves
14	Keyu Liu	Evidence of hot fluid activities and condensate accumulation in the PY30-1 Structure on the Panyu Low Uplift, Pearl River Mouth Basin, South China Sea
15	Sumei Li	Petroleum source and fluid charge models in the Tazhong Uplift, Tarim Basin: New insights from geochemical and fluid inclusion data
16	Sumei Li	Origin of crude oils with unusually high dibenzothiophene concentrations in the Tazhong Uplift, Tarim Basin
17	Inchang Ryu	Stratigraphy and hydrocarbon potential of the southern Tye basin, Oregon Coast Range, USA
18	Jianhui Zeng	Origin and migration of palaeo-fluids in the Foreland Thrust Belt of the Daba Mountains, Sichuan, China
Poster Session Computational Modelling		
19	Jianwen Yang	Paleo-hydrostratigraphy and Fluid Flow Modeling for the Thelon Basin, Nunavut, Canada
20	Jianwen Yang	Numerical Simulation of Tectonic Deformation-Driven Fluid Flow: Implications for Ore Genesis in the Dachang District, Guangxi, China
21	Yanhua Zhang	Numerical modelling of structural controls on fluid flow localization and its implication on mineralization at the Century deposit
22	Chongbin Zhao	Advances in Computational Geoscience: Numerical Methods and Algorithms for Simulating Geofluid Flow Related Problems
23	Chongbin Zhao	Advances in Convective and Advective Heat Transfer in Geological Systems
24	Fadi Henri Nader	From field study to numerical modeling of hydrothermal dolomitization in Early Cretaceous platform carbonates (Cantabrian mountains, northern Spain)
25	Fadi Henri Nader	Reactive geochemical transport modeling of hydrothermal dolomite fronts: the case of Marjaba dolomite front (Jurassic, Lebanon)
26	Guoxiang Chi	Potential hydrocarbon migration paths predicted from numerical modeling of basinal fluid flow in the Paleozoic Anticosti basin, eastern Canada
27	Yongwang Zhang	Experimental study of interaction between fluid and alkaline feldspar
Poster Session CO2 sequestration		
28	Ulrike Schacht	CO2CRC Otway Project Monitoring Program – Soil Gas Survey 2008
Low Temperatures Fluids		
29	Liesbeth Breesch	Diagenesis and fluid system evolution in the Northern Oman Mountains, United Arab Emirates
30	Liesbeth Breesch	Genetic and fluid flow model of a large-scale celestite deposit in Karstryggen, Central East Greenland
31	Isaac Berwouts	Evidence of pressure fluctuations recorded in crack-seal veins in low-grade metamorphic siliciclastic metasediments, Late Palaeozoic Rhenohercynian fold-and-thrust belt (Germany)

- 32 MA Caja Rodriguez Paleothermal constraints from diagenetic minerals recording high temperature conditions in a rift basin (Maestrat Basin, Iberian Range)
- 33 MA Caja Rodriguez Fluid flow record from fracture-fill calcite and its relationship to oil shows (Upper Jurassic limestones, Maestrat Basin, Iberian Range)
- 34 Sunil Varma Estimation of submarine groundwater discharge into Geographe Bay, Western Australia
- 35 Ulrike Schacht PORE WATER COMPOSITION OF VOLCANOGENIC SEDIMENTS FROM ACROSS THE CENTRAL AMERICAN SUBDUCTION ZONE
- 36 Hairuo Qing Petrography and geochemistry of the Cambrian dolomite reservoirs in Tarim Basin, NW China: a case study based on the deep cores sampled from 7200-8500 m
- 37 KL Carriere / H Machel Polyphase speleogenesis in Lick Creek Cave, Little Belt Mountains, Montana, USA

Poster Instructions

Posters have to be hung up in the morning of the day allocated to the respective poster session. They should be hung either before or during the morning oral sessions or during the tea/coffee break.

To hang up your poster, please find the correct numbered poster wall and position for your poster. Mounting material will be provided in the Poster Session room (The Gallery).

Please put the time aside to attend your poster during the lunch break and afternoon coffee/tea break.

Oral Presentations

The conference hall is equipped with a single digital projector, there is no slide projector installed. The preferred format for Oral presentation is a Power Point file that can be projected through a WINDOWS based computer.

I am afraid I cannot provide an APPLE/Mac based projection system, so all files will have to be WINDOWS compatible (the laptop we are using has VISTA installed).

If you have special animated files, like many of the numerical modelling applications have, you will either have to provide the respective software/plugin or you will have to provide a laptop to which we can switch for your presentation. For APPLE laptops you will also need an adaptor to connect the projector.

