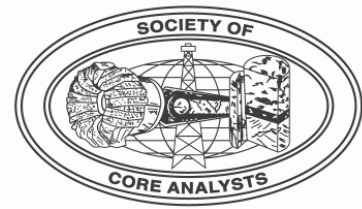


SCANews



The SOCIETY of CORE ANALYSTS

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Note from the Vice President Arrangements

By Axel Makurata

Dear Colleagues, fellow researchers and experimentalists,

On behalf of the Local Organizing Committee, Society and Board of Directors, it is my pleasure to welcome you to the 2009 International Symposium of the Society of Core Analysts in Noordwijk, The Netherlands.

When The Netherlands were proposed as location for the 2009 Symposium September 2007, the oil price was just breaking through the 80US\$/bbl barrier, followed by the peak on 11 July 2008 of 147.27 US\$/bbl. All of us including the Local Organizing Committee were in heaven. We all know the rest of the story – 21 December 2008 – 33.87 US\$/bbl. In contrast to this free fall in oil price, the response to the 2009 Symposium invitation has been amazing. At the moment I am writing this welcome note, we are substantially ahead of the projected participant numbers, we do have 23 vendors participating in the exhibition and sponsorship is coming in. Even more important are the signals in the industry for continued focus on technology development and the need for hard data. The symposium offers you to present your latest results, listen to your colleagues, exchange

knowledge and discuss the hottest topics with your friends.

You are hosted in a prime location, 50 meters from the North Sea at a 300 km long beach with breath taking sun sets. If you like to go out for a run before breakfast, this is your spot. For the more adventures, there is a kite surfing school 200 meter from the hotel. If art is your preference, consider the museums in Amsterdam and the Hague, exhibiting some of the most famous paintings – such as The Night Watch by Dutch painter Rembrandt Harmeszoon van Rijn, displayed in the Rijksmuseum, Amsterdam, and the Girl with a Pearl Earring by Johannes Vermeer in the Mauritshuis, The Hague. And do not forget the cities of Amsterdam, Leiden and Delft with their grachten and picturesque old houses.

Together with my colleagues in the Local Organizing Committee I wish you a safe travel and an inspiring time in Noordwijk.

Groeten

Axel Makurat
VP Arrangement

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Odd Hjelmeland 2009 Darcy Award

The Darcy Award is SCA's technical achievement award that is awarded annually to an individual deemed by the SCA Board of Directors to have made outstanding contributions to the advancement of core analysis technology. The Darcy Award is the SCA's highest honor and the only award for technical achievement.

In 2009 Odd Hjelmeland has been recommended to the Board by the Awards Committee and unanimously accepted.

Odd Hjelmeland was born in Selje, Norway in 1949. He graduated from Montanistische Hochschule in Leoben, Austria as a petroleum engineer in 1974. From 1975 to 1977 he was a research associate at the Technical University of Trondheim (NTNU) He then joined Sintef Petroleum Institute where he first worked as a researcher, then became research supervisor of core- and fluid analysis. From 1981 until 1982 Odd Hjelmeland was visiting researcher at the Petroleum Recovery Institute in Calgary. He was senior Scientist and Department Manager at Sintef from 1984 to 1986.



Photo: Odd Hjelmeland

Hjelmeland's research at Sintef was in the field of capillary and flow behaviour of porous media. He was leading several larger research programmes for the growing oil business in the young oil nation of Norway. He was also initiating and leading large studies in the field of Improved Oil Recovery

for governmental bodies. He was Norway's representative in IEA's Steering Group for research on IOR. Hjelmeland earned a PhD degree in reservoir engineering at NTNU in 1985. His thesis work was on wettability phenomena of reservoir systems. He designed equipment for studying these phenomena at high pressure and temperature. He was able to prove that it is crucial to measure or take into consideration the effect of temperature, pressure and live reservoir systems when studying flow in reservoir systems.

Based on the need for high quality services within core and fluid analysis, Hjelmeland decided to form a commercial company. He started ResLab in 1986 and had a tough start-up time since the oil price dropped to 12 USD per barrel 2 weeks after starting. The company survived and had in 2007 about 350 employees with laboratories in Norway, UK, Abu Dhabi, Oman, Iran, Brazil, and Mexico. The company was acquired by Weatherford in 2007 and Hjelmeland continued as manager until 2009.

In the period from 1989 to 1999, Odd Hjelmeland provided leadership in several research projects, among others Chalk Research Programmes for the North Sea Oil Companies. He served as a distinguished lecturer in the topic of core analysis for SPE during 1997 to 1999. In 2001 Odd took an MBA degree in Strategic Management at the Norwegian School of Economics in Bergen. Hjelmeland has several papers in international journals and conferences.

SCA Symposium 2009

The 23rd International Symposium of the Society of Core Analysts

Noordwijk aan Zee, Netherlands, 27th to 30th September
2009

To be held at the Hotels van Oranje, Noordwijk (<http://www.hotelsvanoranje.com>) consisting of a workshop and 3 days of technical sessions (including both oral and poster presentations).

WORKSHOP – “Coupled Subsurface Processes: Thermal, Hydraulic, Mechanical and Chemical”

Sunday 27th September

Workshop Chair – Doug Ruth, University of Manitoba

10:30 Session 1

10:40 Coupled Thermo-Hydro-Mechanical (THM) Processes in Fractured Rocks: Modelling and Data Needs

Dr. Chin-Fu Tsang – Lawrence Berkeley

Chin-Fu Tsang is a Senior Scientist Emeritus in the Earth Sciences Division and a former Head of the Hydrogeology Department at the Lawrence Berkeley National Laboratory, Berkeley, California. He is currently a Visiting Professor of Hydrogeology at Imperial College London (2008-2010), and a Visiting Professor of Hydrology at Uppsala University, Sweden (2008-2011). He has a B.Sc. (First Class Honours) in Physics from the University of Manchester, UK, and a Ph.D. from University of California at Berkeley, USA. He is well known internationally for his research in coupled thermo-hydro-mechanical processes in fractured rock and buffer clays, flow and transport in heterogeneous media, and advanced well tests analysis and borehole testing methods. He is the author or co-author of more than 400 scientific publications, including about 160 articles in refereed scientific journals and about 110 invited papers and presentations. In addition, he is the co-author or co-editor of eight books and five Journal Special Issues.

11:10 Low Salinity Flooding

Dr. Jos Maas – Shell

Jos Maas joined Shell in 1976 and developed a career in research on EOR and IOR working as an experimental physicist and reservoir engineer both in the laboratory and in the field. He has held positions in the Netherlands as well as in Venezuela (with Intevep SA), PDO (Oman) and Bellaire Technology Centre in Houston. His research interests include SCAL measurements and experimental techniques, EOR by steam injection,

EOR with CO₂, ECBM, CO₂ sequestration into aquifers, and geothermal power generation. A red thread in his work is interpretation of laboratory experiments by simulations of these experiments. At his retirement in December 2006, he was hired back by Shell part time. Currently he is a.o. the Shell Technical Lead for CO₂SINK and a member of the Team working on low salinity flooding designing lab experiments and field applications. He is a proud co-author of a 2001 SCA paper on the interpretation of low salinity flooding experiments with Norm Morrow and Krijn Wit. Finally, he is a Past President of the SCA.

Sunday 27th September (cont)

11:40 Open Discussion Forum

12:15 Lunch

13:00 Session 2

13:00 Simulation of Coupled Processes: Examples for CO₂ Storage

Suzanne Hurter – Schlumberger

Suzanne Hurter, joined Schlumberger Carbon Services in 2006 as a Principal Reservoir Engineer. She supports a variety of projects as the domain expert for reservoir engineering applied to CO₂ storage. This includes setting the strategy for the development of reservoir simulators specific to this issue. Previously, she worked for Shell as a Senior Researcher looking into technical aspects of subsurface CO₂ sequestration and contaminated gas fields. In academic positions in Germany, USA and Brazil, her experience includes delivering large European projects for geothermal resources assessment, hydraulic fracturing for Enhanced Geothermal Systems as well as research of volcanic hydrothermal systems and heat and fluid transport in sedimentary basins.

13:30 VAPEX – Thermal-Chemical Recovery

Dr. John Chatzis – University of Waterloo

Ioannis (John) Chatzis studied at the University of Waterloo and earned all his degrees in Chemical Engineering (B.A.Sc. (1974), M.A.Sc.(1976), Ph.D. (1980)). He was a founding member of the Porous Media Research Institute (PMRI) at the University of Waterloo in 1985 and served as head of the Chemical Engineering Department for the period 1996-2002. He has been active with the Society of Core Analysis since 1991, obtaining the Technical Achievement Award in 2006. He has authored or co-authored more than 50 journal papers and over 100 papers in conference proceedings on subjects relating to fluid flow in porous media, pore structure characterization and core analysis techniques. His current research activities are focused on fundamentals and novel techniques for heavy oil recovery using vapor extraction, pore structure characterization of vuggy porosity carbonates using rate controlled porosimetry, relative permeability of the wetting phase at low saturations and mathematical modeling using network models of pore structure.

14:00 Open Discussion Forum

15:00 Workshop Close

SCA Symposium 2009

The 23rd International Symposium of the Society of Core Analysts Noordwijk aan Zee, Netherlands, 27th to 30th September 2009

Symposium Theme: “Improved Core Analysis for Unconventional Fields”

Monday 28th September

08:00 – 08:15 Symposium Opening Comments

08:15 – 09:45 Session 1 – Case Studies

Session Chair: Jos Maas
Co-chair: Norman Morrow

SCA2009-01 **Field and Laboratory Observations of Remaining Oil Saturations in a Light Oil Reservoir Flooded by a Low Salinity Aquifer**

SCA2009-02 **A Modified Hysteresis Relative Permeability Including a Gas Remobilization Threshold for Better Production Forecasts of Gas Storages**

SCA2009-03 **Pore Pressure Effects and Permeability: Effective Stress Issues for High Pressure Reservoirs**

09:45 – 10:00 Coffee Break

10:00 – 12:00 Session 2 – IOR/EOR – PART I

Session Chair: Ole Torsæter
Co-chair: Patrick Eggerman

SCA2009-04 **Core Holder Technology for Steam – Heavy Oil Gravity Drainage Studies**

SCA2009-05 **Low Salinity Oil Recovery on Clayey Sandstone: Experimental Study**

SCA2009-06 **Surfactant Enhanced Gravity Drainage: Laboratory Experiments and Numerical Simulation Model**

SCA2009-32 **Sensitivity Study of Variables Associated with Magnetic Resonance Imaging Capillary Pressure Measurements in Porous Rocks**

Monday 28th September (cont)

12:00 – 13:00 Lunch

13:00 – 15:00 Session 3 – Improved SCAL Techniques and Interpretation – PART I

Session Chair: Doug Ruth
Co-chair: Issa Abu-Sheikah

SCA2009-08 **The Spinning Porous Plate (SPP) Method: A New Technique for Setting Irreducible Water Saturation on Core Samples**

SCA2009-09 **Determination of Saturation Profiles via Low-Field NMR Imaging**

SCA2009-10 **Improved Methodology for the Characterization of Complex Vuggy Carbonate**

SCA2009-11 **Quantifying the Relative Roles of Illite and Hematite on Permeability in Red and White Sandstones Using Low and High Field Magnetic Susceptibility**

15:00 – 15:30 Exhibitor Presentations I

15:30 – 15:45 Coffee Break

15:45 – 17:45 Poster Session 1

Tuesday 29th September

08:00 – 10:00 Session 4 – Displacement Mechanisms

Session Chair: Gerald Hamon
Co-chair: Josephine Schembre

SCA2009-12 **Direct Experimental Evidence of Wettability Modification by Low Salinity**

SCA2009-13 **The Viscous-Capillary Paradox in 2-Phase Flow in Porous Media**

SCA2009-14 **Evaluation of Water Evaporation and Salt Precipitation Due To Flow in Gas Reservoirs**

SCA2009-15 **Condensate Displacement Mechanisms in Low Permeability Rocks**

10:00 – 10:30 Exhibitor Presentations II

10:30 – 10:45 Coffee Break

Tuesday 29th September (cont)

10:45 – 12:15 Session 5 – Pore Scale Imaging and Modeling – PART I

Session Chair: Olga Vizika-Kavvadias
Co-chair: Ivar Erdal

- SCA2009-16 **Visualizing and Quantifying the Residual Phase Distribution in Core Material**
SCA2009-17 **Towards a Better Understanding of Multiphase Flow in Porous Media: 3D In-Situ Fluid Distribution Imaging at the Pore Scale**
SCA2009-18 **Pore Scale Characterization of Carbonates at Multiple Scales: Integration of Micro-CT, BSEM and FIBSEM**

12:15 – 13:15 Lunch

13:15 – 15:15 Session 6 – Improved SCAL Techniques and Interpretation – PART II and Reservoir Characterization

Session Chair: John Shafer
Co-chair: Jill Buckley

- SCA2009-19 **Phase Identification and Saturation Determination in Carbon Dioxide Flooding of Water Flooded Chalk Using X-Ray Computed Tomography**
SCA2009-20 **Acquisition of Core Capillary Pressure Data by In-Situ Saturation Monitoring – A Comparative Evaluation**
SCA2009-21 **Characterization of Pore to Pore Diffusive Exchange Using NMR T2-Store-T2 2D Experiments**
SCA2009-22 **Micromechanical Investigation of the Hydromechanical Behaviours of Carbonates Contribution of In-Situ Strain Field Measurement by Means of SEM and Optic Digital Image Correlation**

15:15 – 15:30 Coffee Break

15:30 – 17:30 Poster Session 2

19:00 Gala Award Dinner

Wednesday 30th September

08:00 – 09:30 Session 7 – Wettability and Sequestration

Session Chair: Xu-Dong Jing
Co-chair: Marc Fleury

- SCA2009-23 **Experimental Investigation of Deposition of Crude Oil Components in Brine-Filled Pores**
- SCA2009-24 **Revisiting Two Phase NMR Data with a New Inversion Routine Using a Triangular Pores Model for Wettability Estimation**
- SCA2009-25 **Experimental Study on Halite Precipitation During CO₂ Sequestration**

09:30 – 10:00 Coffee Break

10:00 – 12:00 Session 8 – IOR/EOR – PART II

Session Chair: Jon Knut Ringen
Co-chair: Mike Spearing

- SCA2009-26 **Mechanisms of Oil Recovery by Carbonated Water Injection**
- SCA2009-27 **Oil Recovery During CO₂-Foam Injection in Fractured Chalk Rock at Reservoir Conditions**
- SCA2009-28 **Use of Enzymes to Improve Waterflood Performance**
- SCA2009-29 **Effects of Wettability and Salinity on Microbial Enhanced Oil Recovery with Rhodococcus sp. 094**

12:00 – 13:00 Business Lunch

13:00 – 13:30 Exhibitor Presentations III

13:30 – 15:00 Poster Session 3

15:00 – 16:00 Session 9 – Pore Scale Imaging and Modeling – PART II

Session Chair: Jules Reed
Co-chair: Mark Knackstedt

- SCA2009-30 **Pore-Scale Modeling of Three-Phase Flow: Comparative Study with Experimental Reservoir Data**
- SCA2009-31 **Computations of Porosity and Permeability of Sparic Carbonate Using Multi-Scale CT Images**

Alternate Papers/Poster List

- SCA2009-33 **Anomalous Declines in Liquid Permeability**
SCA2009-34 **Diffusive and Convective Drying on a Shaly Sandstone Using NMR Measurements**

Poster List

- SCA2009-35 **Visualisation of Micro Fracture Network in an Oilwet Carbonate**
SCA2009-36 **Monitoring the Surfactant-Enhanced Oil Dissolution and Mobilization in Porous Media**
SCA2009-37 **Improved Measurement Technique for Studying the Effect of Bacterial Solution on IFT and Contact Angles**
SCA2009-38 **Permian Basin: Historical Review of CO₂ EOR Processes, Current Challenges and Improved Optimization Possibilities**
SCA2009-39 **Effects of Salinity on the Morphology of Dissolution Pits in Calcite - Implication for CO₂ Sequestration in Carbonate Rocks**
SCA2009-40 **Characterization of Bitumen Bearing Carbonate Rocks**
SCA2009-41 **A Valid Approach to Correct Capillary Pressure Curves- A Case Study of Berea and Tight Gas Sands**
SCA2009-42 **The Influence of Wettability on Petrophysical Properties**
SCA2009-43 **Is Wettability Alteration of Carbonates by Seawater Caused by Rock Dissolution?**
SCA2009-44 **Comparison of Experimental NMR Measurements with Simulated Responses on Digitized Images of Mono-Mineralic Rocks Using Xray-CT**
SCA2009-45 **The Impact of Thermal and Chemical Effects in Fracture Deformation**
SCA2009-46 **Extracting Pore Throat Size and Relative Permeability from MRI Based Capillary Pressure Curves**

Thursday 1st October

Field Trip to Batavia Shipyard & Zuiderzee Museum

(all day field trip) includes:

- Visiting the Batavia Shipyard where we'll see a 16-17th century boat that is currently being rebuilt the old-fashioned way.
- From the shipyard participants will take a short boat trip to Zuiderzee Museum, where we'll see the historical Dutch way of fishing, how the fishermen dressed and old boats.
- Lunch is included in this trip.

”END-POINT...”

End-point is provided by your Editor for 'miscellany'. Please feel free to send in your contributions...

We look forward to seeing you at the upcoming SCA 2009 International Symposium in Noordwijk aan Zee,

Netherlands. Visit the SCA Website for specific Symposium registration details and associated links.

Patrick Lasswell
VP Publications

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