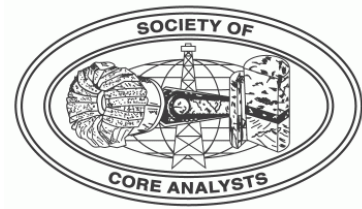


SCANews



The SOCIETY of CORE ANALYSTS

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Note from the Vice President Arrangements

by *Waddah Al Hanai*

Word of Welcome

Dear SCA Members,

On behalf of the Local Organizing Committee I welcome you all wholeheartedly to the 2008 international symposium of the Society of Core Analysts in Abu-Dhabi; the capital of United Arab Emirates.

Following the model of 2000 and 2004 SCA symposia, a local organizing committee (LOC) representing the wide spectrum of the Abu Dhabi oil and gas industry has been selected to prepare and arrange for two events.

I am very pleased to communicate with you again here through the SCANews bulletin. It has almost been a year since we started preparing for the 2008 SCA Symposium. This year's special is that we are holding the Wettability Conference in tandem with the SCA Symposium, to make it easy for overseas delegates to attend both events in one trip. The Local Organizing Committee has again been blessed to get all the support we need to achieve the kind of success that all of us hope to see. There is no doubt that the commitment and dedication of the Local Organizing Committee members will play a critical role in the realization of our hopes and the achievement of our plans. The LOC has worked hard to insure that

accommodation, venue, trips and social programs are all provided with high standard in mind and are made available to all attendees. The LOC has also launched its own website and linked it with the SCA website to give web-site visitors useful information about our LOC arrangements and about Abu-Dhabi.

The theme of the 2008 SCA Symposium conference, "Challenges in Carbonate and Solutions for Field Development", gives assurance that the event will give us the opportunity to stimulate discussions and exchange views on how to optimally develop carbonate reservoirs which host more than 60% of the world's oil and gas reserves.

On the other hand, the workshop theme, "SCAL Data for Carbonate Reservoir Development", should provide us with an important opportunity to review and discuss research and study results, and exchange knowledge and experiences to address the complex and subtle character of the subsurface characterization issues in Carbonates.

At the end, I would like to express my appreciation to all our sponsors for their generous donations and to our exhibitors who undertook the efforts to bring us the latest in core analysis technology. I would also like to thank the LOC members for their dedication and strenuous efforts.

Marc Fleury - 2008 Darcy Award Winner

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.

It is our great pleasure to report that Marc Fleury, Institut Français du Pétrole, was recommended to the Board by the Awards Committee chaired by Tom Fate and unanimously accepted as SCA's Darcy Award Winner for 2008.

Marc Fleury is currently a senior scientist in the petrophysics department of Institut Français du Pétrole (IFP). Marc Fleury was born in 1959 in Mulhouse (France). He graduated from Ecole Polytechnique Fédérale de Lausanne (EPFL, Switzerland) as a physicist, and earned a Ph.D. in Fluids Mechanics from University Joseph Fourier I in Grenoble (France) in 1988. From 1988 to 1992, he worked in the field of Physical Oceanography in Baltimore (USA) and Victoria (Canada). During this period, his studies were devoted to the modelization and measurements of vertical mass or heat transfer due to small scale turbulence in the upper part of the ocean (such as the laboratory study of the effect of the earth rotation on turbulent mixing), or due to salt-heat double diffusive instability processes occurring in very specific oceanic regions. Back to Europe, he joined IFP in 1992 and started studying capillary properties of porous media, a key aspect for hydrocarbon production. Taking advantage of the large experience of IFP leading scientists such as R. Lenormand, L. Cuiec and D. Longeron, he could quickly contribute to the renewal of the core analysis sciences occurring in that decade. Using his experimental skills, he is at the origin of several innovative devices to measure centrifuge capillary pressure curves and resistivity properties; he has 3 award papers from the SCA technical committee in 1996, 1998 and 1999. His studies on resistivity properties of carbonates highlighted the complexity of these formations and the uncertainties of oil in place estimations, and this subject is still an area of active fundamental and applied research. He also contributed to better integrate core and log data, in particular resistivity and NMR. With the growing interest for NMR, he started using this technique in 1998 and probably will never stop. He contributed to the understanding of NMR surface relaxivity and wettability and proposed a new wettability index based on relaxation time measurements. He was also involved in the characterization of emulsions and measurements of oil viscosity using NMR. Along with university professors, he supervised 3 Ph.D. students. He authored and co-authored more than 60 papers (including 25 SCA papers) and has about 20 patents concerning core analysis measurement techniques and fluid characterization. He is currently involved in applied research program dealing with carbone sequestration.

Technical Programme Update from the Vice President of Technology

By Gary Sinclair

Dear SCA Members,
I am pleased to say that the detailed technical programme for the 2008 Symposium is now almost complete and the first draft can be found in this issue of *SCA News* and on the website. (*An updated version including session chairs and any final adjustments will be posted by the end September.*) The theme of the Symposium is “**Challenges in Carbonates and Solutions for Field Development**” and takes place in Abu Dhabi from 29th October – 2nd November. (*Note the technical workshop will be held on the first day – 29th October and details of this are posted separately on the website.*)

The programme this year includes 36 oral presentations and 6 alternate oral presentations over 10 Technical sessions covering the main subject areas of case studies, improved SCAL techniques and interpretation, wettability, displacement mechanisms, reservoir characterisation and SCAL for EOR/IOR. In addition to the oral presentations there will be a poster session comprising 19 poster presentations.

There will also be an opportunity for the exhibitors to give a brief presentation of their services and this will be held over 2 sessions.

If you require any further information on the technical programme please contact me on gary@elreslab.com

I would like to take this opportunity to thank all the authors for their papers and posters and thereby ensuring we will have another excellent symposium.

I would also like to thank the technical committee (listed below) for their

considerable role in reviewing the abstracts and subsequent manuscripts.

I look forward to seeing you all in Abu Dhabi.

SCA 2008 Technical Committee

Gary Sinclair (Chairman) – Weatherford Laboratories
Waddah Al Hanai - ADNOC
Cliff Black - BP
Ted Braun - ExxonMobil
Jill Buckley - New Mexico Tech.
Jean-Baptiste Clavaud - Chevron
Louis Cuiec - Institute Francais du Petrole
Patrick Egermann - GDF Suez
Ivar Erdal - Numerical Rocks
Tom Fate - Chevron
Marc Fleury - Institute Francais du Petrole
Mostafa Fourar – Ecole des Mines de Nancy
Gerald Hamon – Total
Xu-Dong Jing - Shell
Apostolos Kantzas – University of Calgary
Mark Knackstedt – Australian National University
Roland Lenormand - Cydarex
Craig Lindsay – Helix RDS
Jos Maas - Shell
Dan Maloney – ConocoPhillips
Shehadeh Masalmeh - Shell
Norman Morrow – University of Wyoming
Bård Ottesen – Weatherford Laboratories
David Potter – Herriot-Watt University
Gary Potter – Core Laboratories
Jon Knut Ringen – Statoil
Doug Ruth – University of Manitoba
John Shafer – Reservoir Management Group
Bob Smits - Shell
Ole Torsæter – Norwegian University of Science and Technology
Olga Vizika-Kavvadias - Institute Francais du Petrole

ABU DHABI 2008 SCA INT'L SYMPOSIUM

SCA SYMPOSIUM
October 29 – November 2, 2008
Beach Rotana Hotel

DAY	TIME	EVENT	
Tuesday October 28	18:00 – 21:00	Registration	
	18:00 - 21:00	Reception (Icebreaker + Dinner)	
Wednesday October 29	08:00 – 10:00	Workshop SCAL for EOR/IOR (See separate programme)	
	10:00 – 10:30	Coffee Break	
	10:30 – 12:30	Workshop	
	12:30 – 14:00	Prayer & Lunch Break	
	14:00 – 15:30	Workshop	
	15:30 – 16:00	Coffee Break	
	16:00 – 17:30	Workshop	
	19:00 – 22:00	Official Opening Ceremony	
Thursday October 30	Technical Session 1 - Case Studies Chairs: Ivar Erdal & Gary Sinclair		
	08.00 – 08.30	SCA2008-01 Oil/Water Imbibition and Drainage Capillary Pressure Determined by MRI on a Wide Sampling of Rocks	Derrick P. Green, Josh R. Dick, Bruce Balcom, and P.F. de J. Cano-Barrita
	08.30 – 09.00	SCA2008-02 Shuaiba Transition Zone Fields: From Laboratory SCAL Experiments To Field Development Challenges	I. Abu-Shiekh(1), S.K. Masalmeh(2) and X.D. Jing(2)
	09.00 – 09.30	SCA2008-03 The Importance SCAL Data in Modelling Waterflood Remaining Oil Saturation in Carbonate Fields	S.K. Masalmeh and X.D. Jing
	09.30 – 10.00	SCA2008-04 The Value Added from Proper Core Analysis	Bård Ottesen and Odd Hjelmeland
		Alternate Oral/Poster presentation with – full manuscript	
		SCA2008-05 Application of Environmentally Friendly Scale Inhibitors in Carbonate Coreflooding experiments	S. Baraka-Lokmane, K.S. Sorbie, N. Poisson and P. Lecocq
	10:00 – 10:30	Coffee Break	

Technical Session 2 – Improved SCAL Techniques and Interpretation Chairs: Waddah Al Hanai & Shehadeh Masalameh		
10.30 – 11.00	SCA2008-06 Integration of water/oil capillary pressures from different measurements in effective property modelling for extremely heterogeneous carbonate reservoir (case study)	Ali Al-Harrasi, Zaal Alias, Abhijit Mookerjee, Michiel Van Rijen, Khalid Maamari
11.00 – 11.30	SCA2008-07 Electrical measurements: considerations on the performance of 2- and 4-contact systems	N. Bona, E. Rossi, S. Capaccioli and M. Lucchesi
11.30 – 12.00	SCA2008-08 A New Versatile Capillary Pressure Correlation	Frode Lomeland and Einar Ebeltoft
12.00 – 12.30	SCA2008-09 A simultaneous determination of permeability and Klinkenberg coefficient from an unsteady-state pulse-decay experiment	Yves Jannot, Didier Lasseux, Laure Delottier and Gérald Hamon
12:30 – 14:00	Prayer & Lunch Break	
Technical Session 3 – Improved SCAL Techniques and Interpretation (cont.) Chairs: Doug Ruth & Jon Knut Ringen		
14.00 – 14.30	SCA2008-10 Sensitive carbonate reservoir rock characterisation from magnetic susceptibility: mineral quantification, correlation with petrophysical properties, and anisotropy	David K. Potter, Tariq M. AlGhamdi and Oleksandr P. Ivakhnenko
14.30 – 15.00	SCA2008-11 Impact of displacement rate on relative permeability and Residual Saturation in gas-assisted gravity drainage process	Behzad Rostami , Riyaz Kharrat , Mehran Pooladi Darvish, Shirin Samani , Hamed Tabatabaei
15.00 – 15.30	SCA2008-12 Recent Advances in the Measurement of Pore Volume Compressibility of Reservoir Rocks	Shameem Siddiqui ^{â*} , James J. Funk, Aon A. Khamees and Ahmad M. Al-Harbi
	Alternate Oral/Poster presentations with – full manuscript	
	SCA2008-13 NMR Monitoring of Spontaneous Brine Imbibition in Carbonates	Riskedal, H., Tipura, L., Aasheim, J., Howard, J.J. and Graue, Arne
	SCA2008-14 A multi-scale dynamic network simulator used as a means to quantify heterogeneities of permeability and wettability in porous media	Christos D. Tsakiroglou*, Christos Aggelopoulos, Varvara Sygouni

	15:30 – 16:00	Exhibitor Presentations 1
	16:00 – 16:30	Coffee Break
	16:30 – 18:00	Technical Session 4 - Poster Presentations Chairs: Gary Potter & Craig Lindsay
		(note: the alternate oral presentations will be presented as posters if not required as replacement oral presentations) The posters will be on display throughout the symposium in a room adjacent to the main conference hall and the poster presentations will be held in this room. SCA2008-43 A NMR Permeability Model Based on Partial Least Square (PLS) Regression Analysis for a Low Permeability Gas Sand in Santos Basin, Brazil Vinicius de Franca Machado, Rodrigo Bagueira Azeredo, Paulo Frederico Ramos, Marcio Roque Coutinho, Sandra Reveriego Carneiro SCA2008-44 An Integrated Petrophysical Analysis to Evaluate Low Resistivity Low Contrast (LRLC) Pays in Clastic Reservoirs in SE Asia based on Core and Log Data Dr. Lutz Riepe*, A Sharby B A Hamid, M Hafiz, Ridhuan B Hamzah, M Nizam, B M Zain SCA2008-45 Experimental Investigation of the Effective Stress Coefficient for various High Porosity Outcrop Chalks Omdal, E., Breivik, H., Næss, K.E., Ramos, R., Kristiansen, T.G., Korsnes, R.I., Hiorth, A. and Madland, M.V.
		SCA2008-46 Residual gas distribution in Vuggy Carbonate by use of CT Ann Lisbeth Bye, Lars Rennan, Hege C. Wideroe, Tony Boassen, Jon Knut Ringen SCA2008-47 Pore size characterisation of vuggy carbonate material Ketil Djurhuus, Bartek Vik and Arne Skauge SCA2008-48 Core Image Analysis: Reliable Pay Estimation in Thin-Bedded Reservoir Units Christopher M. Prince
		SCA2008-50 Wettability alteration due to Retention of CO ₂ -Foaming agents onto Chalk Rock Ingebret Fjelde and Ingrid Hauge SCA2008-51 Two-Phase Random Walk Simulation of NMR Magnetic Decay in Equilateral, Triangular Pores and a Corresponding Correlation. Unn Højgaard á Lað, IRIS, Aksel Hiorth, IRIS, Jan Finjord, UiS and Svein M. Skjæveland, UiS. SCA2008-52 Effect of temperature on contact angle of water-steam-bitumen systems Maryam Rajayi, Apostolos Kantzas
		SCA2008-53 Experimental investigation of residual CO ₂ saturation distribution in rock samples Hiroshi Okabe

		<p>SCA2008-54 Investigation of Nanoporosity in Carbonate Reservoirs and Its Role in Understanding Oil Reserves and Recovery Economics</p> <p>SCA2008-55 The effect of temperature and brine composition on the mechanical strength of Kansas chalk</p>	<p>Waleed Al-Bazzaz, Muhammed J. Ali, Misfera Al-Qahtani</p> <p>Madland, M.V., Midtgarden, K., Manafov, R., Korsnes, R.I., Zangiabadi, B., Omdal, E., Kristiansen, T.G., and Hiorth, A.</p>
		<p>SCA2008-57 Particle Deposition Profile in the Radial Deep-Bed Filtration of Injection Water</p>	<p>Ali, M.A.J</p>
<p>Friday October 31</p>	<p>08:00 – 18:00</p>	<p>Social Activities (see separate programme)</p>	
<p>Saturday November 1</p>	<p>Technical Session 5 – Wettability Chairs: Norman Morrow & Louis Cuiec</p>		
	<p>08.00 -- 08.30</p>	<p>SCA2008-15 New method to clean carbonate reservoir cores by seawater</p>	<p>T. Austad, S. Strand, and R. Rostami</p>
	<p>08.30 – 09.00</p>	<p>SCA2008-16 Wettability effects on the pore scale distribution of fluids</p>	<p>Munish Kumar, Tim Senden, Mark A. Knackstedt, Robert M. Sok, Adrian P. Sheppard, Christoph Arns, Yildiray Cinar and Val Pinczewski</p>
	<p>09.00 – 09.30</p>	<p>SCA2008-17 Evaluation of Wettability Distributions in Experimentally Aged Core Samples</p>	<p>Else Johannesen, James Howard and Arne Graue</p>
	<p>09.30 – 10.00</p>	<p>SCA2008-18 A chemical model for the seawater carbonate-CO₂ system</p>	<p>A. Hiorth, L. M. Cathles, J. Kolnes, O. Vikane, R. I. Korsnes, S. Evje and M. V. Madland</p>
		<p>Alternate Oral/Poster presentations with – full manuscript</p>	
		<p>SCA2008-19 Sulfate in rock samples from carbonate oil reservoirs</p>	<p>Ingebret Fjelde, Nils Harald Giske</p>
	<p>10:00 – 10:30</p>	<p>Coffee Break</p>	
	<p>Technical Session 6 – Displacement Mechanisms Chairs: Gerald Hamon & Cliff Black</p>		
	<p>10.30 – 11.00</p>	<p>SCA2008-20 Mechanisms of extra heavy oil recovery by gravity-stable CO₂ injection</p>	<p>M. Sohrabi, A. Emadi and M. Jami</p>
	<p>11.00 – 11.30</p>	<p>SCA2008-21 Confining-pressure Effects on Multi-phase Transport in a Shear-fractured Sandstone</p>	<p>Sultan M. AlEnezi, Phillip M. Halleck, Abraham S. Grader</p>

	11.30 – 12.00	SCA2008-22 The significance of wettability and fracture properties on oil recovery efficiency in fractured carbonates	Martin A. Fernø, Åsmund Haugen, James J. Howard and Arne Graue
	12.00 – 12.30	SCA2008-23 Relative Permeabilities for two and three phase flow processes relevant to the depressurization of the Statfjord Field	Egil Boye Petersen Jr(1), Kåre O. Vatne(2), Arild Lohne(2), Johan Olav Helland(2), George Virnovsky(2) and Pål-Eric Øren(3)
		Alternate Oral/Poster presentations with – full manuscript	
		SCA2008-24 Enhanced chemical weakening of chalk due to injection of CO ₂ enriched water	Madland, M.V., Vorland, K.A.N., Korsnes, R.I., Omdal, E., Zangiabadi, B., Kristiansen, T.G., and Hiorth, A.
	12:30 – 14:00	Prayer & SCA Business Lunch Break	
		Technical Session 7 – Reservoir Characterization Chairs: John Shafer & Tom Fate	
	14.00 – 14.30	SCA2008-25 Impact of stress on fluid flow: A detailed study on low permeability rocks	Suleiman Al-Hinai, Quentin Fisher, Carlos A. Grattoni
	14.30 – 15.00	SCA2008-26 Laboratory Determination of Stress-path Dependence of Directional Permeabilities of Carbonates	Jeremie Dautriat, Nicolas Gland, Alexandre Dimanov, Jean Raphanel, Olga Vizika-Kavvadias
	15.00 – 16.00	Exhibitor Presentations 2	
	16:00 – 16:30	Coffee Break	
		Technical Session 8 – Reservoir Characterization (cont.) Chairs: Xu Dong Jing & Olga Vizika-Kavvadias	
	16:30 – 17.00	SCA2008-27 Impact of petrophysical properties on waterflood efficiency in Cretaceous and Tertiary chalk	Shahram Pourmohammadi, Sverre Hetland, Kristine Spildo and Arne Skauge
	17.00 -- 17.30	SCA2008-28 Characterisation of Vuggy Carbonate by Miscible Processes	Djurhus K., Doublet D.C., Skauge A. and Spildo K.
	17.30 – 18.00	SCA2008-29 Does the pore class concept for carbonates make sense for multiphase? flow?	Shahram Pourmohammadi, Sverre Hetland, Kristine Spildo and Arne Skauge
	19:00 – 21:00	Gala Dinner	

Sunday November 2	Technical Session 9 – Pore Scale Imaging and Modeling Chairs: Marc Fleury & Dan Maloney		
	08.00 – 08.30	SCA2008-30 Pore-Scale Simulation of NMR Response in Carbonates	Olumide Talabi, Saif Alsayari, Martin A Fernø, Åsmund Haugen, Haldis Riskedal, Arne Graue, Martin J Blunt
	08.30 – 09.00	SCA2008-31 Pore network modelling on carbonate: a comparative study of different micro-CT network extraction methods	Hu Dong, Ståle Fjedstad, Luc Alberts, Stig Bakke and Pål-Eric Øren
	09.00 – 09.30	SCA2008-32 Flow of a Fluid Through Parallel, Communicating Layers of Porous Media	James Arthur, Douglas Ruth and Mark Tachie
	09.30 – 10.00	SCA2008-33 Evaluation of the reliability of prediction of petrophysical data through imagery and pore network modelling	Cyril Caubit, Gerald Hamon, Adrian Sheppard, Pål-Eric Oren
	10:00 – 10:30	Coffee Break	
	Technical Session 10 – Pore Scale Imaging and Modeling (cont.) Chairs: Mark Knackstedt & Roland Lenormand		
	10.30 – 11.00	SCA2008-34 Validation of multiscale pore space reconstruction and prediction of carbonate flow properties	K. Wu, A. Ryazanov, M.I.J. Van Dlijke, Z. Jiang, J. Ma, G. Couples, K.S. Sorbie
	11.00 – 11.30	SCA2008-35 Image Registration: Enhancing and Calibrating X-ray Micro-CT Imaging	Shane J Latham, Trond Varslot and Adrian Sheppard
	11.30 – 12.00	SCA2008-36 A comparative study of three pore-scale reconstruction and pore-network extraction techniques	A.W. Cense and A.H.M. Marcelis
	12.00 – 12.30	SCA2008-37 High resolution μ -CT combined to numerical models to assess electrical properties of bimodal carbonates	S. Youssef, M. Han, D. Bauer, E. Rosenberg, S. Bekri, M. Fleury, O. Vizika
	12:30 – 14:00	Prayer & Lunch Break	

Technical Session 11 – SCAL for EOR/IOR Chairs: Jos Maas & Ole Torsaeter		
14.00 – 14.30	SCA2008-39 Comparison of High/Low Salinity Water/Oil Relative Permeability	K.Webb, A Lager, C Black
14.30 – 15.00	SCA2008-40 Experimental Investigation of Cooling Effects Resulting from Injecting High Pressure Liquid or Supercritical CO2 into a Low Pressure Gas Reservoir	Daniel R. Maloney and Marcos Briceno
15.00 - 15.30	SCA2008-41 Using MRI to Determine In-Situ Oil Recovery During CO2 Injection in Carbonates	Amund Brautaset, Geir Erslund, Sjur Wiggo Jensen, Oskar Johansen, Arne Graue, Jim Stevens, James Howard
15.30 – 16.00	SCA2008-42 Wettability Alteration by Spontaneous Imbibition of Sulphate-Containing Water into Chalk Cores with Different Boundary Conditions	Liping Yu, Steinar Evje, Ingebret Fjelde, Svein M. Skjaeveland
16:00 – 16:30	Coffee Break	
16:30 – 17.00	Closing Remarks	

”END-POINT...”

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

I very much look forward to seeing all of you in Abu Dhabi.

The next issue of SCANews, slated for December 2008, will provide a look-back at the upcoming SCA 2008 International

Symposium to be held in Abu Dhabi. Please refer to the SCA Website for interim information and associated links.

Patrick Lasswell
VP Publications

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