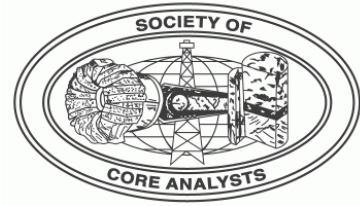


# SCANews



The SOCIETY of CORE ANALYSTS

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P.O. Box 2861, Dublin, CA 94568-2405

August 2010

Published by the SCA, Editor: Patrick Lasswell

Volume 22, Number 2

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## ***Note from the Vice President Arrangements***

***By Jill Green***

On behalf of the Local Organizing Committee, I would like to welcome attendees to the 2010 Society of Core Analysts Annual Symposium. This year we are lucky to be hosting the Symposium in Halifax, Nova Scotia, Canada. The Symposium theme, *From Wellsite to Production*, reflects the need to look at how important core analysis is in every aspect of the oil and gas sector.

The Symposium this year will maintain the quality of previous years while incorporating new features to enhance your experience. The Symposium starts with an optional golf outing to add to the social aspect of the gathering. The opening workshop has invited experts to teach and interact with attendees on topics related to all aspects of core analysis: why is it important; where and why to do it; how to do it well; what to use the information for; and the impact on production operations. The technical program will focus on specific aspects of core analysis, *From Wellsite to Production*. Regardless of where you work within the core analysis spectrum, we want you to learn something new. The workshop, technical program, exhibits, and poster sessions are all designed to facilitate your interaction with other core analysts as well as the presenters, sponsors, and vendors.

The conference venue is in a historic hotel in the heart of downtown Halifax, and offers beautiful views and wonderful accommodations. Many exciting and historical sites are located within easy walking distance. In October, Halifax weather is lovely with trees showing our world renowned lovely fall colours.

We also welcome attendees' guests. The conference guest program offers tours and activities to showcase the highlights of the Halifax region.

The Gala Dinner will be hosted at a Canadian landmark, Pier 21. Attendees will have the opportunity before the dinner to browse through Canada's Immigration Museum where tribute is paid to the 1.5 million immigrants, war brides, displaced people, evacuee children, and Canadian military personnel who passed through Pier 21 between 1928 and 1971. The dinner itself will provide a rare opportunity to enjoy a lobster dinner the Atlantic Canadian way.

We welcome you to our lovely region to learn, explore, and experience our maritime hospitality. We look forward to seeing old friends and meeting new ones.

PS from Jill: Please note that we are running out of booth space and that hotel space is going to be at a premium (and may be difficult to get) for anyone who registers after September 2nd. For details and registration go to [www.scaweb.org](http://www.scaweb.org).

## *John Shafer     Darcy Award Winner 2010*

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.

The SCA is honored to announce that John Shafer is this year's recipient of the Darcy Award.

John graduated from a small liberal arts college, Allegheny, in Pennsylvania with a BS in chemistry. Before going to graduate school at University of California, Berkeley, he taught chemistry and math at high school and junior college for two years in Ghana, West Africa, as a US Peace Corps Volunteer. He obtained a Ph.D. in chemistry in the fall of 1970. For the next forty years John worked/consulted to oil companies: 8 years at Occidental Petroleum (CA), one year at Arco (AZ), 19 years at Exxon (NJ & TX) and the last 12 years as a consultant. During these 40 years he has worked in the broad area of chemistry and mechanics of porous media, initially with the mining industry and for the past 25 years with the energy industry (coal, oil shale, & petroleum). The first 18 years of John's career were as an extractive metallurgist (base/previous metals and uranium); towards the end of this time span he worked on synthetic fuels (oil shale) and coal with a focus on environmental issues. With the demise of the Coal and Synthetic Fuel research at Exxon Production Research in 1988 he was transferred to the Reservoir Division, Core Analysis Section. John took this opportunity in change in work focus to return to graduate school (nights) to obtain a Master's degree in Petroleum Engineering.

John retired from Exxon in the spring of 1998 and immediately started consulting to Reservoir Management Group as a subcontractor to Exxon Exploration Company (EEC) supporting the log analysis group by providing core analysis support for their fields around the world. After two years at EEC he consulted to Conoco for two years and for the past seven years he consulted to Devon Energy. At Devon as part of an asset evaluation team he provided core analysis and rock mechanics support for their ultra deepwater fields in the Lower Tertiary GoM until early 2010 when Devon sold off their entire offshore interests world wide. During the past 22 years, John has provided core analysis/formation evaluation technical support to West Africa and GoM E & P projects involving core analysis data integration with the log analyst, the geologist, and the reservoir engineer. In the late 80's and early 90's he was Exxon's representative for DEA 23 Filtrate Invasion During Coring research project at TerraTek and Exxon's representative for rewriting of API's RP40.

John was SCA president from 1996-1997, a member of the SCA Board from 1994 to 1998 and again from 2005 to 2009, and has been a member of the technical committee for the past 17 years. Since retiring from Exxon he has co-authored ten papers/workshops presentations at SCA and seven

at SPE, SPWLA, and AAPG. His most recent interests have been investigating the impact of true reservoir conditions on rock mechanics and fluid flow measurements.

John is currently semi retired (again) with part time consulting to Noble Energy's GoM projects. He and his wife, Christie, recently moved from Houston to 80 miles north of Seattle to be near both their sons and families.



**Note from the Vice President Technology**  
**By Ted Braun**



*2010 Society of Core Analysts Symposium  
Preliminary Technical Program*



**TUESDAY, October 5**

**8:00-8:15 a.m.**

**Opening Remarks**

**8:15-9:45 a.m.**

**Session 1 - Accuracy of Laboratory Measurements**

*Chairs: to be announced*

SCA2010-01

**Quantifying the Effects of Core Cleaning, Core Flooding and Fines Migration using Sensitive Magnetic Techniques: Implications for Permeability Determination and Formation Damage**

*D. K. Potter, A. Ali, S. Imhmed & N. Schleifer*

SCA2010-02

**Case Study in Validating Capillary Pressure Curves, Relative Permeability and Resistivity Index of Carbonates from X-ray Micro Tomography Images**

*Z. Kalam, T. Al Dayyani, A. Clark, S. Roth, C. Nardi, O. Lopez & P.-E. Øren*

**TUESDAY, October 5 – Continued**

SCA2010-03	<b>A Case of Large Hysteresis on Resistivity Index Values Between Drainage and Imbibition Phases</b> <i>B. Lallanne, G. Hamon, S. Peltier &amp; A. Saint-Pierre</i>
<b>9:45-10:15 a.m.</b>	<b>Break (Commonwealth A)</b>
<b>10:15 a.m.-12:15 p.m.</b>	<b>Session 2 - Obtaining Value from Coring and Core Analysis</b> <i>Chairs: to be announced</i>
SCA2010-04	<b>Value of Information from a Diverse Portfolio of Coring and Core Analysis Projects</b> <i>O. B. Wilson, P. J. Tarabba, A. Jabri &amp; M. Kraaijveld</i>
SCA2010-05	<b>Maximizing The Value Of Core</b> <i>L. E. Whitebay</i>
SCA2010-06	<b>Petrophysical Measurements for CO<sub>2</sub> Storage: Application to the Ketzin Site</b> <i>M. Fleury, S. Gautier, N. Gland, P. Boulin, B. Norden &amp; C. Schmidt-Hattenberger</i>
SCA2010-07	<b>Preservation of Core Integrity: A Comparative Study of Core Stabilization Products</b> <i>S. Baraka-Lokmane, M. Wignell, M. Smith &amp; B. Schipper</i>
<b>12:15-1:15 p.m.</b>	<b>Buffet Lunch (Commonwealth B)</b>
<b>1:15-2:45 p.m.</b>	<b>Session 3 - Advanced Laboratory Measurements</b> <i>Chairs: to be announced</i>
SCA2010-08	<b>FIB/SEM and SEM/EDX: A New Dawn for the SEM in the Core Lab?</b> <i>H. J. Lemmens, A. R. Butcher &amp; P.W.S.K Botha</i>
SCA2010-09	<b>Experimental and Theoretical Three-Phase Relative Permeability for WAG Injection in Mixed Wet and Low IFT Systems</b> <i>M. Sohrabi, H. Shahverdi, M. Jamiolahmady, S. Ireland &amp; G. Robertson</i>
SCA2010-10	<b>New Experimental and Theoretical Base for Reservoir Thermal Properties Determination and Pore Space Characterization</b> <i>Yu. Popov, D. Korobkov, D. Miklashevskiy, S. Safonov &amp; S. Novikov</i>
<b>2:45-3:00 p.m.</b>	<b>Break (Commonwealth A)</b>
<b>3:00-3:30 p.m.</b>	<b>Exhibitor Presentations I</b>
<b>3:30-4:15 p.m.</b>	<b>Brief Presentations by Posters Authors (SCA2010-33 through SCA2010-40)</b> <i>Chairs: to be announced</i>
<b>4:15-5:00 p.m.</b>	<b>Poster Session I (Commonwealth A)</b>

**WEDNESDAY, October 6****8:00-10:00 a.m.****Session 4 – Wettability and Rock-Fluid Interactions***Chairs: to be announced*

SCA2010-11

**Kaolinite Wettability – The Effect Of Salinity, pH And Calcium***E. V. Lebedeva, A. Fogden, T. J. Senden & M. A. Knackstedt*

SCA2010-12

**Effect of Salinity on Oil Recovery by Spontaneous Imbibition***S. Wickramathilaka, N. R. Morrow & J. Howard*

SCA2010-13

**Mechanistic Study of Improved Heavy Oil Recovery by Alkaline Flood and Effect of Wettability and Salinity***A. Emadi, M. Sohrabi, G. Hamon & M. Jamiolahmady*

SCA2010-14

**A Fully Coupled Geochemical Model with a Pore Scale Lattice Boltzmann Simulator - Principles and First Results***A. Hiorth, E. Jettestuen, L. M. Cathles, R. I. Korsnes & M. V. Madland***10:00-10:30 a.m.****Break (Commonwealth A)****10:30 a.m.-12:00 noon****Session 5 - Applications of NMR***Chairs: to be announced*

SCA2010-15

**Using Multifrequency NMR for Probing Wettability***J.-P. Korb, B. Nicot & P. Ligneul*

SCA2010-16

**Nuclear Magnetic Resonance Imaging: Application to Determination of Saturation Changes in a Sandstone Core by Sequential Waterflooding***N. Loahardjo, N. R. Morrow, J. Stevens & J. Howard*

SCA2010-17

**Analysis of T<sub>2</sub>-D Relaxation-Diffusion NMR Measurements for Partially Saturated Media at Different Field Strength***C. H. Arns, T. AlGhamdi, J.-Y. Arns, L. Burcaw & K. E. Washburn***12:00 noon - 1:00 p.m.****Buffet Lunch (Commonwealth B)****1:00-2:30 p.m.****Session 6 - Injection of CO<sub>2</sub> and Other Gases***Chairs: to be announced*

SCA2010-18

**Halite Precipitation and Permeability Assessment During Supercritical CO<sub>2</sub> Core Flood***Y. Wang, T. Luce, C. Ishizawa, M. Shuck, K. Smith, H. Ott & M. Appel*

**WEDNESDAY, October 6 – Continued**

SCA2010-19	<b>Microscopic Displacement Efficiency of Alkane and CO<sub>2</sub>-Based Gaseous Solvents with Heavy Oil</b> <i>M. Darde &amp; G. Darche</i>
SCA2010-20	<b>Rock/Fluid Interaction by Injection of Supercritical CO<sub>2</sub>/H<sub>2</sub>S: Investigation of Dry-Zone Formation Near the Injection Well</b> <i>H. Ott, K. de Kloe, C. Taberner, F. Marcellis, Y. Wang &amp; A. Makurat</i>
<b>2:30-2:45 p.m.</b>	<b>Break (Commonwealth A)</b>
<b>2:45-3:15 p.m.</b>	<b>Exhibitor Presentations II</b>
<b>3:15-4:00 p.m.</b>	<b>Brief Presentations by Posters Authors (SCA2010-41 through SCA2010-48)</b> <i>Chairs: to be announced</i>
<b>4:00-5:00 p.m.</b>	<b>Poster Session II (Commonwealth A)</b>

**THURSDAY, October 7**

<b>8:00-10:00 a.m.</b>	<b>Session 7 - Predicting Rock Properties from Pore Structure</b> <i>Chairs: to be announced</i>
SCA2010-21	<b>Estimation of Petrophysical Properties of Tar Sands using Microtomography</b> <i>C. Caubit, A. P. Sheppard, L. Delottier &amp; G. Hamon</i>
SCA2010-22	<b>Correlations Between SCAL Parameters and Porosity/Permeability: A Comparison Between Experimental Data and Simulated Data from a Pore Network Simulator</b> <i>A.W. Cense, R. Miskiewicz, R.M.M. Smits &amp; X.D. Jing</i>
SCA2010-23	<b>Investigation Into the Reliability of Predictive Pore-Scale Modeling for Siliciclastic Reservoir Rocks</b> <i>O. Lopez, A. Mock, J. Skretting, E. B. Petersen Jr., P.-E. Øren, &amp; A. B. Rustad</i>
SCA2010-24	<b>A Comparative Study of Digital Rock Physics and Laboratory SCAL Evaluations of Carbonate Cores</b> <i>A. Grader, M. Z. Kalam, J. Toelke, Y. Mu, N. Derzhi, C. Baldwin, M. Armbruster, T. Al Dayyani, A. Clark, G. Bin-Dhaaer Al Yafei &amp; B. Stenger</i>

**THURSDAY, October 7 - Continued****10:30 a.m.- 12:00 noon**

	<b>Session 8 - Low Salinity Flooding</b> <i>Chairs: to be announced</i>
SCA2010-25	<b>Mechanisms of Improved Oil Recovery from Sandstone by Low Salinity Flooding</b> <i>M. Kumar, A. Fogden, N. R. Morrow &amp; J. S. Buckley</i>
SCA2010-26	<b>Investigation of Low Salinity Water Flooding by NMR and CryoESEM</b> <i>H. C. Wideroee, H. Rueslaatten, Tony Boassen, C. M. Crescente, M. Raphaug, G. H. Soerland &amp; H. Urkedal</i>
SCA2010-27	<b>NMR Study On Pore Occupancy And Wettability Modification During Low Salinity Waterflooding</b> <i>Q. Chen, D. Mercer &amp; K. Webb</i>

**12:00 noon. - 1:00 p.m.****Business Buffet Lunch (Commonwealth B → Atlantic Ballroom)****1:00-1:45 p.m.****Poster Session III (Commonwealth A)****1:45-2:15 p.m.****Exhibitor Presentations III****2:15-3:15 p.m**

	<b>Session 9 - Advances in Measuring Resistivity and Salinity</b> <i>Chairs: to be announced</i>
SCA2010-28	<b>Excess Electrical Conductance in Carbonate Rocks</b> <i>S. Saner &amp; M. Akbar</i>
SCA2010-29	<b>Improving Connate Water Salinity Analysis on Preserved Clay Rich Cores</b> <i>W. Wei, S. Clinch, J. L. Shafer &amp; P. Lasswell</i>

**3:15-3:30 p.m.****Break (Commonwealth A)****3:30-5:00 p.m.**

	<b>Session 10 - Measurement of Low Permeabilities</b> <i>Chairs: to be announced</i>
SCA2010-30	<b>Permeability Characterization on Tight Gas Samples Using Pore Pressure Oscillation Method</b> <i>Y. Wang &amp; R. J. Knabe</i>
SCA2010-31	<b>Low Water Permeability Measurements of Clay Sample. Contribution of Steady State Method Compared to Transient Methods</b> <i>P.F. Boulon, P. Bretonnier, N. Gland &amp; J.M. Lombard</i>
SCA2010-32	<b>Permeability Measurement on Small Rock Samples</b> <i>R. Lenormand, F. Bauget &amp; G. Ringot</i>

**Posters with Extended Abstracts**

- SCA2010-33      **Modeling Asphaltene Deposition Related Damages Through Core Flooding Tests**  
*A. Rezaian, M. H. Sefat, M. Alipanah, A. Kordestany, M. Y. Khoshdaregi & E. Sarvaramini*
- SCA2010-34      **Sandstone Sample Classification, Using High Resolution CT Method**  
*M. Dohnalik, J. Zalewska & J. Kaczmarczyk*
- SCA2010-35      **Well Site Core Stabilization and Packaging - the first step in acquiring undisturbed core -**  
*J.-V. Garcia, J. Rousseau & D. Dourel*
- SCA2010-36      **Tertiary Carbon Dioxide Flooding of Low Permeable Chalk with In-Situ Saturation Determination using X-Ray Computed Tomography**  
*B. Niu, W. Yan, A. A. Shapiro & E. H. Stenby*
- SCA2010-37      **Efficiency of Gas Injection Scenarios for Intermediate Wettability: Pore-Network Modelling**  
*Y. Yang, M. I. J. van Dijke & J. Yao*
- SCA2010-38      **Study of Wettability Alteration Mechanisms by Surfactants**  
*Kh. Jarrahan, M. Vafie-Sefti, Sh. Ayatollahi, F. Moghadam & A. M. Moghadam*
- SCA2010-39      **Effects of Closure Stress on Fracture Morphology and Absolute Permeability of a Shear Fractured Sandstone**  
*S. M. Al Enezi, P. M. Halleck & A. S. Grader*
- SCA2010-40      **Attempt to Measure Velocity at Low Frequency by Modified Tri-Axial Destructive Instrument**  
*F. Kono, S. Onozuka, S. Izumotani & N. Shimoda*
- SCA2010-41      **Evaluating Potential Geothermal Reservoirs in Northern Germany by Interpreting NMR and CT Results of Core Plugs and Sidewall Cores**  
*W. Hübner, J. Orilski, M. Halisch & T. Wonik*
- SCA2010-42      **A New Algorithm for Estimating Three-Phase Relative Permeability from Unsteady-State Core Experiments**  
*H. Shahverdi, M. Sohrabi & M. Jamiolahmady*
- SCA2010-43      **Three-Phase Unsteady-State Relative Permeability Measurements in Consolidated Cores using Three Immiscible Liquids**  
*P. Cao & S. Siddiqui*
- SCA2010-44      **Determining Wettability from In Situ Pressure and Saturation Measurements**  
*A. Brautaset, G. Ersland & A. Graue*



### Posters with Extended Abstracts - Continued

SCA2010-45	<b>Impact of Deformation Bands on Fluid Flow and Oil Recovery</b> <i>G. Ersland, A. Graue, R. W. Moe, E. Aspenes, T. Skar &amp; S. Berg</i>
SCA2010-46	<b>Drainage Capillary Pressure and Resistivity Index from Short-Wait Porous Plate Experiments</b> <i>M. Dernaika, O. B. Wilson, S. M. Skjæveland &amp; E. Ebeltoft</i>
SCA2010-47	<b>Experimental Investigation of the Inertial Effects of Flow through Porous Media</b> <i>J. K. Arthur, D. W. Ruth &amp; M. F. Tachie</i>
SCA2010-48	<b>Research on the Elemental Sulfur Deposition Mechanism in High Sulfur Gas Reservoir by NMR</b> <i>S. Genhua, S. Yunqing, L. Guangyue, L. Dongjiang &amp; L. Hongwei</i>

## The Society of Core Analysts

### Young Professional Awards for Best Poster and Outstanding Presentation

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**Purpose of the Award:** To recognize best Young Professional (YP) poster and presenter at the Annual Symposium to increase interest and participation by YPs in the Society of Core Analysts.

**The Award:** Up to two prizes will be awarded; one for the best poster and one for the best presentation of a technical paper. The awards will be \$250 and \$750, respectively.

**Frequency of the Award:** Annually

**Eligibility for the Award:** All presentations of posters and technical papers during the SCA Annual Symposium's poster and technical sessions by a Young Professional are eligible and will be given equal consideration for the award. The VP Technology may ask the winning presenters for a copy of a government issued id to verify their age.

**Entry Requirements:** The presenter must be under the age of 36 to be eligible.

**Method of Selecting Award Recipient:** The technical committee will judge each poster/technical paper using a YP scoring sheet provided by the VP Technology. The VP Technology (or designated representative) will tally the scores and inform the Society President (or designated

representative) of the results. After examining the results and resolving any questions or procedural issues, the President will determine the award recipients and announce the results.

Members of the Technical Committee will abstain from evaluating YP posters/presentations which they themselves or their colleagues having the same employer have authored or co-authored.

**Presentation of the Award:** The Awards will be presented to the winners before the end of the calendar year in which the Symposium occurred. The winners will be announced in the SCANews and on the SCA website. An Award certificate will be prepared later by staff and mailed to the recipient along with a congratulatory letter from the President. Winners can choose to receive the cash award by cheque or wire transfer.

### ***”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 2010 International Symposium in Halifax, Canada. From all accounts, this should prove to be an exciting and rewarding experience for all.

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

Patrick Lasswell  
*VP Publications*

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