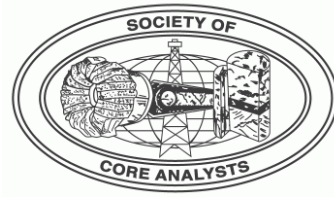


SCANews



The SOCIETY of CORE ANALYSTS

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Message from the SCA President *Bob Smits*

Dear Colleagues,

The 2006 International Symposium of the Society of Core Analysts will be held in beautiful Trondheim, Norway, 12-16 September. You can find the timetable at our website: <http://www.scaweb.org/>

In addition to the main technical programme featuring 10 paper sessions, 2 poster sessions and 2 vendor presentation sessions, we also have a workshop on "Value added from core analysis and future trends in the industry". The nice and (so far) unique feature this year is the fact that this workshop is held on board of a boat going from Trondheim to Bergen.

Special thanks go to the VP Arrangements, Odd Hjelmeland, the Local Organising Committee, the VP Technology, Ivar Erdal, the current SCA Board, and the many others who have contributed to organising this years Symposium. Always a lot of effort has to be spent in organising the Symposium, and it's always a great pleasure to see how well these efforts pay off.

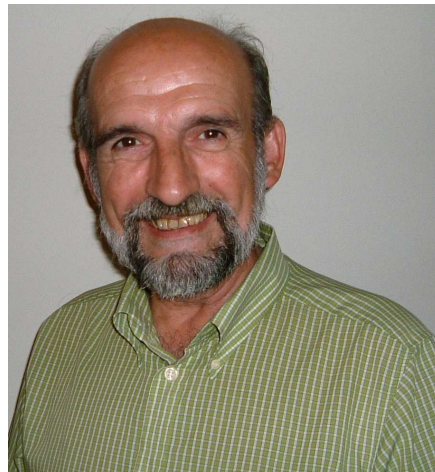
I hope you will enjoy this year's SCA Symposium. It will again be a great opportunity to keep abreast with the latest technological developments, also from the vendors, to meet your friends and colleagues from all over the world, and to exchange

ideas and experiences in our exciting field of core analysis and its applications.

I wish the Symposium a great success, it will certainly be again very enjoyable, and I hope to see very many of you there.

2006 Technical Achievement Award

Ioannis (John) Chatzis was born in Evia – Greece in 1949 and immigrated to Canada after completing high school in 1967. In the period 1970-1979 he 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).



(Continued on p.3)

Summer issue of SCA News...

by **Andrew Cable, Editor**

By now, for most, the holiday season is over. But we have the symposium to look forward to. A time for enjoyment in the company of friends and colleagues. The symposium involves a great deal of effort, but clearly there is immense satisfaction and reward which drives our thriving membership. Tom Fate has written an interesting article, and challenges the membership to recruit more suppliers and end-users of core analysis into the SCA.

In this issue of SCA News you will also find the latest and to date information from Odd Hjelmeland (*VP Arrangements*) and Ivar Erdal (*VP Technology*). Our outgoing President, Bob Smits, invites you all and Waddah Alhanai (*ME Director*) has also written an article on Doug Ruth's visit to Abu Dhabi. Congratulations to John Chatzis (*photograph front cover*) who will receive the 2006 SCA Technical Achievement Award.

The Ninth International Wettability Symposium (IWS) on "Evaluation of Reservoir Wettability and its Effect on Oil Recovery", is planned for September 18-19, 2006, in Bergen, Norway. The wettability symposium is a biannual event and provides an arena where major oil companies, federal agencies, research institutes and academia discuss topics of impact of wettability on oil recovery. Sessions will focus on fluid-fluid-solid interactions, pore-scale modelling, crude oil-brine-rock interactions in cores, heterogeneous wetting, and chemical alteration of wetting.

The wettability symposium is arranged back-to-back with the SCA conference in Trondheim and for more detail you should visit <http://www.cipr.uib.no/IWSymposium/>

On the back page of this issue you will also find a prize winning cross word! This was a challenge to compile since the SCA covers a

diverse range of disciplines and I wanted to use clues that reflect our various professions. This may have made the cross word difficult, I don't know, but hopefully there may also be some educational benefit? I know I learnt a thing or two researching some of the words. Many of the answers may be found in SCA News (including back issues – now you wish you had read them!). The prize of a digital camera is kindly sponsored by Vindum Engineering who will be exhibiting at the conference. You will be able to place your entries at the booth, or alternatively if you cannot attend the conference you can fax me:-

+44 1929 463963 (no later than 12:00h on the 08.09.06)

All correctly completed cross words will be entered into the draw. This draw will take place during the Business lunch and I will announce the winner. My decision will be final!

If your Company or Organisation would like to sponsor any future prizes in SCA News please contact me at the Symposium.

The next issue of SCA News will be December. If you have any comments, contributions, articles please do not hesitate to contact me, or any of the current Board members.

Andrew Cable
VP Publications

(continued from p. 1)

His graduate studies were supervised by Professor Dullien and the published works contributed to the use of advanced network models of pore structure and invasion percolation concepts for modelling capillary and transport phenomena in porous media. Right after his graduate studies he joined the New Mexico Petroleum Recovery Research Centre (PRRC) as research engineer and worked in Dr. Norman Morrow's group for about 3 years. While at PRRC he advanced his skills on photo fabrication techniques for making glass micromodels and made use of them for explaining and characterizing the detailed structure of residual oil in water-wet porous media, pore scale immiscible displacement mechanisms, the role played by pore structure and bulk film flow in of the wetting phase in pore corners. He contributed in the development of correlations of residual oil saturation with capillary number in porous media and relative permeability at reduced residual oil conditions. He joined the Department of Chemical Engineering of the University of Waterloo as a faculty member in 1982 and continued researching various topics relating to capillary and transport phenomena in porous media with applications to oil recovery. 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. As an academic and researcher he has supervised fourteen PhD students to date with four of them being well-established professors in Canadian universities and three others in their country of origin. He has been active with the Society of Core Analysis since 1991 with numerous presentations and assisted in organizing the very successful SCA 2005 conference held in Toronto, Canada. 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. In the area of core analysis, he

has published work on apparatus design and data analysis techniques related to measurements of breakthrough capillary pressure, scaling the mercury porosimetry capillary pressure curves using the breakthrough capillary pressure, the magnitude and detailed structure of residual oil after waterflooding, relative permeability measurements using NMR, x-ray CT scanning, developed experimental techniques of oil recovery using gravity assisted inert gas injection and heavy oil recovery techniques using vapor extraction. 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 modelling using network models of pore structure.

Message from the VP Technology

by *Ivar Erdal*

Dear colleagues,

The technical programme for the 2006 Annual Technical Symposium in Trondheim is now ready. The program includes 10 paper sessions and 2 poster sessions, which will give time for a total of 37 oral presentations and 20 posters to be displayed. An overview of the technical program, starting on Wednesday morning, is given below. More details regarding registration desk opening hours, icebreaker on Tuesday evening and the social programme are given elsewhere in this issue of SCA News.

The workshop will be held onboard M/S Midnatsol, going from Trondheim to Bergen. The topic for the workshop will be **Value added from core analysis and future trends in the industry**, and invited speakers will address topics related to the theme and hopefully create some good discussion amongst the participants! Six guest

speakers have been invited to give a presentation at the workshop:

Jon Knut Ringen (Statoil), **Cliff Black** (BP Exploration), **Tom Fate** (Chevron ETC), **John Shafer** (Reservoir Management Group), **Arne Skauge** (Centre for Integrated Petroleum Research), **Val Pinczewski** (University of New South Wales). **Bengt K. Pedersen** (Statoil) has been invited to chair the workshop. The final programme with titles of the talk etc. is currently at the publishers. There will be three sessions during the workshop, each about 90 minutes, and we will prepare the programme so that you will have some time to view the scenic coastline of Norway as we are going towards Bergen. As an alternative to the traditional field trip, we will also arrange our own special geological field trip – at a distance. More about this when you get onboard!

Looking forward to seeing you all in Trondheim in September!

2006 International Symposium of the Society of Core Analysts
Improved Core Analysis Driven by Field Development Needs
Trondheim, September 12 - 16, 2006

	<i>Wednesday 13 September</i>	<i>Thursday 14 September</i>	<i>Friday 15 September</i>	<i>Saturday 16 September</i>
7:00 - 8:00	Registration desk open			
8:00 - 9:45	Session 1 <i>Wettability Determination & Restoration</i>	Session 5 <i>Case Studies</i>	Session 8 <i>Improved SCAL Techniques and Interpretation - III</i>	Workshop <i>Onboard M/S Midnatsol</i> <i>Value added from core analysis and future trends in the industry</i> Departure: 10:00AM
09:45 - 10:15	Coffee Break	Coffee Break	Coffee Break	
10:15 - 12:00	Session 2 <i>Improved SCAL Techniques and Interpretation - I</i>	Session 6 <i>Pore Scale Imaging and Modeling - I</i>	Poster Pres. II	
12:00 - 13:00	Lunch	Lunch	Business Lunch	
13:00 - 13:30	Vendor Pres. I	Vendor Pres II		
13:30 - 15:15	Session 3 <i>Improved SCAL Techniques and Interpretation - II</i>	Session 7 <i>Pore Scale Imaging and Modeling - II</i>	Session 9 <i>Displacement Mechanisms</i>	
15:15 - 15:45	Coffee Break	Coffee Break	Coffee Break	
15:45 - 17:30	Session 4 (15:45 - 17:00) <i>Reservoir Characterization</i>	Poster Pres. I	Session 10 (15:45 - 16:45) <i>Improved Oil Recovery</i>	

WELCOME TO TRONDHEIM, SEPTEMBER 12 - 16by **Odd Hjelmeland, VP Arrangements**

We have now prepared a comprehensive technical and social program for the 2006 SCA Symposium and Workshop. We hope that you all will enjoy the stay here in Norway.



There are regular bus services from the airport to the city hotels. The distance is approximately 40 kilometres so that taxi trips may be expensive.



The weather this summer has been the best ever over a period of 60 years. However, we can not guarantee that this will continue. Therefore, bring a light rain-coat or jacket. Temperatures may be between 12 - 22°C.

The registration takes place at Britannia Hotel (The Conference Hotel) on Tuesday, September 12, 17:00 – 19:00 hrs. and Wednesday from 07:00 hrs.

Social Events**Ice-breaker**

On Tuesday evening, after you have registered, you, and the person accompanying you will have the chance to meet those friends and colleagues that you have not seen since Toronto, during the traditional Ice-breaker. It will be held in the Exhibit area from 18:00 to 19:00.

After the short Ice-breaker we walk 10 minutes to the Archbishops Palace where the Mayor of Trondheim will host a reception for participants and accompanying persons. Drinks and snacks will be served. Casual Dress.

Conference Concert

On Wednesday at 18:30 there will be a Concert at Nidaros Cathedral for participants and accompanying persons. Duration approx. one hour.

Conference Dinner

The Conference Dinner will take place at Palmehaven in Britannia Hotel at 19:30 to 22:30, Thursday night. Dress smart/business.

Spouse Programme

Trip to Røros (full day) Wednesday 09:00 – 18:00

Røros is a mining town with soul and atmosphere. The characteristic low wooden houses, the history, the atmosphere and the experience have a unique flavour which you will find nowhere else. Røros' whole town centre is under a preservation order and is found on UNESCO's World Heritage List in line with other cultural treasures like the Palace of Versailles and the pyramids of Egypt.



Sightseeing on the Canal and Fjord,
Friday 10:00 – 12:00

Guided tour around canals, Nidelven and the fjord. Landmarks such as the quays, Gamle Bybro, Munkholmen and excellent views over the town from the sea. The boat call at Munkholmen where you can go ashore for a short walk.

Workshop

The Workshop takes place at the Costal Voyage Ship, Midnatsol, which takes you to Bergen. The ship leaves Trondheim at 10:00 on Saturday, September 16 and arrive Bergen on Sunday at 14:00 hrs.



An interesting Workshop and a social program which we think you will enjoy have been prepared.

For those of you who will try the outdoor Jacuzzi, you should bring a swimsuit.



I would like to welcome you all to the 2006 SCA and look forward to see you here in Trondheim.

From the ME Director

Waddah T Alhanai

Last year's Technical Achievement Award winner, Dr. Douglas Ruth, paid a visit to Abu Dhabi from Tuesday, May 9 (evening) until Wednesday May 17 (afternoon). The visit was sponsored by ADNOC and its Group.

Dr. Douglas Ruth conducted two workshops for ADNOC and its Group, each for two days, and a one-day R&D Seminar. Saturday & Sunday, May 13 & 14, Dr. Ruth conducted the first workshop: "Advanced Saturation Functions".



Monday, May 15, was reserved for the R&D Seminar at the Abu Dhabi Petroleum Institute. Tuesday & Wednesday, May 16 & 17, Dr. Ruth conducted the second Workshop "Saturation Functions for Beginners".

The evening of Monday, May 15, was also reserved for a joint meeting of the professional of SPE, SPWLA, SCA and the Emirates Society of Geoscientists.

The workshops included topics on:

- Measurement methods of P_c & k_r (description of each method, apparatus, pros & cons of each method).
- P_c and k_r correlations.
- End-point saturation relationships.
- Hysteresis and its effect.

- Effects of wettability, IFT, temperature and end-effects on P_c, k_r
- Data processing of unsteady-state experiments, modelling of unsteady-state experiments (pressure & saturation equations, discrimination in space & time, boundary conditions).
- Upscaling of P_c and k_r (standard methods & advanced techniques).
- Three-phase k_r .
- Network Models.

Diversity in the Core Analysis World

by **Tom Fate SCA President Elect**

Soon we will hold our 2006 Symposium in Trondheim. SCA members from around the world will be attending, but is there enough diversity in the attendees?

When the SCA was started in Dallas in 1985, it was a US based Society and was composed of a variety of people, from those that performed basic core analysis for commercial labs, to oil company R&D people. As the Industry declined during the late 1980's and early 1990's, the US membership started to decline and the Europeans took a very active interest and involvement. Since then we have held the annual Symposia in Abu Dhabi (with great success) along with several European venues (France, Norway, The Netherlands, England and Scotland). The membership has changed from 100% US to US and European and is now Global.

But the change in demographics is not enough, we have moved from the people who perform the core analysis as a business (the first SCA President, Joel Walls, was from a service company) and the users of core analysis data to the people who do the research in Core Analysis. The main contributors and participants are from oil company R&D labs, government R&D labs and Academia. This is a wonderful group, who can present the best and newest methods and technology, but we need the people who actively practice core analysis and use core analysis to be just as involved.

As we say in Texas "You are preaching to the choir", meaning that one researcher telling a group of researchers about a special method or calculation is often not optimum, the people who perform 90% of the core analysis also need to be involved.

I travel the world and have core analysis performed at many labs in many countries, I

always am asking the lab personnel if they have seen a certain SCA paper or ask if they will be attending the next Symposium. I am almost always faced with a blank or semi-blank look. The labs that I am relying on to analyze my core with the best methods possible are not in the main stream of the SCA and its good works. The other customers of these laboratories face the same challenges, they rely on the data and techniques available and they often do not know that there are new methods of analysis or interpretation available.

With the "new" oil economy currently in play, with \$72 a barrel oil, the industry is pushed even harder just to provide the standard core analysis results. Most people think that they do not have time to learn anything new or to attend meetings. Plus there are new technologies that are required to enable the industry to advance into new areas of core analysis. There are new projects being started in CO2 sequestration, oil shale, gas shale, gas hydrates, coal bed methane and tar sands. These new resources demand even more technology and the R&D community by itself cannot provide the services required.

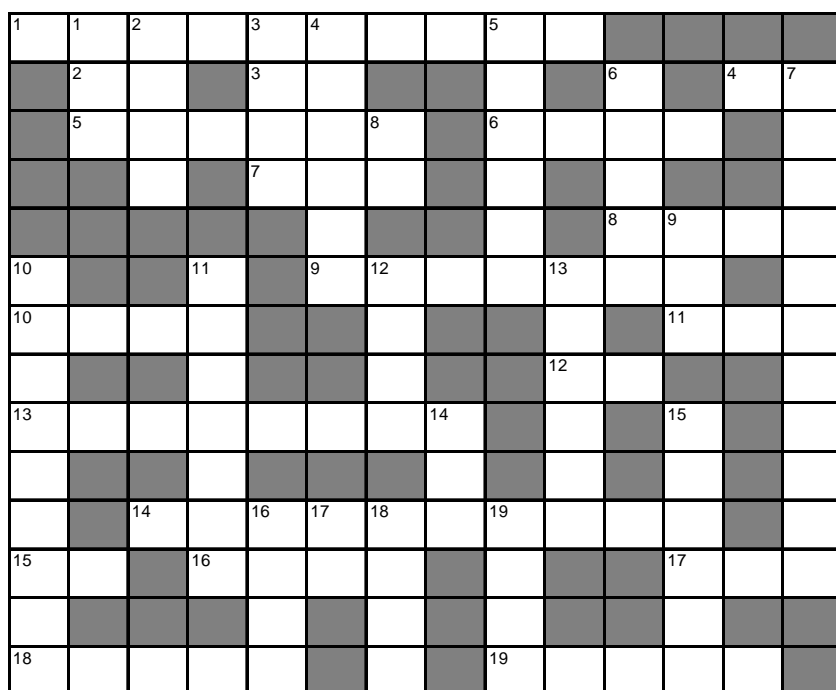
The SPWLA is full of practitioners in log analysis; they are supplemented by the R&D people and the commercial people (wireline contractors). I would like to see the SCA return to its roots, and engage all of the practitioners of core analysis. So I challenge the SCA membership to actively recruit new members, and encourage their core analysis suppliers and end users of the data to become involved in the SCA.

See you in Trondheim!!!!

“END-POINT...”**PRIZE WINNING CROSS-WORD**

Prize: - DIGITAL CAMERA

Rules of the competition: Open to all SCA members. Please state full name and affiliation and post your completed cross-word in the box provided at the conference. The box will be placed on the exhibitor stand of **Vindum Engineering** who has kindly agreed to sponsor the prize for this competition. Alternatively fax to the editor +44 1342 317331 no later than 12:00 8th September 2006. All correctly completed cross-words will be entered, and the winner will be drawn during the SCA Business lunch. Editor's decision is final.



NAME:- _____

AFFILIATION:- _____

Across:-

1. This character was born June 10, 1803 in Dijon, France (5,5)
2. A chemical symbol for the butyl radical
3. Might be used as an abbreviation for the industry referred to in 14 down
4. Intellectual Property (*Abbrev*)

5. Beautiful Norwegian town which will play host to the IW Symposium in September (6)
6. Mineral matter that is our business (4)
7. A prefix indicating the presence of a branched carbon chain in the molecule, or an isomeric compound (3)
8. Large E&P Company that brands its UK petrol by this name (4)

9. A rare calcium silicate formed at very high temperatures in contact with metamorphosed limestone (7)
10. 31,536,000 seconds (4)
11. A state of matter in which the molecules move freely (3)
12. Number (*Abbrev*) also found in the game of Cricket
13. This will happen if a fluid falls below its dew point pressure (8)
14. SCA's lifetime achievement award winner 1992 (3,7)
15. Stuff that powers our hardware (*Abbrev*)
16. To receive for one's labour (4)
17. This breaker can be very cold (3)
18. Wettability state that permits imbibition of both phases (5)
19. Unit of reciprocal inductance (5). An inverted clue might be 1 across

Down:-

1. The flow of water back towards the sea, as the tide falls (3)
2. ___(4) ardente: a glowing cloud of gas and volcanic ash that may move rapidly downhill
3. Chap who prefers to be known after a famous bear (4)
4. Automotive fuel that may also be found in some drilling mud (6)
5. Atomic number 6 (6)
6. The up to eight valency electrons in an outer shell of an atom or molecule (5)
7. A 'device' that may be used for the measurement of capillary pressure (6, 5)
8. Nobelium (*Chem. symbol*)
9. Society of Exploration Geophysicists (*Abbrev*)
10. Largest onshore oilfield in Western Europe (5,4)
11. Bay discovered in 1968 currently accounting for about 8% of US oil production (7)
12. A straight line for reference, as in a graph (4)
13. To start burning (6)
14. A generic abbreviation used in the Oil Industry when referencing additional recovery (3)
15. This particular clay can be very problematic in special core analysis (6)

16. In digital communication, a measure of signalling speed (4)
17. Public relations (*Abbrev.*)
18. Trade name for a well known operating system, not tied to a particular computer manufacturer (4)
19. This gun slinging hero can be found buried not too far from the SCA's 1999 conference venue.

How many Core Analysts does it take to change a light bulb?

Four, plus one Senior Analyst to manage the project, one technical writer to correct the spelling and grammar, one light bulb librarian, a sales-force of at least five to drum up enough users who want to turn the light on, 274 users to burn out the new bulb, at which point we go to tender for another light bulb change...Anon.

