



Call for Abstracts 2005. **Submission deadline is 17th December 2004.**

The new VP Technology Tom Fate has the detail on page 4. Visit www.scaweb.org for on-line submission.

Message from the President

by ***Olga Vizika***

Dear Colleagues,

It is an honour and a great privilege for me to serve the SCA as President for the term 2004-2005. The Society of Core Analysts provides an international forum to exchange experiences and share advances in core analysis. We are a relatively small, yet constantly growing multi-disciplinary international society. Our annual meetings constitute big successful events because of the high quality of the technical contributions, the friendly exchanges and the great opportunities to network.

This has been most particularly the case this year. Bob Smits, our VP Technology, prepared with the Technical Committee an excellent technical program. A one-day Workshop on the "Carbonates" permitted to revisit the issues related to prediction and production of carbonate reservoirs, to demonstrate the impact of high quality core analysis on reducing uncertainties, to highlight the latest advances on this area. A rich Symposium programme treated us with

numerous oral and poster presentations given by participants from all over the world. But of course the Meeting wouldn't have been that success without the magnificent organization of everything, to the smallest detail, by Waddah Al Hanai and Ali Al Habshi who lead the Local Organizing Committee to this unequalled achievement. I wish to thank them warmly for having hosted so successfully the Meeting in Abu Dhabi and for having turned this Symposium into a memorable event.

It is true that for all of us being in Abu Dhabi is a unique experience. Having our meeting in this part of the world, where are concentrated most of the worldwide petroleum reserves, is for us very motivating. Here we feel better the importance and the impact of our work, our results do really matter, we are the champions, we feel very Special Core

(Continued on page 3...)

A note about your new Editor

by **Andrew Cable**

Welcome to December 2004 issue of SCA News. I have been voted VP Publications to take over from Marios Ioannidis, who now has his work more than cut out with arrangements for the 2005 Symposium. You will already know that next year the conference will be held in Toronto, Canada, and there is just three weeks now to get your Abstracts submitted!

It is hard to believe that we are talking of 2005. Where have the last six weeks gone since that fantastic Symposium in Abu Dhabi. The 2004 Local Organizing Committee are so deservedly congratulated, and you only need to see the photographs posted on the SCA website to see how much the membership enjoyed this event.

Not long after the Abu Dhabi Symposium we were saddened to hear the news that the founding father Sheikh Zayed bin Sultan Al Nahyan passed away Tuesday night 2nd November. HH Sheikh Khalifa bin Zayed Al Nahyan, Ruler of Abu Dhabi, was elected as the new president of the United Arab Emirates on the 3rd November to succeed his father.

So who is this new SCA News Editor? I am a relative newcomer, my first SCA Conference was only 5 years ago in Golden, Colorado. And what a wonderful experience that was. A good thing about the SCA is that it is International and you do get to see some of the World and meet its people. So 5 years in the Society, some might say I have inexperience, but inexperience is what makes a young man do what an older man says is impossible (Herbert

Prochnow). Young I hear you say...? Well sort of, I was born in London 1962. The year that Nelson Mandela was jailed for the first time, Yves St Laurent launched his fashion empire, Glenn orbited the Earth in 'Friendship 7', the World lost Marilyn Monroe, but gained the Beatles to name but a few of the many events that year... Yes I admit I am greying a little around the sides, but I'm told it is very distinguishing.

I left 'Purley High School for Boys' (also known to 'The Sun' Newspaper readers as Wacko Academy, but that's another story) to study Chemical Engineering at Loughborough University of Technology, graduating in 1985. My first experience of the 'Oil Industry' was in 1984 as I had 12 months industrial experience in UKAEA studying N₂ EOR processes. I didn't actually start Special Core Analysis and Advanced Reservoir Studies until 1991, having spent the first six years in the Nuclear Industry (waste management). I have always worked at 'Winfrith' in Dorset but with four employers: UKAEA, AEA Technology, ECL and now more recently I am the Winfrith Laboratory Manager for ResLabUK.

For this edition of SCA News there are contributions from Olga Vizika-Kavvadias (2005 President), Tom Fate (2005 VP Technology). We have a short feature from Lutz Riepe's "Knowledge Shared is Knowledge Gained". Hopefully in a future SCA News or at www.scaweb.org we will run a full feature. Lutz is Corporate Knowledge Management Advisor at Shell Petroleum Development Company, Nigeria. This year's Technical

Achievement Award recipient was Ken Sorbie. Ken teaches Reservoir Simulation on the Heriot-Watt Masters classes as well as teaching in more specialised short courses. In the next edition of SCA News we will report on Ken's Gala Dinner speech (not to be missed).

One feature I enjoyed at this year's conference was the opportunity given to the vendors for short conference presentations. A lot of time, effort and investment goes into exhibitor stands and I think Abu Dhabi offered excellent opportunities. Read Yogi Vindum's account on page 4.

SCA News is written for the membership by the membership. So like most things in life, you get out what you put in. I shall be asking for more contributions from the current SCA Board, but more importantly from the membership. There is an opportunity for anyone to contribute, technical or otherwise, news, letters, questions for the Editor, SCA Board etc. There is a direct link available scanews@scaweb.org.

Message from the President

by **Olga Vizika** (cont. from p.1)

Analysts. The impressions are so strong that a wish comes out spontaneously, that the SCA Annual Symposium returns again to Abu Dhabi in the near future.

The trend observed last year about increasing participation from new countries has been confirmed this year. We hope to be able to maintain and improve even further the active participation in our community of loyal and open-minded people, those who think that debating is integral part of the

solution finding. To achieve this objective, we count on you, our valued members, we need your help and support, and we encourage the new members (there have been several dozens this year) to follow closely our society's activity. The best way to do that is to plan participating to the 2005 Annual Symposium.

The preparation of our 2005 Symposium, to be held in Toronto, Canada, is well underway under the coordination of VP Technology, Tom Fate (ChevronTexaco) and VP Arrangements Mario Ioannidis (University of Waterloo). The Technical Committee is already organized and the call for abstracts issued. There will be a whole day workshop on Emerging and Unconventional Resources including hydrates, heavy oil sands, tight gas sands and CO₂ injection with the dual objective of oil recovery and CO₂ sequestration.

You can find more information about next year's meeting in this SCANews and on the SCA website at www.SCAweb.org. So please visit regularly the website for the up-to-date news and start planning your participation to the meeting in Toronto. With an oral or poster presentation, as an exhibitor or just to discuss core analysis problems and to exchange ideas with other specialists you have an important role to play in our annual event.

I look forward to seeing you all in Toronto. In the mean time do not hesitate to send me an e-mail at olga.vizika-kavvadias@ifp.fr for any suggestion or comments concerning our Society.

With best regards,
Olga Vizika
SCA President

Note from the VP Technology

by **Tom Fate**

“Core Analysis Solutions across Scales and Disciplines”

Dear SCA Members,

The 2005 SCA International Symposium in Toronto proposes to be a very technically interesting and stimulating meeting. It will bring a focus on new resources and technologies for the core analysis community.

The highlight of the Symposium will be a workshop, during which invited keynote speakers will discuss new types of resources & processes, and challenge the Core Analyst to develop new and innovative methods for characterization and development. Interaction between Scientists, Engineers and Professionals of the SCA together with Reservoir Engineers & Geoscientists, not necessarily working directly with core analysis, but having experience with broad-scope projects is key to defining core analysis for the exploitation of subsurface environments.

Core analysis is a means to understand the behaviour of fluids in porous media and to determine parameters needed for decision-making at the large scale. Non-conventional technologies and resources pose unique challenges and opportunities, and it is those that we seek to identify with the help of presentations by leading experts.

Subjects to be covered in the Work Shop: *Emerging and Unconventional Resources: Gas Hydrates, CO₂ sequestering, heavy oil sands, tight gas sands, gas shales and oil shales.*

The 2005 Technology committee has been formed; it has many returning members and some new members who will add technical depth. The Technical Committee is looking forward to reviewing and selecting the papers and posters for the 2005 Symposium.

The Call for Abstracts has been issued; it can be seen on the SCAWeb along with the form to be used for abstract submission. I would encourage all members to provide abstracts for the Symposium. We will be holding technical sessions on the traditional core analysis technologies and will have some sessions that will focus on unconventional resource analytical methods and challenges.

There are many new challenges and opportunities in core analysis and I hope the 2005 Symposium will provide insight to these for our members.

See you in Toronto!

Tom Fate
VP Technology.

Note from the VP Membershipby **Bas Schipper**

When visiting the membership database at the SCA website you will find the following Information:

Database information	
Total # of records:	816
Last updated:	Mon Nov 15 20:43:43 2004

The total number of records are the members that have paid their membership fee for the current year but also include members that have paid their fees for 2003 but not (yet) for 2004 and also includes the new members which attended this year's symposium in Abu Dhabi. Reviewing the 816 members listed in the membership database shows that the geographical distribution is still weighted in favour of North America and Western Europe. However from the active member count per region as given in the table below, it shows that the Middle East region membership has increased the last few years and has decreased again drastically last year. Because of this year's symposium being held in Abu Dhabi, the number of members has increased with 118 members! The table also shows that the other active hydrocarbon regions are barely represented.

Region	August 2001	August 2002	August 2003	December 2003	August 2004	October 2004	2001-2004 period
Africa	1	3	6	6	6	7	+ 6
Asia	21	24	27	31	33	32	+ 11
Australia	18	17	17	17	18	17	- 1
Europe	228	242	257	280	282	281	+ 53
Middle East	98	170	155	159	48	166	+ 68
North America	285	254	280	286	289	295	+ 10
South America	26	24	26	27	18	18	- 8
	677	734	768	806	694		+ 139

The member distribution per country is as follows:

USA	271	United Arab Emirates	136
United Kingdom	96	Norway	58
France	41	Netherlands	26
Canada	24	Russia	20
Australia	17	Denmark	11
Japan	11	Saudi Arabia	10
Germany	9	China	9
Oman	7	Brazil	7
Venezuela	6	Indonesia	5
Italy	5	Egypt	5
Poland	4	Kuwait	4
Qatar	4	Malaysia	3
Iran	3	Mexico	3
Belgium	3	Turkey	2
India	2	Bahrain	2
Nigeria	2	Switzerland	1
British Virgin Islands	1	Brunei	1
Spain	1	Korea (South)	1
Peru	1	Greece	1
Hungary	1	Argentina	1
Portugal	1		

We ask all active members to help increase the membership by directing colleagues to the SCA Website at www.scaweb.org.

Bas Schipper
VP Membership

SCA Industrial Relations Liaison

by **Jørgen "Yogi" Vindum**

We are always looking for ways to make the annual technical symposium more useful for all the attendees. During this year's symposium in Abu Dhabi, the various vendors were given an opportunity to give a short 5-minute presentation to the whole audience. Presentations covered services, hardware and new measurement techniques. Presentations were given by:

- ACS Laboratories
- Corpro Systems, Ltd
- Core Laboratories International BV
- Coretest Systems. Inc
- Corex UK Ltd
- Emirates Link ResLab
- Vinci Technologies, E&P Laboratories

- PETEC Software and Rogaland Research
- Quizix Inc.
- Temco Inc.
- Vindum Engineering Inc.

The new format was met with great enthusiasm. Everybody appreciated the chance to learn more from the vendors and all the vendors appreciated the opportunity to give an overview of their products or decided to do the same during next years meeting in Toronto.

If you have any comments regarding the vendor presentation program, please feel free to contact me.

Knowledge Management

An introduction by **Dr Lutz Riepe**

"Knowledge Shared is Knowledge Gained" Examples of Best Practices for Knowledge Management (KM) in the Oil & Gas Industry.

The concept of Knowledge Management is increasingly considered as the most important asset and an essential key success factor in today's global economy. There are numerous definitions on KM, but in essence it is about identifying, creating, capturing, sharing and using knowledge within (and between) organizations. If done well, it may lead to improved production, shorter time-to-market, reduced time-to-competence, value creation, cost reduction and innovation. Organizations are more and more forced to fully exploit the know-how of their working force.

Team work and collaboration are pivotal to stay ahead of the competition.

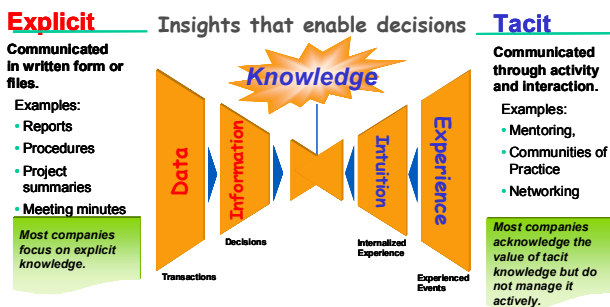
Of all knowledge in an organization, the tacit knowledge - that what is in the heads of the employees - is the most valuable. It is essential to make the tacit knowledge accessible and to increase internal and external collaboration. Modern technology makes that possible in a relatively simple way, worldwide, 24 hours per day, e.g. via global Intranets. Technology is a tool, however. Almost everything depends on the willingness of people to share knowledge and to cooperate. People may hesitate to share their knowledge, mindful of the saying: **Knowledge is Power ?!** So many will still ask 'What's in it for me?' The answer could be:

- personal development
- saving time by not re-inventing the wheel
- recognition and acknowledgement by contributing with your expertise

Team working, collaboration, information and knowledge sharing: all this should be a **continuous** process in every organization.

What is Knowledge ?

Knowledge is a strategic asset at the intersection of **explicit** and **tacit** information.



Knowledge Sharing in Professional Organisations. e.g. SCA

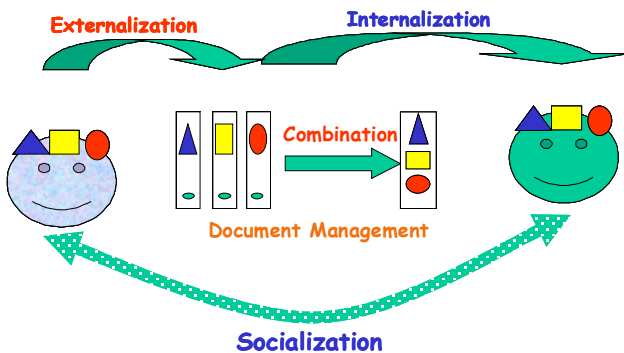
Explicit to Explicit:
„Archiving & Filing“:
 • SCA Conference Papers
 • on CD or
 • on the SCA websites
 • Petrophysics Journal
 etc. etc.

Explicit to Tacit:
„Reading“:
 • SCA papers
 • CA Guidelines
 • SCA Forum discussions
 • SCANews
 etc. etc.

Tacit to Explicit:
„Writing“:
 • SCA Papers
 • Contributions on the SCA website Forum
 • Articles in SCANews
 etc. etc.

Tacit to Tacit:
„Talking & Listening“:
 • SCA Conferences
 • SCA specialWorkshops
 • Field Trips
 • Individual Discussions

Knowledge Sharing Cycle



Knowledge Sharing is not only pivotal within the Oil&Gas industry , but also for professional organisations like SCA, SPE, SPWLA, SEG!

The tools are in place on the corresponding websites, but it is now up to the individual members to actively contribute and to harvest the global expertise!

Letters from the Membership

With your 'knowledge sharing hat on' please feel welcome to forward your SCANews, articles for publication, questions for the Editor or any other business to scanews@scaweb.org

From the VP Technology 2004

by **Bob Smits**

I was very sad to have missed the Abu-Dhabi meeting. I had looked forward to it tremendously, and I heard from the Shell attendees that it was indeed a very great and successful event. I missed the Symposium because of a neck hernia (caused by a manual therapy that went wrong). This caused extreme pain in my neck and right arm, causing sleepless nights and days in which I could not concentrate on anything. I was partly drugged by pain killers, and unfortunately could not have attended the Symposium. Currently I am much better, almost fully recovered, although a slight pain occasionally still lingers in my right arm and in the neck (esp. after a full work day). I hope this remainder will soon disappear

I want to thank everyone for their professionalism in coping with my absence. Special thanks to the LOC, to

the SCA Board members, and to Stayc, for covering my many duties. I appreciated this support and the concerns expressed (including a nice card thank you very much).

I have learned not to undergo manual therapy anymore (and certainly not anything like it before a major conference), so I hope to see you all in good health at the 2005 Symposium in Canada.

Thanks again, and best regards,
Bob

Editor: It is good news to hear that Bob is well on the road to full recovery. We have asked Olga on Bob' behalf to give a reflection of the SCA 2004 Symposium and to announce this year's best papers...

Reflections on the 2004 SCA Symposium

by **Olga Vizika**

Bob, our 2004 VP Technology, prepared with the Technical Committee an excellent programme but unfortunately was not able to attend. The task was tough and time consuming but at the same time very rewarding. Bob was proud about the variety and innovation in the final program and he appreciated the enthusiasm and commitment of all authors and reviewers.

The Symposium started on Tuesday 5th of October 2004 with a Workshop dedicated to Carbonates. The workshop was motivated by a very difficult and

challenging industrial problem as his title demonstrates "Closing the Loop for Carbonates: From SCAL Project Design to Field Development". It has been organized around major issues concerning the carbonate reservoirs (reservoir characterization, water flooding, gas injection, EOR) with keynote lectures and shorter presentations on field applications. Technical and scientific answers to several problems related to the development and exploitation of this very complex reservoir have been presented and discussed, but it has also been

demonstrated that there still exist pending problems mostly related to the high heterogeneity of these reservoirs at different scales. The importance of treating these problems within multidisciplinary groups involving geologists, petrophysicists and reservoir engineers has been underlined.

Wednesday, Thursday and Saturday were devoted to the Technical Sessions that included 34 oral-, 3 alternate/poster- and 13 poster- presentations. Wednesday we followed with great interest one session on the determination and manifestation of wettability and its heterogeneity on real reservoir cases. The two sessions on "Displacement Mechanisms" demonstrated once again the importance of high quality consistent data for the interpretation of complex experiments: from the in situ saturation monitoring, integral part of SCAL measurements and the only method that gives relevant insight on phase mobility close to the extreme saturations, to gas condensate and dispersed flows, through the physicochemical properties of the fluid systems.

Thursday's three sessions on "Improved SCAL Techniques and Interpretation" focused essentially on characterization of multiscale heterogeneity, its impact on the determination and upscaling of relative permeabilities and capillary pressures and the improved laboratory techniques to improve log interpretation.

Friday evening during the Gala Dinner held in a splendid Ballroom we all congratulated Ken Sorbie who was presented with this year's SCA Technical Achievement Award.

On Saturday, one short but very dense session on "Pore Scale Modelling" demonstrated in an excellent way that in order to obtain predictive models we need to understand the mechanisms at the small scale and to take them into account in a detailed modelling before upscaling. The two last technical sessions were as usually devoted to "Case Studies". They federated beautifully core analysis with field observations and reservoir performance predictions. The posters covered all topics treated also within the plenary sessions, and served as a basis to thoughtful discussions about the different subjects. Also, this year, following an original idea of Yogi Vindum, we experimented for the first time and highly appreciated short presentations given by the vendors and exhibitors right after the technical sessions.

The success of this Symposium is due to all the participants with their long experience and practice. Workshop presenters, authors of oral and poster presentations, members of the technical committee devoted a considerable number of hours in writing, reviewing and editing manuscripts. All these people along with the SCA Board, the session chairs, the exhibitors and the Local Organization Committee put the necessary energy and enthusiasm to turn this Symposium into a memorable event. I wish to thank them and congratulate them all.

My warmest congratulations go however to the best oral papers and posters. Again this year the final scores were very similar and many papers ranked close together. We list below the 5 highest "scored" contributions in each category. Congratulations to all the authors and

especially to authors of SCA 2004 - 13 for the oral papers and SCA 2004 - 42 for the posters.

For more information on best paper and the scoring results, please visit the SCA website.

Best paper

1st SCA 2004-13 "Multiphase Flow Behaviour in Vugular Carbonates Using X-Ray CT" by P. Olivier, L. Cantegrel, J. Laveissière, N. Guillonau

2nd SCA 2004-31 "Revitalizing the Use of Sponge Core for the Determination of Residual Oil Saturations in Carbonate Reservoirs" by J.J. Funk, M. Al-Khan, R. Eyvazzadeh, H.J. Halpern, P.J. Jones, B. Wilson

3rd SCA 2004-28 "Effects of Paraffin Wax Precipitation During Cold Water Injection in a Fractured Carbonate Reservoir" by D. Maloney, A. Oesthus

4th SCA 2004-27 "Water-Weakening of Under-Stress Carbonates: New Insights On Pore Volume Compressibility Measurements" by P. Carles, P. Lapointe

5th SCA 2004-18 "A New Methodology to Evaluate the Impact of the Local

Heterogeneity on Petrophysical Parameters (Kr, Pc): Application on Carbonate Rocks" by P. Egermann, R. Lenormand

Best poster

1st SCA 2004-42 "Angstrom to Millimetre Characterization of Rock Pore Structure and the Prediction of Conductivity and Permeability Thereof" by E.S. Amirtharaj, M.A. Ioannidis

2nd SCA 2004-35 "Characterization of the Pore Space Accessed by the Nonwetting Phase During Constant Rate Injection at the Breakthrough Capillary Pressure" by J. Smith, I. Chatzis

3rd SCA 2004-36 "Measurement Parameters and Resolution Aspects of Micro X-Ray Tomography for Advanced Core Analysis" by J. Coenen, E. Tchouparova, X. Jing

4th SCA 2004-48 "Uncertainty Reduction in the Evaluation of Poorly Consolidated, Thin Bedded Core Using X-Ray Computed Tomography" by F. Radaelli

5th SCA 2004-51 "Monitoring Water Saturation During Gravity Drainage in a Column of Glass Beads Using NMR and the Determination of Wetting Phase Relative Permeability" by R. Perunarkilli, I. Chatzis*, M.A. Ioannidis, C. Lemaire

"END-POINT..."

by ***Andrew Cable***

End point is introduced to SCANews by your new Editor for 'miscellany'. Please feel free to make future contributions...

Last week at Olympia, London, the PESGB (Petroleum Exploration Society of Great Britain) biannual exhibition & conference was in full swing: PETEX is a showcase of cutting edge technology and techniques for subsurface workers in the oil and gas industry. Keynote

speakers included the UK Minister for Energy & e-Commerce Mike O'Brien, D. Allard UK Exploration Manager Apache Oil Corporation, and A Millholland, President Oilexco. The theme was the role of the small independent companies and the new entrants view of future exploitation of the North Sea. In much the same way as Canada has exploited its resources, we may now see similar developments in the North Sea following

the "Fallow Initiative". (For information on the fifth UK Fallow Assets Release see www.oq.dti.gov.uk/ukpromote). There is a UK Prospect Fair 14th-15th December at the Gallery Hall, London.

You may be interested to know that the PESGB is 40 years old, founded in 1964 when the first survey vessel entered Aberdeen Harbour. There is an informative website at www.pesgb.org.uk. The next exhibition, DEVEX a joint SPE, AFES, PESGB conference is to be held 18th-19th May at the Aberdeen Exhibition Centre.

I watched Billy Connolly on the TV last week (a very well known, rather rude, Scottish comedian) and I want to share one of his jokes with you. Quite unusually this joke was 'clean':

There were two Scotsmen, two Welshmen, two Irishmen and two

Englishmen shipwrecked on a desert island. After one year of being shipwrecked, the two Scotsmen were already distilling their own whiskey. The two Welshmen had formed a choir. The two Irishmen were still fighting on the beach and the two Englishmen were still waiting to be formally introduced !

On a final note, I wish all our members and readers Season's Greetings and a very happy and prosperous New Year.

