

The SOCIETY of CORE ANALYSTS

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

May 2004

Published by the SCA, Editor: Marios Ioannidis

Volume 16, Number 1

Message from the President

by **Dan Maloney**

Dear Colleague,

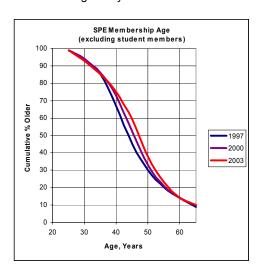
In this SCANews, you will find additional descriptions of the Abu Dhabi October 2004 SCA Symposium. The Technical Committee and Local Organizing Committee are planning an outstanding meeting. Register early and make travel arrangements! Early registration simplifies planning and increases the likelihood of joining one of the unique Symposium field trips.



In our last SCANews issue, I described some of the elements of value received through Symposium participation. In coming years, we will gain greater appreciation for those that contributed to the body of technical literature and lessened the learning curve for others. It appears that change is on the way. Buckle-up! I think we are in for an interesting ride.

Most of us are aware that the petroleum industry workforce is maturing. This is reflected by SPE membership statistics. Much of the change in demographics over the past 6 years occurs in the age range from about 35 to 55, with the trend shifting toward higher age each year. For many, early retirement becomes an option after age 55. Referring

to technical staff demographics, Janeen Judah² said "You hear this everywhere and it's obvious walking down the halls of any company. It seems that everyone is in their 40s or older." She refers to the shape of technical staff frequency versus age plot, with median age of about 48 and few younger employees, as the "rat in the anaconda." If the trend continues, within a decade or so, our industry may face a "retirement crisis" as the majority of those with significant experience achieve eligibility for retirement. This problem is well known, but little has been done to change the trend. Numerous articles propose solutions, such as attracting college graduates and maintaining their interest and loyalty through challenging assignments and frequent promotions, and adopting a "just in time" approach by tapping into the international talent pool to fulfill staffing objectives while reducing salary costs.



² Sumrow, M. "Special Report: Point of View – Global Staffing to Reshape Petroleum Industry as Current Workforce Ages." O&GJ (Sept. 23, 2002).

 $\frac{\text{http://www.spe.org/specma/binary/files/1997249SPE_membership}}{2003.xls}$

¹ Data from



The SOCIETY of CORE ANALYSTS

It seems that many assume that our industry is alone in this looming "retirement crisis." With that assumption, it is attractive to postpone addressing the problem until later with a "just in time" solution. Will it surprise you to learn that this is an issue of concern in all developed Countries? Dychtwald et al³ state "During the next 15 years, 80% of the native-born workforce growth in North America - and even more so in much of Western Europe - is going to be in the over-50 cohort. In the next decade or so, when baby boomers - the 76 million people born between 1946 and 1964, more than one-quarter of all Americans start hitting their sixties and contemplating retirement, there won't be nearly enough young people entering the workforce to compensate for the exodus." Richard Jackson⁴ says "Global aging is not a distant or hypothetical challenge. It is already underway, it is gathering momentum, and it will soon render today's retirement systems unaffordable." You've probably heard government debate over public pension plan funding in your Country related to this issue. The entire "developed" world is in the same boat on this one... All industries and governments may be in fierce future competition to recruit and retain welleducated, competent staff.

Considering the global nature of this looming problem, I think it is a mistake to assume that a "just in time" approach will be viable. Proactive recommendations are:

- Change corporate culture and provide opportunities that encourage staff to delay retirement.
- Accept that redundancy is necessary to prepare for the future. Hire and train young engineers and scientists now. Pair them with experienced staff to build confidence, competence, and expertise.
- Take responsibility for building the future talent pool. Increase support to students and universities. Contribute to the education process to shorten the "new hire" learning curve.

- Aggressively support knowledge sharing and technology transfer through participation in technical societies and symposia.
- Encourage attendance at technical symposia to promote knowledge sharing and transfer.
- Encourage presentations at symposia. The technical body of literature is an excellent repository for knowledge.

With best regards, Dan Maloney, SCA President

Publisher's corner by Marios Ioannidis

Dear colleagues,

Preparations for the 2004 Symposium in Abu Dhabi are well underway. Whichever way I look at it, be it wealth of technical content, attractiveness of location or quality of organization, this is promising to be an outstanding event that none of us should miss! The local organizing committee, led by Waddah Al-Hanai, is busy ironing out the final organizational details. Read more in the *Note of the VP of Arrangements*. On his end, Bob Smits, VP of Technology, is putting together an exciting technical program under the theme "Challenges in Carbonates and Solutions for Field Development". Read more about it in the *Report of the VP of Technology*, in this issue of SCANews.

Preparations are also underway for the publication of the July-August issue of *Petrophysics*. As you know, this is a special issue on core analysis, containing some of the best papers of last year's symposium. It is interesting to know that inclusion of *Petrophysics* in the Science Citation Index of the Web of Science (www.isinet.com/products/citation/wos) is an idea that has been discussed informally for some time by SPWLA and SCA members. For those not familiar with it, the SCI database provides access to research articles and associated citations published in over 8,000 journals. This is indeed a powerful means of knowledge sharing! There will be certainly more news on this as the Editorial Board of *Petrophysics* makes decisions in the near future. In the meantime, share your thoughts on this issue with me by following

³ Dychtwald, K., Erickson, T., and Morison, B.: "It's Time to Retire Retirement." Harvard Business Review, March 2004, pp. 48-57

⁴ Jackson, R.: "The Global Retirement Crisis: The Threat to World Stability and What to Do About It." CSIS, (April 2002). (http://www.csis.org/gai/global retirement.pdf)



The SOCIETY of CORE ANALYSTS

the corresponding thread in the Technology section of the SCA Forum.

In search for nominations

Nominations are solicited for the 2004 SCA Technical Achievement Award, the highest honor the SCA can bestow. This award is presented each year to an individual deemed by the SCA Board of Directors to have made outstanding contributions to the advancement of core analysis technology. Your input as SCA members is critical in identifying this individual. Any member can submit a nomination to Xu Dong Jing before the deadline of June 1, 2004. For more information please visit www.scaweb.org.

With best regards, Marios Ioannidis VP Communications

Who is your VP Communications?

In previous SCANews issues you were introduced to Dan Maloney, the SCA President, and Bob Smits, the VP Technology. In keeping with this trend, here are a few lines about Marios loannidis, the VP Communications.



Marios was born in Athens, Greece. At a very young age he developed a keen interest in math and science and the way things work. Marios would often conduct experiments to test his theories. His mother recalls that at the age of five he dropped an expensive watch from their third-floor apartment in what was an experiment to

measure the velocity of a falling object! After high-school, Marios entered the Department of Chemical Engineering at the University of Patras, Greece. While still an undergraduate student, he became exposed to research in multiphase flow through porous media and was quickly fascinated by the complexity of physical phenomena that take place within pore networks. How did that happen? Well, in case you didn't know, Marios used to assist Olga Vizika-Kavvadias (SCA President Elect, then Ph.D. candidate) in the lab where she was studying two-phase flow in transparent glass micromodels!

Marios graduated with a degree in Chemical Engineering in 1989 and shortly after received a scholarship for Ph.D. studies from the University of Waterloo, Ontario. Needless to say, it was porous media all over again, and so he spent the next four years researching applications of pore network modeling to heterogeneous porous media under the direction of John Chatzis. Time flies when you are having fun and in 1993 Marios graduated with a Ph.D. in Chemical Engineering. Always excited by the possibility to turn theory into practice, he began combining pore network modeling with techniques for 3D reconstruction of porous media from thin-section image data, first as a postdoctoral fellow and then as a research associate at Waterloo. In 1996 he accepted a faculty position at the Department of Chemical Engineering, University of Waterloo.

At present Marios is Associate Professor of Chemical engineering at Waterloo. His current research interests continue to involve the characterization of rock microstructures and the prediction of petrophysical properties thereof, but have expanded into the areas of magnetic resonance imaging of porous media, contaminant hydrogeology and fuel cell technology. He first attended an SCA Symposium in 1997 and immediately appreciated the high level of relevance of the SCA to porous media research and related industrial practices. Marios has published over 50 papers in journals and conference proceedings.

At present, Marios lives in Waterloo, Ontario. He loves to travel, above all places to his native Greece, where his close family lives. When not thinking about pores, he enjoys playing folk tunes on his accordion (but this is a whole new story...)

Note of the VP of Arrangements by **Waddah Al-Hanai**

Dear colleagues,

Arrangements and preparations for the 2004 Int'l SCA Symposium in Abu Dhabi are advancing at a steady pace. Under the stewardship of the Abu Dhabi National Oil Company (ADNOC) and its Group, we are witnessing splendid cooperation and support by



The SOCIETY of CORE ANALYSTS

the local, regional and international partners of the oil and gas industry; manifesting itself on all fronts of the Local Organizing Committee activities. To this effect, it's expected to see high attendance from the Middle East, while the majority of the Symposium events are expected to be hosted by the local and international partners. It's worth mentioning, that the 11th ADIPEC (Abu Dhabi Int'l Petroleum Exhibition and Conference) will immediately follow the SCA Symposium. This offers overseas visitors the opportunity to attend both events. The following paragraphs summarize the current status of the main events of the Abu Dhabi 2004 SCA Symposium.

 Symposium Preliminary Program: A write-up on the preliminary program can be found in the SCA Web-site. This shows in a brief form the dates, timings and duration of the events and activities proposed for the 2004 Symposium.



- 2. The Venue (Beach Rotana Hotel & Towers): There is also a Venue write-up in the SCA Website, which describes the Hotel and its various facilities and services and lists the Room Categories and their respective rates. Participants are invited in particular to read the information on Visa requirements, which is also included in the Venue write-up.
- Trips: The 2004 SCA Symposium offers its Participants two optional Trips over October 7-8; one is a Geological Field Trip, while the other is a visit to the largest oil field in the United Arab

Emirates. Both Trips involve overnight stay near the trip site, and are free of charge for the Symposium Participants. However, please visit the SCA Web-site to be aware of the conditions and requirements for each of the two trips.

4. SCAL Course: A one-day SCAL Course is scheduled for October 5. The title of the SCAL Course is "Interfacial Phenomena in Flow in Carbonates - With Focus on Field Applications". The course is donated by SHELL Abu Dhabi to the young professionals working in Abu Dhabi National Oil Company (ADNOC) and its Group of Companies and to the National Oil/Gas companies in the Middle East. The course is limited to ~30 participants, and will run side-byside with the Workshop. The Local Organizing Committee of the 2004 SCA Symposium would like to express its gratitude to SHELL Abu Dhabi for their SCAL Course donation.



5. Workshop: A one-day technical Workshop is planned for Tuesday, October 5, under the Theme "Closing the Loop for Carbonates: From SCAL Project Design to Field Development". The format of the Workshop will be a Panel Discussion, where four Sessions will be held; each devoted to a particular topic of the Theme. The four Topics are: Carbonate SCAL: Coring & Pre-SCAL, SCAL for Waterflooding, SCAL for Gas Injection/WAG, SCAL for other EOR processes including chemical, thermal, ... etc. Each Session will begin by a key-note on the Topic given by an invited Speaker. The



The SOCIETY of CORE ANALYSTS

finalization of the Workshop format is still ongoing.

6. Exhibition: Exhibition will take place during the Symposium days (5-9 October, 2004). Fourteen uniform standard booths are offered on rental basis. Booth dimensions are 3x4 meters. Each booth will have back and side wall partitions, fascia board with Exhibitor's name, three spot lights, one electric socket (13 Amp), one table, and two chairs. The SCA Web-site includes a description of the Exhibition and its floor plan. Exhibitors are invited to visit the SCA Web-site for further information on the Exhibition and its floor plan.

See you in Abu-Dhabi, Waddah Al-Hanai VP Arrangements

Report of the VP of Technology by Bob Smits

Dear colleagues,

The Technical Programme of the SCA 2004 in Abu-Dhabi is well on its way. We currently have planned **34 oral presentations**, **10 alternates** (i.e. possible oral presentations, otherwise posters) and **25 poster presentations**. The schedule for the preparation of the technical programme is as follows:

- 15 May: Authors to submit their manuscripts to their reviewers
- 10 June: Reviewers to send reviews back to authors
- 30 June: Authors to send revised manuscripts back to reviewers
- 10 July: Authors to send "camera-ready" manuscripts to reviewers

All authors have been notified about the status of their paper (i.e. whether it's oral, alternate or poster), including who will review their paper. Authors and reviewers are requested to really stick to these deadlines.

I will post some guidelines on the preparation of the actual Powerpoint presentations on the SCA website in May. The draft programme of the conference will probably be posted in July, i.e. after all manuscripts have been received in their final form.

The draft Technical Programme looks very exciting. We have many excellent contributions from a wide variety of countries and affiliations, including many from the Middle East. At the conference I will give a short presentation in one of the first technical (oral) sessions advertising the poster presentations. Also vendors will have the opportunity to briefly advertise their booth in one of the oral sessions.

I'm looking forward to an exciting conference.

Best regards,

Bob Smits VP Technology

Middle East Director Report by Waddah Al-Hanai

Abu Dhabi Chapter of SPWLA Activities: January to May 2004

The Abu Dhabi Local Chapter of the Society of Professional Well Log Analysts (SPWLA) is dedicated to fostering interest in matters of petrophysics and encouraging the exchange of experience within the local petrophysics community. It holds monthly meetings, which take place either in local hotels or in the Auditoriun of ADCO (Abu Dhabi Company for Onshore Oil Operations). The Chapter now has 168 registered members.

So far during 2004 the Abu Dhabi Chapter has held 6 meetings and two more are scheduled before the summer break.

The first meeting in 2004 was held on 17 January. The title was "The Oil Field of the Future", and was given by Mr. Tony Wood of BP. The event and its dinner were sponsored by BP. ADCO provided the conference room.



The SOCIETY of CORE ANALYSTS

The next meeting was held the following week on January 24 when Mr. Mohamed Hashem from Shell gave a talk entitled "Wireline Formation Testers – Uses Beyond Pressures and Fluid Samples – An Attempt to Replace Production Tests".

The third meeting was held on Sunday, February 29 at the Diwan Ballroom; Beach Rotana Hotel. The title of the talk was "Formation Pressure Testing in the Dynamic Drilling Environment", and was given by Mr. Charley Siess (Sperry-Sun). A record 73 people attended the event and its dinner, which were sponsored by Halliburton (Sperry-Sun).

The fourth meeting of the Abu Dhabi Local Chapter of SPWLA for the year 2004 was held on Monday, March 22, at ADCO's Auditorium, Main Tower. It was sponsored by Baker Hughes. The talk was on "New 3 Dimensional Resistivity Measurements by the 3DEX Tool", and was given by Rick Aldred of Baker Hughes.

The next meeting was held on Monday, April 19, at the Beach Rotana Hotel. The talk was on "Managing Reservoirs at Reservoir Scale -- The Crosshole Electromagnetic Technique" and was given by Dr.

Yan Kuhn de Chizelle of Schlumberger. The event and its dinner were attended by 46 people, and were sponsored by Schlumberger.

The sixth meeting of the Abu Dhabi Local Chapter of SPWLA for the year 2004 took place on Tuesday, April 27, in the Auditorium of ADCO. The title of the talk was "Downhole Fluid Analysis -- The Key to Unraveling Fluid Complexities in the Formation", and was given by Oliver Mullins, of Schlumberger.

In addition to the technical meetings, the Chapter has also organized a learning event for students from Al Ain University. This took place in April and was well attended.

The SPWLA International Topical Conference on "Carbonate Residual Oil Saturation", which is being organized by the Chapter, is scheduled for May 16-19, at the Beach Rotana Hotel. There are already over 65 registered attendees for the event.

With best regards, Waddah Al-Hanai Regional Director for Middle East

2004 International Symposium of the Society of Core Analysts

Theme: "Challenges in Carbonates and Solutions for Field Development"

Abu-Dhabi, United Arab Emirates (U.A.E.), 5 - 9 October 2004

Make Plans and Register Early!