

The SOCIETY of CORE ANALYSTS

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

December 2005

Published by the SCA, Editor: Andrew Cable

Volume 17, Number 3

<u>Call for Abstracts 2006. Submission</u> <u>deadline is 6th January</u>

The new VP Technology *Ivar Erdal* has the detail on page 4. Visit <u>www.scaweb.org</u> for on-line submission.

Message from the SCA President by Bob Smits

Dear Colleagues,

I'm honoured to serve as President of the SCA for the term 2005-2006. The Society is very alive and kicking! In the past years we have had very good annual symposia, which also were very well attended. This shows your continuous good commitment and drive to support the society. In August we had again an excellent symposium in Toronto, Canada, which started with an interesting one day workshop on 'Emerging & Unconventional Resources' with several invited speakers. Thereafter we had a full programme of many interesting paper and poster presentations. This was the second year that vendors gave presentations, which again was very successful. There were also ample opportunities to network and meet other core analysis colleagues, especially during the excellent trip to the Niagara Falls. Hence, I want to express my sincere thanks to all who contributed to the Toronto Symposium, in particular to Past President Olga Vizika, VP

Arrangements Mario Ioannidis and the organizing committee, VP Technology Tom Fate and the technical committee, VP Membership Bas Schipper, Treasurer Abby Matteson, VP Publications Andrew Cable, all other board members (too many to mention), and of course to Stayc Feil and many others who worked behind the scenes to organize, conduct, and sponsor the event. Well done!



Picture: Bob Smits- SCA President (cont. page 3)

Winter issue of SCA News...

by Andrew Cable, Editor

Welcome to SCA News. Toronto is almost a distant memory, then I think back to that jet boat ride up the Niagara River and it all comes flooding back, literally right up to the waist if you were in the 'wet boat'! That was one trip I really would like to do again. If you are abreast with the developments of next year's symposium then you will know that the 'boating theme' continues. There is more information in SCA News and our website at www.scaweb.org

One week before our visit to Toronto, I just happened to be sitting in my 'bolt-hole' (well my shed come conservatory) with a beer and I started rummaging through some old books in the bookcase. Most of the books had come from an unwanted lot at auction (I think I paid £2). There are some great works in that bookcase and the old, musty smelling issues look the part in my rustic surrounding. One book that caught my eye was "Wild Animals I have Known" by Ernest Thompson Seton (Copyright 1898). The setting for this book (which is still published) is Toronto of all places. How uncanny. The issue I have appears to be on handmade, hand cut paper and published in London 1904 by David Nutt. So the book is over 100 years old. With my impending trip to Toronto I was inspired to find out more about the author. I could not believe the number of hits as soon as I did the web search. This chap was a prolific writer, about 80 publications from 1886 until his death in 1946. Ernest Thompson Seton ("Black Wolf") was an award winning wildlife illustrator and naturalist who was also a spellbinding storyteller, lecturer, author and expert with Native American sign language. He was born 14th August 1860, the eighth of ten brothers. The family moved to Lindsay, Ontario in 1866 from England and later moved to Toronto (1870). There is a fascinating short biography of Ernest Thompson Seton at <u>www.etsetoninstitute.org</u>

But what really caught my eye was that this chap wrote a series of articles in 1902 that began the woodcraft movement and in 1906 he met Baden-Powell, who borrowed much of Seton's material (allegedly without credit) in founding the Boy Scouts movement. In 1910 Seton was Chairman of the Boy Scouts of America, wrote the first handbook and served as Chief Scout from 1910 until his resignation in 1915. Seton did not like the military aspects of this youth movement and instead revived Woodcraft. The Woodcraft League of America served all ages from '4 to 94' as a coeducational organisation. Woodcraft also grew in Europe and the UK. In 1924 Leslie Paul founded the 'Woodcraft Folk', which is still very much in existence in England as a movement for boys and girls, teaching principles of cooperation, fairness and a respect and appreciation for nature.

Why does this interest me? Well both of my parents were children in the Woodcraft Folk, met, got married, had four boys (I am the third) and as young adults founded their own pioneer group known as 'Twin Firs'. My parents were dedicated and the District flourished. So from my conception until I left home at 18 years the Woodcraft Folk was a part of our family life. Now that is uncanny!



More from the editor on the back page...

(cont. from page 1)

The 2006 Annual Symposium will be held 12 th-16th September in Trondheim, Norway. For those of you who haven't attended an SCA Symposium, I encourage you to make plans to do so. It is an excellent opportunity to learn about the newest developments in core analysis, and to present/discuss your ideas or your technologies to/with the typical stakeholders in this area.

The people you meet at an SCA Symposium may be your future clients, future partners, or future co-workers. Hence, take full advantage of your SCA membership by attending SCA Symposia! The organisation of the 2006 symposium is well underway under the coordination of VP Technology Ivar Erdal and VP Arrangements Odd Hielmeland. The Technical Committee is already organized and the call for abstracts issued. The Local Organising Committee has already put a nice information package on our website: www.scaweb.org. Please have a look at this beautiful brochure, also containing many nice photos of Trondheim, hopefully giving you additional motivation to attend the symposium. A new feature is that the one day workshop will be held

on a boat (MS Midnatsol) departing from Trondheim Saturday 16 th and arriving in Bergen Sunday 17 th, thus enabling interested attendees to attend the Wettability Symposium in Bergen Monday 18 th and Tuesday 19 th September. Please do your part by submitting an abstract and by encouraging others within your organization to do so before the abstract due date which is 6th January 2006.

You can find more information about the 2006 meeting in this SCANews and on the SCA website at www.scaweb.org. So please visit our website regularly for up-to-date news and start planning your participation to the meeting in Trondheim. 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 vou all in Trondheim. In the mean time do not hesitate to send me an e-mail for any suggestion or comments concerning our Society.

With best regards, Bob Smits SCA President

Best Papers 2005

by Tom Fate 2006 President Elect

The final task of the 2005 Technical Committee, identifying best papers and posters from the Toronto Symposium, has been completed. Before announcing results, I would like to describe the best paper and poster selection process. As you know, papers and posters are reviewed by the Technical Committee before the Symposium. At the start of the Symposium, all Technical Committee members in attendance plus a number of

additional experts are provided with lists of presentations and instructions to assign a score to each presentation in the range from 0 to 10, with 10 being the score for a presentation of exceptional quality and merit. After the last Symposium presentation, score sheets are collected. From these, an average score is determined for each presentation. The list is sorted in order of score, revealing top scoring papers

and posters. Because this process uses input from 20 to 30 individuals of varied interests, results reflect a consensus of best presentations with broad appeal.

The Best Paper Award goes to Jill Buckley and Tianguang Fan for their paper entitled: "Dynamic Crude Oil/Brine Interfacial Tensions."

The Best Poster Award goes to Christos Aggelopoulos and Christos D.
Tsakiroglou for their poster entitled:
"Simultaneous Determination Of The Two-Phase Flow And Hydrodynamic Dispersion Coefficients Of Heterogeneous Soils From Transient Immiscible And Miscible Displacement Experiments."

The results for second and third papers were: David K. Potter for "Magnetic Susceptibility As A Rapid, Non-Destructive Technique For Improved RCAL And SCAL Parameter Prediction" and P. Egermann, S. Bekri and O. Vizika for "An Integrated Approach To Assess The Petrophysical Properties Of Rocks Altered By Rock/Fluid Interactions (CO2 Injection)"

Second and third posters were Christopher M. Prince, Mark W. Dixon and Lizanne L. Haynes for " The Use of High-Resolution Core Imagery in Reservoir Characterization: An Example from Unlithified Miocene Turbidite" and G.S. Padhy, M.A. loannidis "Special core analysis studies in vuggy porous media of controlled microstructure".

There were many excellent papers and posters at the 2005 Symposium and I would especially like to congratulate the winners for their outstanding contributions. The winners had some very strong competition from all of the papers and posters.

I would also like to thank the Technical Committee members for their excellent job in reviewing and ranking the papers and posters.

Special thanks are extended to everyone for a very successful 2005 Symposium. See you in Trondheim!

Note from the VP Technology

by *Ivar Erdal*

"Improved Core Analysis Driven by Field Development Needs"

Dear SCA Members,

As this is being read we are already into December, and the 2006 SCA International Symposium in Trondheim is approaching fast. First of all I would like to draw your attention to the headline on the first page. If you plan to submit an abstract, and I certainly hope that you do, please visit our home page and you will find all of the

information needed. The deadline for abstract submission is set for 6 thJanuary, so there is still plenty of time.

The Symposium theme is given above, and we believe the theme is a very challenging one for all of us working with core analysis; how can we improve the work – and the way we do the work – so that it brings added value to the oil and gas reservoirs that we are running core analysis on. We hope that this question will be on your minds when writing

abstracts and papers for next year's Symposium.

The topics which will be covered during the Symposium are listed in the Call for Abstract and I will not repeat here. Instead, we would like to highlight two topics, Case Studies and Improved oil **Recovery**, since these two specifically address the challenges given in the Symposium theme. We would like to encourage representatives from the oil companies to present papers that demonstrate the role of core analysis in field development planning. The other five topics are more classical, covering major areas of core analysis in which there is a constant and focused R&D effort. We hope to receive many abstracts within all of these topics!

The Symposium will run for three full days in Trondheim, please visit www.scaweb.org/symposium 2006 for more details. Following the Symposium there will be a workshop, which will be held onboard 'MS Midnatsol', a cruise ship which goes from Trondheim to Bergen. The reason for this is that the International Wettability Symposium will be held in Bergen on September 18 – 19, and this will make it easier and more cost efficient for those who want to take part in both arrangements. The theme for the SCA workshop has not yet been decided by the Local Organising Committee and the SCA Board, however it will be announced in due time so that you can consider "the full package" when arranging your trip to Norway.

The 2006 Technical Committee has been formed and is already in operation. You will see a list of the members below. Without going into all details, I can tell you that the committee has already had

a very interesting discussion regarding how the authors should reference papers. The question was brought up by one of the committee members, and the outcome of the discussion is that papers in the future will be referenced by the author and year form of citation rather than numbering in sequence. This discussion and the outcome of such demonstrates how the SCA members can contribute to a dynamic development of the society and that it makes a difference if we speak up!

On behalf of the Technical Committee I welcome you to submit abstracts for paper and poster presentation, and we are looking forward to receiving your contribution during early January. See you in Trondheim!

Ivar Erdal, Numerical Rocks Tom Fate, Chevron ETC Olga Vizika-Kavvadias, Institute Français du Pétrole Dan Maloney, ConocoPhillips Bob Smits. Shell International E&P BV Arne Skauge, Centre for Integrated Petroleum Research Jos Maas, Shell International E&P BV Jean-Baptiste Clavaud, Chevron ETC David Potter, Heriot-Watt University Louis Cuiec, Institute Français du Pétrole Xu-Dong Jing, Shell International E&P BV Gary Potter, Core Laboratories Doug Ruth, University of Manitoba John Shafer, Reservoir Management Group Matt Honarpour, ExxonMobil Cliff Black, BP Exploration Operating Company Shehadeh Masalmeh, Shell Abu Dhabi Jon Knut Ringen, Statoil Marc Fleury, Institute Français du Pétrole Jill Buckley, New Mexico Tech Norman Morrow, University of Wyoming Gerald Hamon, Total, E&P, Techniques Géosciences Apostolos Kantzas, University of Calgary Waddah T. Alhanai, ADNOC Kewen Li, Stanford University Ted Braun, ExxonMobil Upstream Research Ole Torsæter, Norwegian University of Science and Technology Mark Knackstedt, Australian National University Dave Bowen, Core Laboratories Middle East

From the SCA Regional Directors

Australian Regional Directors Report 2005:

By Kevin Flynn

General activity in Australia continues to maintain a high pace with continued rejuvenation of the Cooper Basin (Central Australia) and expectation of high drilling activity in Queensland (my home State) on completion of Native Title Agreement legislation with the appropriate indigenous Aboriginal communities. There is continued development and exploration of the Coal Seam Gas (CSG) or Coal Bed Methane (CBM) in both SE Queensland and Northern New South Wales. There are also additional programs starting in both South Australia and Victoria. In WA (Western Australia) the re-emergence of the Perth Basin continues along with the more obvious (higher profile) NW Shelf. Both Production and exploration continues to grow but perhaps not in a proportion to the escalating crude price. The greatest limiting factor is rig availability, both on- & offshore, which is keeping the industry from perhaps achieving record levels.

In Australia there are two chapters of The Formation Evaluation Society of Australia, a vehicle for both SPWLA and SCA communication:

FESWA – Formation Evaluation Society of Australia – West Australia

FESQ - Formation Evaluation Society of Australia – Queensland and South Australia.

In FESWA there were 11 monthly meetings on various Formation evaluation topics and a Stromberg NMR

course simiar to that of FESQ (see below).

Best Chapter award from SPWLA **David Bowyer** course on formation waters. We are preparing for the Bali Conference on Petrophysics due 16-19 Nov 2005.

FESQ held 10 lecture / practical series (6 speakers) to UQ (University of Queensland students covering all aspects of Log Analysis of which I presented a session on Core Analysis!! An NMR course was held in Adelaide (SA) with Simon Stromberg as the presenter. AGM and lecture on NMR uses and log analysis in Brisbane. Lecture on Core Analysis Uncertainty by Colin McPhee (March 2005).

For the coming year I plan to address SCA Membership on three fronts:

- 1. Greater activity in FESWA and FESQ for Core Analysis.
- 2. A mail out to all known colleagues in the greater Core Analysis industry extolling the benefits of SCA membership. I had tried this earlier but for a number of reasons never quite managed to complete it!
- 3. I have printed a number of small SCA advertising posters that I will pin up on "Client" notice boards (with their approval!). One of the benefits of my job is that I should get round most (it not all) of the local Oil & Gas operating companies during the year.

Best regards, Kevin Flynn.

More from Kevin on the back page...!

From the Membership

by **SCA Members**

Henry Darcy and His Law

By Glenn Brown (revised 09/03/03)

My thanks to Roland Lenormand for sourcing this article. Those of you that remember Roland's vendor presentation in Toronto will have noticed the picture of Darcy's Experiment in the background. I thought Roland could do a nice piece on Darcy- but instead he got permission from Glenn Brown for this short biography. I do recommend a visit to http://biosystems.okstate.edu/darcy/ There is a wealth of historical information (far too much to reproduce here) that I am sure will be of much interest to every reader of SCA News - Editor.

Henry Philibert Gaspard Darcy was born June 10, 1803 in Dijon, France. His father, Jacques Lazare Gaspard a minor civil servant, was the Collector of the Registry (tax collector). Darcy's younger brother, Hugues, became a noted Prefect and civil servant. His father died in 1817 when Henry was 14, and his mother Agathe Angelique Serdet rose to the task of insuring his and his brother's education. She had only a small city pension to live on, but she was able to borrow money for tutors and obtained city scholarships for her sons to attend college.

In 1821, at the age 18 Darcy entered L'Ecole Polytechnique (Polytechnic School), Paris. Two years later Henry was admitted to L'Ecole des Ponts et Chaussee's (School of Bridges and Roads), Paris. The school was a part of the Imperial Corps des Ponts et Chaussee's (Corps of Bridges and Roads. After graduation, he was eventually assigned by the Corps to a position in Dijon. In 1828 he married Henriette Carey. She was an English native from the Isle of Guernesey whose

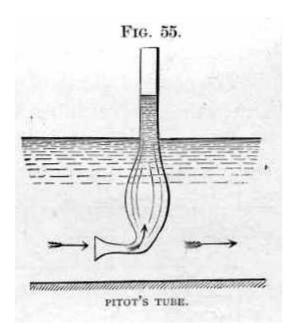
family was living in Dijon. They remained together until his death, but had no children.



In 1828, Darcy was assigned to a deep well drilling project that found water but could not provide an adequate supply for the town. However, soon after the disappointment of the well, and under his own initiative, Henry set out to provide a clean, dependable water supply to the city from more conventional surface water sources. That effort eventually produced a system that delivered 8m³/min from the Rosoir Spring through 12.7 km of covered aqueduct to an enclosed 5,700 m³ reservoir located near the Porte Guillaume and another reservoir at Montmusard. Pressurized distribution lines totaling 28,000 m were laid in underground galleries and provided water to major buildings and 142 public street hydrants spaced 100 m apart throughout the city. The entire system was enclosed and gravity driven, thus it required no pumps or filters. Darcy followed that project with numerous other civil works in and near

Dijon including roadways, bridges, sewers and a railroad tunnel. He also was very active in the Dijon City Government.

By 1848 Darcy was Chief Engineer for the Department of Côte-d'Or, but due to political pressures, he was forced to leave Dijon. He was however soon appointed to the higher position of Chief Director for Water and Pavements, Paris. In Paris he carried out significant research on the flow and friction losses in pipes, which forms the basis for the Darcy-Weisbach equation for pipe flow. He also created an improved design for the Pitot tube and was the first researcher who postulated the existence of the boundary layer in fluid flow.



In 1855 due to failing health, he resigned from normal duties but was allowed to return to Dijon to carry out research of his own interest. In 1855 and 1856 he conducted column experiments that established Darcy's law for flow in sands. Since his time Darcy's Law has been generalized by many writers to allow for differential solutions, vector analysis, unsaturated flow and multiphase flow.

Likewise, the equation's theoretical basis and applicability in several fields has been well defined.

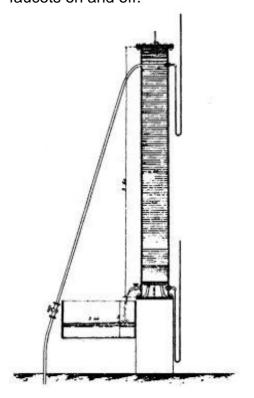
Unexpectedly, on January 3, 1858, Darcy died of pneumonia while on a trip to Paris. He is buried in Dijon, next to his wife and mother.

Procedures

Starting late in 1855, Henry Darcy supervised a succession of experiments with the objective to determine the relation between the volumetric flow rate of water through sand beds and the hydraulic head loss. All experiments were completed in the courtyard of an unnamed hospital in Dijon. The first set was carried out with the assistance of Mr. th to Charles Ritter from October 29 November 2nd. Four different packings of Saone River sand were tested, with each designated a test Series. For each Series, three to ten different experiments were performed. The inlet pressure was varied for each experiment while holding the outlet at atmospheric pressure. A second experimental set was carried out February 17-18 th, 1856 by Ritter on a single sand packing. In this set, both inlet and outlet pressure was varied. A total of 35 experiments were reported and used in the final analysis. The Chief Engineer, Mr. Baumgarten is reported to have repeated the experiments, but the data presented does not list any duplication.

Darcy's apparatus was a vertical steel column with an inside diameter of 0.35 m and sealed on both ends by bolted flange plates. Its total height was reported in the text as 2.5 meters, but it is dimensioned on the Figure as 3.5 m. At the bottom, an outlet reservoir was created by supporting a set of screens

above the bottom, which in turn supported the sand. An inlet reservoir was created by leaving a void between the sand and the column top. A tap at the top allowed air to be bled from the system. Water flow rate was determined by timing the effluent accumulation in a volumetric box. Supply and effluent lines were mounted on the column side, and both had valves to allow control. Water was supplied directly from the hospital house line, which induced considerable oscillations as users elsewhere turned faucets on and off.



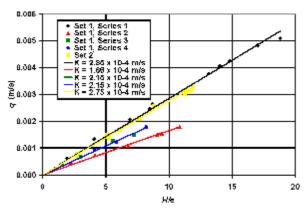
Mercury U-tube manometers were connected to both reservoirs to provide pressure measurements. At low-flows they were read to + 1 mm, while at high flow oscillations only allowed reading to within + 5 mm. Darcy reported this represented knowing the water pressure within 26.2 mm and 1.30 m for low and high flows respectively.

Each packing used Saone River sand. Unwashed sand was used in the first two Series, the third used washed sand, and the forth used very well washed sand that was slightly larger in grain size. The sand used in the February experiments was not reported. Packing height was intentionally varied from 0.58 to 1.71 m. Sand was placed in the column by dropping it into the water filled column, which was intended to eliminate air entrapment.

Each run consisted of setting the inlet supply valve and allowing the column to reach equilibrium. Then the manometers were read and the volume flow measured over a period of 10 to 25 minutes. Most direct data measurements were not reported. Instead for the November experiments, the computed flow rate and the head loss in meters of water were reported. In the February experiments, the outlet pressure was set by an unrecorded method, and inlet and outlet heads relative to the bottom of the filter were reported.

Darcy's Results

Darcy's results were reported in two tables. In the first Set, flow rate, Q varied from 2.13 to 29.4 l/min, while the head loss, H ranged from 1.11 to 13.93. Darcy computed Q/H for each experiment and noted that for a given packing, that it was near constant. He also calculated conductivity values in units of I/m²-s (10⁻³ m/s) for each of the first Set Series and noted that they varied due to the sand being different between each. For the second Set, Darcy again noted the near constant value of Q/H, consistent with the other experiments. Thus, he showed conclusively that the flow was a linear function of the head loss across the filter bed.



Darcy ended the appendix with a solution for the flow through a filter with a falling depth of water on the upper surface. He would use the solution in the next Appendix section, Note E, which attempted to explain the behavior of artesian wells. His solution is now known as the falling head problem. Slightly rearrange it is,

$$\ln\left(\frac{h_o + e}{h + e}\right) = \frac{k}{e}(t - t_o)$$

where h is the height of water above the filter, t is the time and the subscript o indicates the initial variable values. This solution does clearly demonstrate a good mathematical ability. A point of confusion may arise with the hydraulic potential across the bed. Darcy is correct in defining it as the sum of h and e. That is, h is not the head, it is only the pressure component, (pressure divided by the specific weight) at the top filter surface, while e in the log term results from the elevation component.

Darcy's solution anticipates the traditional solution for a falling head permeameter

$$\ln\left(\frac{H_o}{H}\right) = \frac{kA}{ea}(t - t_o)$$

with 'A' being the reservoir area and a the column area. Thus, Appendix D not only defines the Law, but also provides the two standard methods, (constant head and falling head) used to measure conductivity.

Concluding Comments

Henry Darcy's testing and analysis was simple, but clearly well thought out, carefully performed and theoretically complete. While he himself may not have known of its eventual full impact, it is still appropriate to give him full attribution for discovering the Law. Not only was his analysis substantially correct, but with the falling head problem he provided the first analytical solution to a complex saturated flow. Thus, he not only discovered the Law, but also showed how to use it.

Finally, Appendix D, demonstrates that Darcy just didn't stumble onto the Law. He obviously knew what he was doing. In the Appendix he demonstrates,

- · Good math skills,
- Good experimental technique,
- Mastery of the concepts of fluid statics and hydraulic head by his use of manometers and computations of head, and
- Mastery of the continuity principle in the computation of flow and the falling head solution.

It would be refreshing if everyone in the ground water field today had those basics down.

I do hope you enjoyed Glenn Brown's article. His concluding comments are equally as relevant to to us Core Analysts in the Oil & Gas sector. - Editor.

2005 SCA Technical Achievement Award Winner.

By Doug Ruth

The SCA's Technical Achievement Award 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 award is the SCA's highest honour and the only award for technical achievement. Congratulations to Doug Ruth – Editor.

To begin, I would like to thank the Society of Core Analysts for the honour bestowed on me by the 2005 Technical Achievement Award. The best recognition is always the recognition of ones peers.

I would like to take this opportunity to reflect on what the SCA has meant and done for me. Firstly, it has given me the opportunity to learn. I think that I have a reputation for asking questions. Questioning is the means whereby we say that we don't know something and that we want to learn. I apologize if some questions lead to discomfort --- that was never the intent. Occasionally a question raises a point that was missed. I know that some of my best work has arisen from seemingly innocent questions that were asked of me. I particularly want to thank the SCA for the opportunity to learn from our "elders". In my home province, we have a very strong Aboriginal heritage. In this society, the "elders" are a group of leaders who hold power because they are wise, not because they possess wealth or political position. Simply listening to these people is a learning experience. There are similar people in our society: Jim Melrose and Stan Jones who asked me some of the most challenging questions in public, Ben Swanson and Jake Rathmell, two of

the best people to sit beside and listen to at a conference, and Pat Worthington, a man who could ask a question that really made you squirm.

Secondly, I want to thank the SCA for my most interesting research projects. A particular case best illustrates this. I have known Norman Morrow for almost 30 years. As I followed his work, Norm kept showing plots of scaled imbibition production that should not overlap but they did. At our conference in The Hague, I casually claimed that I could model this problem numerically and Norm disagreed. This simple disagreement has lead to a very productive, ongoing research collaboration and if I ever stop being Dean it will be even more productive.

Thirdly, I want to thank the SCA for an extended family. Many of you know my wife Bev. I've met many of your spouses and even some of your children. Your friendships have taught me so much more than science and technology. My American friends, such as Yogi Vindum, Abby Matteson, and Dan Maloney have maintained my respect for my southern neighbours. My friends at IFP and Total have made me proud that my country is a coalition of English and French cultures. Bas Schipper and Jos Maas still have not explained to me why The Netherlands is called Holland and is inhabited by the Dutch. Waddah El-Hannai has taught me more about the Middle East than anything I have read in books or seen on television. And Jill Buckley has provided a lead that I have proudly followed for so many years.

I also want to thank the SCA for so many great memories: the stunning light of the south of France, the magnificent fjords of Norway, the miracle of Abu Dhabi (desert to modern city in thirty years), the bustle of New Orleans, the magic of Monterrey Bay (watching dolphins from our hotel room), and the most incredible meal of our lives at the Kurhaus in Scheveningen. I want to particularly thank all of those who have joined me in my annual "Search for Guinness", helping me to prove the theory that a pint of Guinness can be had anywhere in the world.

Finally, I want to give advice to the "young": do good work (there are so many exciting problems in core analysis). write papers (the ability to write comes only with practice), dare to present them (you learn best by teaching), get engaged in the discussions (never be afraid to ask a "stupid" question), and help in the organization (the SCA will only be as strong as its volunteers). Our annual conferences are attended by the 100+ people who are the international experts in core analysis. This is "one stop shopping" for all those who wish to pursue a future in this research area. Make the most of your opportunities.

In closing, I would like the Society to consider rename the Technical Achievement Award. Most technical societies have associated their highest award with a prominent researcher in the area. It would be very appropriate for the Society of Core Analysts to do the same. Perhaps the Darcy Award in recognition of the founder of the field, or the Archie Award to recognize the coiner of the term "petrophysics", or the Purcell Award to recognize a former Technical Achievement Award winner who recently passed away. I am sure there will be other suggestions. Only two rules should apply to the choice: prominence in the field and the naming should be posthumous.

Again, thank you all for making my work more relevant, my memories more memorable, my computer software company more profitable, and my life more rewarding.

"END-POINT..."

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

The Bathtub (courtesy of Kevin Flynn) It doesn't hurt to take a hard look at yourself from time to time, and this should help get you started.

During a visit to the mental asylum, a visitor asked the Director what the criterion was which defined whether or not a patient should be institutionalized.

"Well," said the Director, "we fill up a bathtub, then we offer a teaspoon, a teacup and a bucket to the patient and ask him or her to empty the bathtub."

"Oh, I understand," said the visitor. "A normal person would use the bucket because it's bigger than the spoon or the teacup."

"No" said the Director, "A normal person would pull the plug. So, do you want a room with or without a view?"

God saw Adam sitting by a rock looking less than happy. "What's wrong with you Adam?" He asked. Adam replied "It's really boring with no one to talk to".

God thought for a moment "OK, I'll make you a companion: a woman. She will gather food for you, cook for you, and when you discover clothing she will wash it for you."

"Sounds good so far" Adam replied cheerfully.

"Oh there's more. She will always agree with every decision you make. She will bear your children and never ask you to

get up in the middle of the night to take care of them."

"Sounds better all the time."

"There's more," God replied. "She won't nag you, and will always be the first to admit she is wrong when you have a disagreement. She will never have a headache and will freely give you love and passion when you need it."

"Sounds great," Adam said. Suddenly a frown creased his brow. "What would a woman like this cost me?".

God replied "An arm and a leg."

Adam thought for a couple of minutes...then looked up to God "What can I get for a rib?"

The rest is history! (Anon)

Next SCA News The next issue will be May 2006. All contributions for the next SCA News by 15 th March please. My thanks to all contributors in this issue of SCA News.

Seasons Greetings and happy holidays.

