



AICISE CENTRE NEWSLETTER: September 2006

New AICISE Centre Manager:

David Reynolds joined AICISE on August 8 as the new Centre Manager. He brings a wealth of knowledge and experience in environmental, geo-science and program and project management in the private sector and government. For the past 16 years he worked at The City of Calgary. He holds a B.Sc. (jointly in Geography and Geology), and a M.Sc. in Fluvial Geomorphology from The University of Calgary. He completed an MBA in Environmental Management and Sustainable Development at the Haskayne School of Business (University of



Calgary) in 2004. He is currently working on a Ph.D. with Dr. Dianne Draper in the Geography Department about the effects that climate change may have on skiing-dependent businesses in Banff and Jasper. He is registered as a Professional Hydrologist (ground-water) with the American Institute of Hydrology; Professional Geoscientist (P.Geo) with APEGBC and Examinee Member with APEGGA and a member of the Canadian Society of Petroleum Geologists. Dave is married and has two grown children, both grads of U of C. Outside of work and school he is a Senior Associate of the Calgary Exhibition & Stampede Board.

New AICISE Centre Administrative Assistant:

Susan Dooley joined AICISE on March 20th, 2006. She brings 40 years of administrative support experience from both industry and government with her. Some of her experience comes from working at the former Calgary General Hospital, Alberta Research Council (ARC) and the University of Calgary. While raising her children she worked as a temporary secretary in many of the major oil companies in downtown Calgary. Susan is a native Albertan, born in Red Deer and moved from the farm to the town of Bowness (now part of Calgary) in 1954. She has watched the University of



Calgary grow from being a satellite of the University of Alberta to the major, diversified educational facility that it is today. She is married and has two grown boys. As well as raising her family and working, she managed to volunteer in the schools, for her community association, but closest to her heart is the sports programs for youths. Currently she is still on the Board of Directors of the Cambrian Heights Community Association, McKnight Sports Council and Baseball Calgary. Susan feels extremely fortunate to have been selected to be the Administrative Assistant for AICISE. Susan says that the diversity of the people and work has already proved to be an extremely rewarding experience and she is looking forward to spending many years in helping AICISE reach for the prize.

Other New Faces at AICISE:

AICISE welcomes **Dr. Lorraine Whale**, Ph.D., P.Eng., a ISEEE/Shell Industrial Fellow and a 24-year veteran of Shell Canada Limited. Dr. Whale is Shell's liaison to AICISE and an Adjunct Professor in the Department of Chemical and Petroleum Engineering, where she teaches a course in sustainable development to engineers. Dr. Whale manages Shell's In-Situ Oilsands Research Program. She is proud of Shell's continuous commitment to oil sands research and innovation,



including the company's role as the founding industry member of AICISE. She anticipates that efforts like that of AICISE will increase productivity while reducing environmental impacts from oilsands development. She believes that with as much as \$100 billion of oilsands development on the table, this valuable resource must be developed appropriately and sustainably.

Recognition & Congratulations:

Many happy returns to John Thompson, who recently reached the ripe old age of ... well, if you must know, ask John. And to Behdad Moini who hit the quarter century mark on Sept 11.

Congratulations to the *Los Caimanes* ("Crocodiles") baseball team for winning the GSA Co-Recreation Slow Pitch League!



AICISE Start-of-Term BBQ and Percolator Session:

Besides the kick off events, all AICISE staff and students are invited to participate in future Percolator sessions in CCIT 209 for scientific discussion and brainstorming that will help to facilitate the integration of AICISE research activities and improve the training activities of the students. Future Percolator* sessions scheduled are:

- Oct 18 – Ron Spencer & Lorraine Whale are holding an Oilsands Geology Workshop for AICISE students & staff; location and time to be determined.

- Nov 22 – Pedro Pereira-Almao is speaking about Advanced Catalysis and upgrading; and
- Dec 20 - Steve Larter is speaking about Chemical Monitoring & Bitumen Characterization.

* Sorry, Percolator sessions are for AICISE students and staff only.

Future Events to add to your calendar:

A number of future events to be aware of include:

- Watch for news about the dates for occasional TGIF (Thank Goodness It's Friday) events at 4:30 p.m. at the Grad Lounge to celebrate reaching the end of another successful work week. The next TGIF is being organized by Geology & Geophysics for sometime in October. Watch for notices.

Website:

The new AICISE web site is live (www.aicise.ca). Have a look! If you find errors or have suggestions for new content or links, please let Dave Reynolds (dave.reynolds@ucalgary.ca) know. Thanks.

AICISE Technical Advisory Committee Meeting:

AICISE's Technical Advisory Committee (TAC) will be meeting December 14 and 15 in the CCIT/ES buildings. TAC members include: Dr. Sanjay Srinivasan, University of Texas; Dr. Patrick Corbett, Heriot Watt Institute of Petroleum Engineering; Dr. Frank McCaffery, Chevron (retired); Dr. Otto Strausz, Professor Emeritus, Chemistry at U of A; and Dr. Lorraine Whale (Chair) from Shell Canada Limited.

Recent U of C and/or AICISE- Related Presentations at the 2006 Canadian International Petroleum Conference:

- Calculations of the Effect of Boiling Water on Bitumen Production, J. Wang, B. McGee and A. Kantzas
- Automated Global Optimization of Commercial SAGD Operations, C.C. Card, N. Chakrabarty and I. D. Gates
- Geological Controls on the Origin of Heavy Oil and Tar Sands and Their Impacts on In Situ Recovery, H. Huang, B. Bennett, T. Oldenburg, J. Adams and S. Larter
- The Origin, Prediction and Impact of Oil Viscosity Heterogeneity on the Production Characteristics of Tar Sand and Heavy Oil Reservoirs, S. Larter, J. Adams, I.D. Gates, B. Bennett and H. Huang
- Observations of Heavy Oil Primary Production Mechanisms from Long Core Depletion Experiments, N.N. Goodarzi and A. Kantzas
- Micro-Bubbles in Cold Production of Heavy Oil – Are They Present? Are They Important?, H. Sheikha and M. Pooladi-Darvish
- Design of the Stream and Solvent Injection Strategy in Expanding-Solvent Steam-Assisted Gravity, I.D. Gates and N. Chakrabarty
- Fluid Movement in the SAGD Process – A Review of the Dover Project, A. Aherne and B. Maini
- Effect of Oxidation on Explosion Potential and Barite Sag Reduction in Oil and Synthetic-Based Drilling Fluids, K. Shahbazi, S.A. Mehta, R. G. Moore and M.G. Ursebach
- PVT and Viscosity Measurements for Propane – Athabasca Bitumen and Propane – CO₂ – Athabasca Bitumen Systems, A. Badamichi Zadeh, B. Maini and H. Yarranton
- Material Balance Technique for Hydrate-Capped Gas Reservoirs, M. Pooladi-Darvish and S. Gerami
- The Effect of Scale on the Primary Depletion of Heavy Oil Solution Gas Drive; N.N. Goodarzi and A. Kantzas
- Foamy Oil Flow – A Laboratory Curiosity or a Real Drive Mechanism in Field Operations? B.B. Maini

- Characterizing Moisture and Gas Content of Coal by Low-Field NMR; R. Guo, K. Mannhardt and A. Kantzas
- Coal Bed Characterization Studies with X-Ray Computerized Tomography (CT) and Micro CT Techniques; F. Saites, W. Wang, R. Guo, K. Mannhardt and A. Kantzas
- Visbreaking Based Integrated process for Bitumen Upgrading and Hydrogen Production; C. Sosa, M. Gonzales, L. Carbognani, M.J. Perez Zurita, F. Lopez-Linares, M. Husein, R.G. Moore and P. R. Pereira-Almao
- Reservoir Simulation Assessment of the Oil Recovery Mechanisms in High-Pressure Air Injection (HPAI); E. Niz-Velasquez, S. A. Mehta, R. G. Moore and M. Ursebach
- Mitigating Explosion Risks in High Pressure Air Injection Compressors; M. Ursebach, R. Sutherland, R. G. Moore and S. A. Mehta
- Advances in Diffusivity Measurement of Solvents in Oil Sands; B. Afsahi and A. Kantzas
- In Situ Viscosity Heavy Oil: Core and Log Calibrations; J.L. Bryan, A. Kantzas, R. Badry, Emmerson and T. Hancsicsak
- Determining Bitumen, Water and Solids in Oil Sands Ore by Using Low Field NMR; Y. Niu, A. Kantzas and J. Bryan

Other Presentations at the Heavy Oil Conference and Canadian Symposium on Catalysis:

- "Impact of Oil Viscosity Heterogeneity on Production by Thermal Processes Such as SAGD and CSS" by I.D. Gates, J. Adams and S. Larter
- "Selective Adsorption of Thermally Cracked Heavy Molecules" by M. Gonzalez, L. Carbognani and P. Pereira-Almao.
- "Low Temperature Catalytic Steam Gasification of Heavy Model and Converted Residual Heavy Molecules to Produce Hydrogen" by C. Sosa, M. Husein, G. Moore and P. Pereira-Almao.
- "Ultradispersed catalysts for Hydrotreating: Preparation Variable Effects and Fixed Bed Test Comparison with Conventional catalysts by A. Vasquez and P. Pereira-Almao.
- "Study of Organonitrogen Compounds Adsorption Kinetics on Macroporous Natural Silica Alumina" by F. Lopez-Linares, C. Sosa, M. Gonzalez and P. Pereira-Almao.

For further information about the AICISE Centre's mandate, role and research activities, please go to the web site (www.aicise.ca) or contact:

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