

ALUMNI NEWSLETTER

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ALUMNI REUNION

Class of 1979

The party will be at the
Calgary Winter Club on
Saturday, Oct. 23, 2004!

If you would like to attend,
but haven't yet purchased a
ticket, please contact

Shaheen Khan

(saykhan@telus.net) or

Louise Klatzel

(lklatzel@ucalgary.ca)

Let us know about your
upcoming class reunion!
Send us the details, including
year of graduation, date of
the event, location, and
organizing committee
contact information.



GREETINGS FROM THE DEPARTMENT

The Department of Geology and Geophysics at the University of Calgary is pleased to send you this inaugural issue of our Alumni Newsletter. Our Department's alumni numbers continue to grow due to increased enrollments (327 undergraduate majors, 120 graduate students) and subsequent graduations (95 degrees awarded in 2003). With our 30 full-time faculty members, 15 support staff, 36 research staff and several active research consortia, our programs have never been busier or more productive.

The Department is very pleased to see the creation of a number of research chairs – funded through government and the private sector. We are fortunate to be located in Calgary, a world centre for petroleum geosciences. With so many educational and research activities in geology, geophysics, and hydrogeology, it is imperative that our alumni be kept informed of departmental activities. Our Alumni Newsletter seeks to improve communication regarding departmental news on a regular basis. Its production is made possible through the creative efforts of my Administrative Assistant, Norma Tischer.



Photo by Don Lawton

There is much to celebrate with our Department's achievements – including national and international awards won by students, staff, faculty, and research groups. In this Newsletter, we share the many good news items with you while encouraging your future support and participation in the Department's many academic activities.

Larry Lines,
Department Head

CONGRATULATIONS TO RECENT AWARD WINNERS

- **Dr. Len Hills** (Professor Emeritus) - admitted as a Member of the Order of the University of Calgary at the November, 2003 convocation
- **Jennifer Adams** (PhD Candidate) - recipient of an Alberta Ingenuity Fund (AIF) Studentship
- **Daria Zelenitsky** (Postdoctoral Fellow) - recipient of an AIF Fellowship
- **Bazlur Rahman** (PhD Candidate) - winner of the Best Student Presentation Award at the 2004 CSPG Conference
- **Burdine Chmilar** - 2003 recipient of the APEGGA Gold Medal in Geology
- **Brooke Berard** - 2003 recipient of the APEGGA Gold Medal in Geophysics
- **Fold-Fault Research Project (FRP)** 2003 Ingenuity Fund Research Excellence Award (APEGGA Summit Award)
- **CREWES Project** - 2003 Distinguished Achievement Award, Society of Exploration Geophysicists (SEG)

COMING EVENTS

FATS (Friday Afternoon Talk Series)

Fridays, 4:00 pm,
ES 162

Check our weekly
Newsletter
for presentation topics

[www.geo.ucalgary.ca/
newsletter/newsletter.htm](http://www.geo.ucalgary.ca/newsletter/newsletter.htm)

"Rock for the Gallagher"

Saturday, Oct. 23, 8 pm

The Den, MacEwan Hall

DID YOU KNOW?

The Department of Geology & Geophysics is made up of:

- 30 full-time faculty members
- 15 support staff
- 36 research staff
- 327 undergraduate majors
- 120 graduate students

We have programs in:

- Geology
- Applied & Environmental Geology
- Geophysics
- Environmental Science
- Earth Science

New admissions in September 2004:

- 29 graduate students
- 100 undergraduate majors

NEW ARRIVALS

Dr. Robert Brady (BSc, Geology, 1993) has returned to the U of C after completing his Masters and PhD degrees at the California Institute of Technology. He then was a researcher at Los Alamos National Labs and an Assistant Professor in the Cal State University system. Since his arrival here in September 2003 as Assistant Professor in Structural Geology (replacing Dr. Simony), Dr. Brady has established a research program investigating the kinematics of strike-slip and extensional fault systems, and the distribution of radiogenic heat production in the continental crust of western North America.



We are pleased to welcome **Dr. Steve Larter**, Tier 1 Canada Research Chair in Petroleum Geology, who joined us in July 2004 from the University of Newcastle upon Tyne, UK, where he was Dean of Research for the Superfaculty of Science, Agriculture & Engineering. Dr. Larter's research in petroleum geochemistry spans a range of activities from biodegradation, basin modelling, and biogeochemistry to theoretical and practical applications of heavy oil extraction.



See **Spotlight on Research** (p. 3) for more details about Dr. Larter's research team and current projects.

RETIREMENTS / DEPARTURES

During the past two years, the Department of Geology & Geophysics has marked the retirements of four faculty members:

Dr. Philip Simony retired in 2002 after 39 years of dedicated and enthusiastic service to the Department and the University. In recognition of his contributions, a conference, *"From Forelands to Core Zones: Deformation and Tectonic Evolution of Orogenic Belts"* was held in his honour in June 2004. Dr. Simony continues to play a role in the Department as an active Emeritus Professor.



Dr. Ian Hutcheon, former Department Head (1992-97), retired in August 2003 to pursue his new career as a rancher in British Columbia. He reports that "I've never worked so hard for so little money"! He returns to Calgary from time to time to meet with colleagues regarding his research projects in Weyburn and Brazil.



Dr. Jim Nicholls joined the University of Calgary in 1969, and is noted for his knowledge of mineralogy, volcanic petrology,



field geology, and scientific writing. For the past 3 years he has served as the Director of the Natural Sciences Program of the Faculty of Science. Jim retired effective August 1/04. He is writing an electronic textbook on volcanic petrology with long-time colleague Mavis Stout. You can view the latest version at <http://www.gtwist.ca>.

Dr. Russell Hall joined the Emeritus ranks on August 1/04. He has been a faculty member since 1977, specializing in Jurassic and Cretaceous ammonites, biostratigraphy, and geochronology. Over the next twelve months he plans to write up final reports on a number of co-operative research projects involving ammonite faunas from western Canada before moving permanently to Perth, Western Australia.



Other Departures:

Deb Glatlotis, analytical technician since 1991, left the University in summer 2004. A keen traveller, she and her husband are now living in British Columbia.

Many former undergraduate students will remember **Marg Graham**, Manager of Student Programs and Office Services since 1994. Marg relocated to the temperate climes of Vancouver Island in December 2003; we wish her great golf scores and all the best in the future!

SPOTLIGHT ON RESEARCH

In each issue we will feature one of the research groups in the Department.

The petroleum geoscience program at the University of Calgary is expanding and reorganizing. Recent additions include a research group of 5 scientists and technicians from the University of Newcastle, UK. The **Petroleum**

Reservoir Group, led by **Steve Larter**, our new Canada Research Chair in Petroleum Geology, is a



reservoir characterization group specializing in reservoir fluids and especially in understanding the processes controlling heavy oil compositions and distributions. They have worked on heavy oilfields in China, North Sea, Brazil, Gulf of Mexico, Middle East and on the vast tar sand deposits found in the foreland basins of North and South America. When not carrying out applied research for the petroleum industry, they work on fundamental research topics as diverse as life in deep sediments (or on Mars), or on what controls reservoir wettability or oil viscosity.

They are already working closely with Larry Lines and the geophysics heavy oil reservoir characterization group (CHORUS) and with petroleum engineers under the ISEEE banner. This expanded reservoir characterization program at U of C, supported by AIF and industrial partners, consists of experienced and trained scientists, engineers and technicians carrying out research, training highly qualified staff, and applying research results to the solution of problems

relating to petroleum production from all types of reservoirs but especially heavy oil and tar sand reservoirs. Not only is U of C investing in new lab facilities but the reservoir characterization program at U of C is linking its lab facilities with the world class lab facilities at GSC to make an integrated facility second to none in North America.

Accompanying Steve Larter from Newcastle are research staff members **Barry Bennett** and **Haiping Huang**, experienced reservoir geology and geochemistry experts, and **Thomas Oldenburg** a biogeochemist specializing in understanding microbial processes in petroleum reservoirs. Understanding these processes is one of the keys to unlocking the giant tar sand and heavy oil reserves in western Canada and finding production sweetspots. **Kim Noke**, the lab manager, keeps them in order! The group is completed with graduate students Jennifer Adams (biodegradation reservoir modelling), Femi Jokanola (cap rock petrophysics), Tamer Koksalan (reservoir geochemistry), & Milovan Fustic (tar sand reservoir characterization).

The new group is working with the staff and students in established petroleum geology groups at U of C and the GSC (Cindy Riediger, Ron Spencer, Charles Henderson, Fed Krause, Martin Fowler, Lloyd Snowdon). The U of C petroleum geology program is on a roll! There's lots new happening at U of C — come see us and find out what we are doing!

More information on the Petroleum Research Group can be found at:
<http://www.geo.ucalgary.ca/petroleum/>

RECENT THESES

Carrie Armeneau (MSc):
"Syntectonic vein formation in the Rundle Thrust sheet near Canmore, Alberta"

Jeff Beckett (MSc):
"Seismic imaging using matched filters for operator weighing"

Jennifer Cole (MSc):
"Arsenic in a village drinking water supply, Mexico"

Colin Frostad (MSc):
"The structural controls on karst development, Oparure Block, North Island, New Zealand"

Rachel Newrick (PhD):
"Understanding velocity models used for prestack depth migration"

Brian Russell (PhD):
"The application of multivariate statistics and neural networks to prediction of reservoir parameters from seismic attributes"

Scott Rayner (MSc):
"An integrated hydrogeophysical and hydrogeological characterization of potential saltwater intrusion pathways in a fractured aquifer, Saturna Island, British Columbia"

Dawn Hodgins (MSc):
"Structural deformation along the Red Deer River valley, Drumheller, Alberta"

Theses are listed on the Gallagher Library website (<http://www.ucalgary.ca/library/gallagher/>), and may be borrowed by anyone having a valid University of Calgary Library Card



GEOSCIENCE PROFESSIONAL DEVELOPMENT CENTRE

The GPDC was established in 2002 to provide training for post-degree, mid-career petroleum industry professionals. Courses offered by the GPDC qualify for APEGGA professional development credit.

Upcoming courses being offered:

Overview of the Geology of the Western Canada Sedimentary Basin

October 19 - 20, 2004 / Instructor: Grant Mossop

Practical Sequence Stratigraphy: Concepts and Applications

November 9 - 10, 2004 / Instructor: Ashton Embry

Applications of Geostatistical Reservoir Modelling

November 22 - 23, 2004 / Instructor: Clayton Deutsch

For more information and to register, see our website: <http://www.geo.ucalgary.ca/gpdc/>

Department of Geology
& Geophysics
University of Calgary

Mailing Address:

2500 University Dr. NW
Calgary, AB Canada
T2N 1N4

Phone: 403-220-5841
Fax: 403-284-0074

Alumni Newsletter Editor:

Norma Tischer
geoalumni@ucalgary.ca

Undergraduate Information:

geoscience@ucalgary.ca

Graduate Program Info

geosciencegrad@ucalgary.ca

..Our Website:

<http://www.geo.ucalgary.ca>

*Some other useful
websites:*

University of Calgary:
www.ucalgary.ca

U of C Alumni Page:
www.alumni.ucalgary.ca/



UNIVERSITY OF
CALGARY

GALLAGHER LIBRARY UPDATE

As you may know, in recent years the University has been dealing with a period of substantial budget restraint, which has affected the funding of the operation of the Gallagher Library. At one point, it was suggested that the Gallagher collection be moved to the MacKimmie Library.

In 2003, an ad-hoc study group was formed to investigate and recommend how the Gallagher Library could best serve the disciplines of geology and geophysics, align with the core principles of the U of C Strategic Academic Plan, enhance the relationship between the University and the business community, and sustain a cost-effective operation.

As a result, Information Resources has pledged to continue operations in the present location for the foreseeable future, based on the Department of Geology & Geophysics' pledge to seek the partnership of alumni and other friends and stakeholders to help address the funding challenges.

I have been meeting in recent months with a number of our graduates working in local oil and gas companies, and the Gallagher Library has frequently come up in discussion. It is clear that the library is viewed as an important resource for geoscientists in the petroleum industry and as a comprehensive earth science resource.

An alumni appeal is currently underway, with the objective of raising sufficient funds to cover the operating budget of the Gallagher Library. The continued support of G&G alumni, and of companies in the oil and gas sector, is important in ensuring that the library continues to serve its stakeholders.

Our current students have also been active in supporting the "Gallagher", as evidenced by the success of the "Rock for the Gallagher" fundraiser held Oct. 18, 2003. This event, organized by the undergraduate student clubs (Rundle and GUSS), and enthusiastically supported by department members, raised over \$4,000. *And, they plan to do it again – another "Rock for the Gallagher" fundraiser will be held on Saturday October 23, 8 pm, at 'The Den'. The theme is "Come as Your Favorite Rock Star"! Hope you can join us!*

The future...

The University is examining long-range plans for building on strengths in energy and the environment. The establishment of the new Institute for Sustainable Energy, Environment and Economy (ISEEE) will foster greater collaboration between the areas of geology & geophysics, engineering, law and business. The possibility for expanding the Gallagher Library's focus to support studies in energy and the environment is being considered.

Larry Lines, Head

KEEP IN TOUCH!

We'd really like to hear how YOU are doing. Drop us a line! Let us know about your new job, your growing family, an interesting trip that you have taken!

Please write to us (address above, or by e-mail to geoalumni@ucalgary.ca with your news and to update your address and contact information. Be sure to include your degree and date of graduation.

Let us know if you enjoyed this Newsletter. How would you like to receive it in the future? On paper? Electronically?

Name: _____

Degree: _____ Year of Graduation: _____

Address: _____

E-mail: _____ Phone: _____

What's new with you? Comments on this Newsletter?

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