

**CANADIAN SOCIETY OF PETROLEUM GEOLOGISTS
1998-1999 REPORT OF ACTIVITIES**

1998-1999 Executive Committee

**Kathryn Scales, President
Ian Hutcheon, Vice President
Monica Meding, Finance Director
Ted Watchuk, Assistant Finance Director
Paul Price, Program Director
Paul MacKay, Assistant Program Director
Tony Cadrin, Service Director
Colin Yeo, Assistant Service Director
Terry McCoy, Past President**

PRESIDENT'S REPORT (Kathryn Scales)

Each new year brings with it significant changes which we must learn to adapt to, and 1999 was no different. Our Society had to learn to cope with low commodity prices, which meant increased difficulty in obtaining sponsorships for many of our committees and, more importantly, increased pressure on individuals to look after their own careers, leaving less time and opportunity to devote to the Canadian Society of Petroleum Geologists. We have always relied heavily on the spirit of our members, and hopefully with the upturn in industry, we will once again be flush with individuals who recognize the value of giving of their time and energy.

In general, the relatively new subdivision of the Executive into: Finance, Services and Programs, seems to be working well. The Programs division has always been one of the Society's strong suits, with monthly technical sessions in nine specialized technical divisions, as well as 19 well-attended general technical luncheon talks. A new committee, the Volunteer Committee, was formed to help us find appropriate niches for those who were willing to volunteer to the Society, but were not sure where their talents could best be utilized. This has proven to be very useful, especially to the incoming Convention organizers.

The Services division had a very active year, beginning with the addition of the CSPG as a founding sponsor of "The Oil

Game", a successful addition to our outreach program. We maintained our sponsorship of the "Invent an Alien" project with the Science Centre. We also directed funds to the Atlantic GeoScience Society in support of their upcoming publication "The Last Billion Years: A Geological History of the Maritime Provinces". The Educational Trust Fund (ETF) embarked on an aggressive sponsorship drive, which is intended to enhance their ability to support all of the Society's outreach programs. The main financial obligation of the ETF is the Student Industry Field Trip (SIFT) program. Given the eagerness of the SIFT grads to volunteer for other CSPG Committees, and the suitability of these grads as new hires because of the intense training that SIFT gives them, it is a fund which pays for itself in many intangible ways. The details of all of these programs, as well as our financial results, are contained in the following pages, and I hope that every member of our Society takes the time to review this Annual Report.

Our membership numbers remain relatively stable, with 3274 members in 1999, up from 3273 members in 1998. Of these, we have 2676 Active members; the remaining are Associate, Emeritus, Corporate (55) and Honorary.

The price of oil was definitely one of the biggest stories of the year, going from its lowest price in 22 years, to a welcome recovery by mid-year of over \$20/barrel. Although we've all sat on this roller-coaster

ride before, experience doesn't make it any more pleasant. Hopefully, though, it becomes more tolerable, as we learn how to adapt and ride it through. The Society was not the only one to suffer; many companies are finding it more and more difficult to keep their f&d costs low while maintaining an aggressive exploration program. With the recent increase in price, and highly competitive market for ever-smaller Western Canada prospects, the imminent arrival of gas from new discoveries in the Liard area of the Northwest Territories, targets in the MacKenzie Delta and parts of the Jeanne d'Arc Basin are attracting more attention and dollar commitments. All of these initiatives bode well for our industry, our personal careers, and our Society's health as well.

Operating the Finances of the Society continues to be a challenge – predicting revenues from big ticket items such as our annual convention, and counting on it to keep the Society out of the red, makes budgeting difficult. As long as we continue to mandate that the annual convention bring in substantial profit, and fix our finances to that, we shall continue to live in an unpredictable financial climate. Fortunately, for the past few years, the unpredictable numbers have come up heavily in the black. This year's joint convention with the Petroleum Society hit home the critical need for interdisciplinary co-operation to both the geological and engineering communities, and the hard work by our chairmen and their corps of volunteers ensured us a financial and technical success.

Our financial gains in one area are always welcome respite to other areas, and 1999 was a year in which the *Reservoir* commanded not only a significant amount of volunteer time, but financial relief as well. While most members agree that the new colour format is more readable and serves our members well, we also believe that the *Reservoir* should be run at least as a break-even proposition. This is currently being worked on, and I anticipate that our intense management of this monthly publication will produce tangible results by year end. Our "soft" publication, the CSPG website, finally

came back on line early in the year after almost a 12-month hiatus. It is still a work-in-progress, but is proving a useful tool in our outreach efforts, such as the Honorary Address, and as a link for the Convention, and helps us in our goal to provide timely services to our members nation-wide, not just those within the 403 area code.

All of these efforts to provide support to our members comes at a cost, and the costs are never static. With that in mind, the Executive made the difficult decision to increase the membership dues. The decision was not taken lightly, but was taken to ensure the ongoing financial viability of the Society, given the uncertainty of the amount of profit/loss that can be expected in any given year. Keep in mind that the cost (expenses only) of providing just the monthly *Reservoir* and the quarterly *Bulletin* amounts to approximately \$100 per year per member. Taking actual figures from our current year-to-date, the *Bulletin* and *Reservoir* combined have expenses of \$320k, and associated revenues of only \$228k. The CSPG has also been very active in giving back to the community and promoting our profession, in such philanthropic events as the annual Honorary Address, graduate thesis awards, undergrad awards, the inter-university geological conferences, the Visiting Petroleum Lecturer series, the Invent-an-Alien project, and the Oil Game. The spending that we incur in any given year is relatively set, for example, on staff salaries, office rent, printing costs, and postage for our publications. It would be fairly easy to wipe out the current surplus with a poor fiscal year or two. With these factors in mind, the dues increase from \$65 to \$80 per member is justified, more closely reflects the actual costs to members of operating the Society, and should hold the Society in good stead for several years to come.

Historically, our efforts to reach those of our members that do not reside in the Calgary area has fallen on the National Liaison Committee, comprised of a representative from each of our country's regions. Given the time and dollar limitations of our members and the Society, it

was becoming increasingly difficult for this group to provide the Executive with all of the support we were requesting. We are now in the process of re-structuring what was the N.L.C. into a group of regional sectors, which will be able to be somewhat more self-sustaining, with support from the Society for technical events, as well as student chapters. It is hoped that this endeavour will foster regional chapters across the country, which would be able to rely on the CSPG for overall support. I would like to take this opportunity to say thank you on behalf of the Society to the current members of the National Liaison Committee for all of their efforts towards keeping our Society truly national.

A totally revised Strategic Business Plan, a process initiated under the direction of Gerry Reinson in 1996, will be completed by the end of 1999, which should enable future Executives to maintain continuity from year to year. The Plan represents both financial and strategic objectives within a 5 year time frame, which should enable the Society to overcome the effects of an ever-rotating Executive.

I would like to take this opportunity to thank the office staff for their generous support. They have had to deal with ever-increasing demands placed upon them as the amount of time that volunteers have seems to have dwindled. They have spent the better part of a year trying to get a new accounting software program up and running, and in tandem, get our member database on a system that will deliver the most flexibility to our unique needs, and through agonizing efforts, have succeeded.

I would also like to thank the Society's volunteers, many of whom give not only of their time, but of their hearts, to ensure the longevity and success of our Society. I commend them all. I have attended many of the technical and social events put on by the Society, and they were all well-organized and well-received.

I am extremely pleased to have had the satisfaction of working with such a diverse, committed, group of people as those that served on the Executive with me. I thank

them for making my job easier, and certainly never dull.

And finally, thank you, for giving me the opportunity and challenge of serving as your president.

TREASURER'S REPORT (Monica Meding, Finance Director)

I would like to report on our Society's Financial Affairs for the year ending August 31, 1999. The general operations of the Society include the income or expenses from all operations including Programs, Convention, Services, Publications, Operations, Executive and Donations.

The Society ended the year with an *operating deficit* (revenue minus expenses) of \$47,061. While we always budget for a surplus, the following items contributed to our deficit: the Reservoir deficit (\$30,486), higher office operating charges by our landlord (\$3000), accruals and adjustments, capital asset amortization (\$24,694) and non-budgeted donations (\$12,980).

Our income from general operations was \$1,658,821, while total expenses were \$1,705,882. The highlights include *Convention* net income of \$110,495, *Education* net of \$30,277, *Technical Luncheons* net income of \$15,366, *Bulletin* net costs of \$81,723, *Reservoir* net costs of \$30,486, and *Website* costs of \$19,592, with no income as yet.

Programs (Schedule 1)

Technical programs consist of the Education, Technical Luncheons, Technical Divisions and field trips. We had revenues of \$321,228 compared to expenses of \$274,565 for a net income of \$46,663. The major revenue generators were the Convention, Luncheons, and Education.

Services (Schedule 2)

Services consist of membership, awards, social activities and our Outreach programs. Services generated \$388,457 in income, principally from membership dues, offset by expenditures of \$194,320. With the exception of Membership, Open Golf and the

Squash Tournament, all activities within Services registered deficits.

In 1998/99 we donated a total of \$19,650. Recipients include the Calgary Science Centre, the Calgary Science Fair, EDGEO, as well as \$10,000 to the Oil Game and \$500 to the Tom Oliver Memorial Fund. We also donated \$2000 to the Atlantic Geoscience Society as seed money towards a new publication, copies of which will be available from our office when published.

Publications and Merchandise (Schedule 3)

The *Reservoir* continues to be a cause for concern. Eleven issues were published resulting in a net loss of \$30,486. The Executive and the Senior Managing Editor review this item monthly. We have made some changes to lower our costs, but continue to have a shortfall in revenues. Continued adjustments *will* be made so that this publication will at least break even. In the last three issues of the Bulletin for this year, we have included a small amount of advertising to help offset increased costs of printing and mailing. Our website expenditure of \$19,592 is due to high up-front costs. When its construction is complete, we expect that advertising revenue will offset the cost of its maintenance.

Our inventory includes publications and merchandise. While we had very good sales at our own and at the AAPG convention, we had to write down those items that did not sell 20% of inventory. The result was that we wrote down the value of our publications by \$1527 and our merchandise by \$766.

Operations (Schedule 4)

The Society's operations consist of office expenses, staffing, finance and banking, amortization, and administration. Operations generated \$42,102 in income, largely from investments, and incurred expenses of \$278,632, principally on salaries, rent and amortization.

Investments (Schedule 5)

Our investment portfolio has recovered from the loss recorded last year. Last year's loss (\$15,459) was the result of market turmoil in equities. This year, our portfolio has increased in value by \$12,839, primarily from an increase in equities. However, the fixed income portion declined as a result of declining bond prices. The total increase in our portfolio in the 18 months since its inception is \$39,797. As of year-end, we held \$16,398 in cash. Cash generated from dividends and interest income is re-invested so that the split between fixed income (70%) and equities (30%) remains as close as possible to our original goal, which continues to be the safeguarding of our principal.

Conclusion

We continue to live beyond our means despite our best efforts to curtail expenses. The official audit indicates that we ended the year with a net loss of \$47,061. Our asset base can presently cover this sum. A brief review of past financial statements makes it abundantly clear that the Society has experienced a roller coaster of surpluses and deficits, defined largely by our conventions and their relative success. It is the task of each year's Finance Committee to wrestle with this problem and to attempt to moderate the swings. Certainly, the aggressive budgeting of the past four years has helped. However, to prevent further erosion, the Executive has decided to raise the membership fee to \$80 (Active & Associate), which will generate an additional \$30,000. This decision was not taken lightly, but when compared to the value of the present services we enjoy (\$110), the new fee more closely mirrors that amount.

As my tenure in Finance draws to a close, I am confident that Ted Watchuk will carry on the tradition of excellent financial management, which will ensure the ongoing prosperity of our Society. I would like to thank our Business Manager, Tim Howard, for his outstanding support. Thank you to our many volunteers whose dedicated service makes it possible for us all to benefit from belonging to a Society of which we can be proud.

PROGRAMS

TECHNICAL PROGRAM COMMITTEE

(Patricia Cucman, Alan Schink, Colleen Sherry, Virginia Trapnell, Co-Chairpersons)

The Technical Luncheon Committee hosted 19 talks during the 1998-1999 season. Talks focused on a range of topics related to Canadian and International petroleum-related subjects and a small number of general interest topics. Presentations and attendance are detailed at the end of this report as an attachment.

The 1997/98 luncheons attracted more than 11,800 attendees with average attendance of 621. This average attendance is slightly more than the 1997-1998 season average of 613 and significantly more than the previous two years' averages.

The Fall 1998 programme was held in all three venues in almost equal number - Convention Centre, Westin Hotel, Metropolitan Centre. Feedback from attendees concerning both the restricted capacity and viewing in the Metropolitan Centre has resulted in elimination of this venue. We continued to employ professional A/V services through APEX and TELAV and this has proven to be successful approach. There were only a small number of minor technical "glitches" in this aspect of the 1998-1999 programme.

Ticket prices remained at \$20.00 plus G.S.T. An effort was made to publish speaker biographies and abstracts in the *Reservoir* as much as two months in advance of the talks and ticket sales were made available at the time of publication. This had a positive impact on attendance and the Committee will continue to publish at least the first talk of the month two months in advance. In addition, a listing of speakers and topics for the entire Fall 1999 programme was published in the July/August and September *Reservoirs*.

A Technical Luncheon Survey was included in the June *Reservoir*. Copies were also dropped on tables at the June 8 Luncheon. Response represented about 12% of average attendance which is a good response rate for a survey. Responses were

very positive with a strong message to not change anything too significantly. The Committee was interested in evaluating reception to alternate venues such as brown bag or no-lunch options in the Jack Singer Hall. Feedback on this option was not very positive. The Committee has decided to not pursue these options at this time. Feedback from the respondents concerning "Best" of the season were passed on to those identified speakers. We are actively seeking speakers on topics which respondents cited as of interest. A summary of survey results was published in the September *Reservoir* and an Atlas was awarded in a random draw of survey respondents.

The Committee would like to extend our appreciation to the 1998-1999 season Speakers. Sincere thanks also must go to the Society and the office staff, without whose support the Technical Luncheons would not be possible.

Date	Speaker	Topic	Attendance
September 8 th	M. El Hashimi	Middle Triassic Halfway/Doig Sedimentation	453
September 22 nd	Dale Leckie	Cretaceous Diamond-Bearing Kimberlites in the Mannville, Colorado and Wapiti Groups of Western Canada.	556
October 9 th	Kevin Root	Devonian 'Antler' Thrustbelt and Foreland Basin Development in W. Canada	534
October 27 th	Mary Feeley AAPG	Integrated 3-D Interpretation and Geologic Modeling Technologies Optimizing Exploration/Exploitation	599
November 5 th	Tom Moslow	Reservoir Architecture and Predictability of Shoreface Conglomerates in The Deep Basin: Outcrop Insights	678
November 24 th	Dave Morrow	Regional Subsurface Dolomitization: Models, Constraints and Examples	400 (capacity)
December 8 th	George Pemberton	The Glossifungites Ichnofacies and its Role in Delineating Discontinuities and Enhancing Fluid Flow in Hydrocarbon Reservoirs	615
January 12 th	Pantei Karkanian	Linkage Between Earth Scientists, The Market,	657

		The Current State of Affairs of Natural Gas and Mergers and Acquisitions Activity	
January 26 th	Gerry Reinsen	Reservoir Models for Jurassic and Cretaceous Hydrocarbon Pools	899
February 4 th	Amos Nur AAPG	Earthquakes, Armageddon, and the Dead Sea Scrolls	835
February 25 th	John Paul Zonnefield	Triassic Mixed Siliciclastic-Bioclastic Accumulations, NW Pangea: Sequence Stratigraphy, Hydrocarbon Implications and Relationships to Extinction and Recovery	682
March 9 th	John Harper	Sequence Stratigraphic Myths and Facts	661
March 30 th	Neil Braunsdorf AAPG	Gulf of Mexico Deep Water Play: 50 Years From Concept to Reality	637
April 13 th	Bilal Haq	Use and Misuse of Exxon Sea Level Charts	582
April 27 th	John Underhill AAPG	Role of Propagating Normal Faults in Controlling Sequence Variability and Sediment Dispersal in Rift Systems	575
May 11 th	Terry Joubert	Superstition, Baseball and Drilling Wells	631
May 25 th	John Mckay	Get Hands on With Your Career	531
June 8 th	Jim Underschu Itz	Hydrodynamic Controls on Foothills Gas Pools; Mississippian Strata	646
June 29 th	Cindy Riediger	Jurassic and Lower Cretaceous Petroleum Systems in Southern Alberta	619

EDUCATION COMMITTEE (Brent Wignall, Chairperson)

The Continuing Education Committee maintained its level of activity from previous years even as industry went through one of its periodic contractions and the “education dollar” fell out of the budgets of most companies. Outside of the 1999 Convention, we successfully ran nine courses, three of them brand new to industry. As well, the Convention short course and field trip committees under the capable whip hands of Alexis Anastas, Mark Hearn and Jennifer Vezina produced a well-rounded and well-attended lineup of courses and field trips for Convention participants. Courses included such topics as: regional geology of the WCSB;

aeromagnetic data interpretation; the relationship of hydrothermal dolomites and tectonism; structural styles in fold and thrust belts structural geology; a geological approach to seismic workstations; and paleoichnology.

Looking into the remainder of 1999 and 2000 we expect to continue our level of short course activity, with a roster of new and intriguing courses that focus on tools for the explorationist and development geologist-water isotope geochemistry, well test design and analysis for geologists, the effects of rock and fluid chemistries on completion techniques, as well as a range of our more traditional core-based courses.

The Con-Ed Committee currently consists of: Suzan Moore, Gordon McLean, Mark Mallamo, Natalie Sweet, Jason Montpetit, Tim de Freitas, and myself. Tim has handed over chairmanship of the Committee to me so that he could relax and focus on chairing the short course component of Conference 2000 and editing the CSPG *Bulletin*.

TECHNICAL DIVISIONS

BASIN ANALYSIS DIVISION (Annemone Altebaeumer, Chairperson)

No report available.

STRUCTURAL GEOLOGY DIVISION (Dennis Johnston, Chairperson)

The CSPG Structure Division continues to thrive as a relatively informal forum for the presentation and discussion of ideas and topics relevant to the oil and gas structural geologist. The monthly lunch-hour talks have been a success, often drawing upwards of 50 to 100 people to presentations on field-oriented studies, computer software and visualization relevant to the structural geologist and international structural oil and gas plays. The monthly evening sessions continued to provide a very informal forum for the presentation and healthy discussion of a wide range of structural geology topics, including international and local structural studies, graduate student’s results and tectonics. Lunch-hour talks were organized by Dennis

Johnston, evening sessions were organized by Normand Begin and Dennis Johnston. Normand Begin retired after serving as chair of the Division for two years (1998-99); Dennis Johnston took over as chair for 1999.

The Structure Division held two field trips in 1999. A small resolute group persevered in adverse weather condition on June 26 to bike-n-hike their way to Heart Mountain to look at a cliff-scale duplex in the Palliser Formation in the hangingwall of the Exshaw Thrust. Technical leadership for this trip was provided by Peter Jones and logistics were handled by Dennis Johnston and Katherine Brittle. A two day (Oct 15-16) fall field trip to the Nordegg area was also held. Participants enjoyed the comforts and hospitality of the Goldeye Conference Centre on the Friday evening and Saturday morning before heading out for a full day of examining and discussing structural features in spectacular outcrops in the Nordegg area, along the Ram River and along the David Thompson Highway. Dennis Johnston compiled the technical material for the field stops and organized this trip with help from Normand Begin, Rob Scammell and Marian Warren, Byron Veilleux and Willem Langenberg. Petro-Canada, Talisman and POCO are thanked for providing the minivans for this trip.

CSPG Structure Division Lunch-hour talks presented in 1999.

Petro-Canada is thanked for providing the overhead and slide projectors and Norwest Labs is thanked for providing abundant pastries. Talks were held in the small +15 Auditorium, 540 5th Ave SW; because the CSPG office is in this building, there is no charge for the use of the auditorium.

January

Speaker: Nick Purday, Landmark.

THE LONG AND WINDING WELL: A LIVE SOFTWARE DEMONSTRATION OF HOW INTEGRATED SOFTWARE AND 3D VISUALIZATION CAN BE APPLIED TO EXPLORATION TODAY.

February

Speaker: Tako Koning, Texaco Angola Inc.
THE CENTRAL SUMATRA BASIN, INDONESIA: STRUCTURAL AND STRATIGRAPHIC EVOLUTION AND RELATED PETROLEUM GEOLOGY.

March

George Allen, Pioneer Natural Resources Canada Inc.

DETAILED MAPPING OF RESERVOIR STRUCTURAL GEOMETRY IN DETACHED, SHORTENED FOLD BELTS, ORTEGA (APTIAN-ALBIAN) FIELD AREA, GIRARDOT BASIN, COLOMBIA.

April

Speakers: Mike Cecile, Lisel Currie, Larry Lane, Andrew Legun and Glen Stockmal, Geological Survey of Canada and B.C. Geological Surveys Branch.

STRUCTURAL STYLES, SIKANNI FIELD TO TRIMBLE LAKE, NORTHEASTERN B.C. AND CONTROL BY PREEXISTING BASEMENT AND DEVONIAN STRUCTURES.

May

Speakers: Larry Lane, Mike Cecile, B. Richards, John Dixon, Glen Stockmal, B. MacLean, M. Johns, J. Majorowicz.

"AT THE FRONTIER", GSC'S CENTRAL FORELAND NATMAP PROJECT INFORMATION SESSION.

September

Speakers: Zeev Berger and Jim Davies, Image Interpretation Technologies Inc.

PRELIMINARY TECTONIC MAP OF NORTHEASTERN BRITISH COLUMBIA AND THE LIARD BASIN

October

Speaker: Kirk Osadetz, Geological Survey of Canada.

CLUES TO THE ORIGIN, TECTONICS AND HYDROCARBON GENERATION HISTORY OF WILLISTON BASIN FROM APATITE FISSION TRACK THERMOCHRONOLOGY.

November

Speaker: Sophie Lemieux, University of Calgary
SEISMIC REFLECTION EXPRESSION AND TECTONIC SIGNIFICANCE OF LATE CRETACEOUS EXTENSIONAL FAULTING OF THE WESTERN CANADA SEDIMENTARY BASIN IN SOUTHERN ALBERTA.

CSPG Structure Division Evening talks presented in 1999.

The University of Calgary and Professor Deborah Spratt are thanked for the use of our meeting room and projectors.

January
SIXTH ANNUAL STRUCTURE GROUP SLIDE SHOW.

February
Speaker: Mazhar Qayyum, Foothills Research Project, University of Calgary.
THRUST GEOMETRY OF THE HIMALAYAN THRUST FRONT AND ITS COMPARISON TO THE CANADIAN ROCKY MOUNTAIN THRUST FRONT.

March
Speaker: Deborah Sanderson
TRANSVERSE FAULT GEOMETRIES AND THEIR POSSIBLE ORIGINS IN THE RUNDLE AND LEWIS THRUSTS SHEETS, HIGHWOOD PASS AREA, ALBERTA FRONT RANGES.

April
Speakers: Normand Begin, Roland Dechesne, Greg Soule, John Varsek, Paul MacKay, Dennis Johnston.
COMPARTMENTALIZATION OF HYDROCARBON RESERVOIRS IN DEFORMED BELTS BY SECONDARY STRUCTURES (E.G., BACKTHRUSTS, LATERAL RAMPS , TEAR FAULTS).

November
Speaker: Henry Lyatsky, Lyatsky Geoscience Research & Consulting Ltd.
BASEMENT IN WESTERN CANADA - ITS INFLUENCE ON THE PLATFORMAL

SEDIMENTARY COVER AND THE CORDILLERAN OROGENIZED ZONES

SEDIMENTOLOGY DIVISION (Brian Tuffs, Chairperson)

I would like to introduce myself to members: as of Sept. 1998 I took over the position of Sedimentology Division Chair from Paul Fejer (conveniently this coincided with Paul packing-up and heading to work in Australia). Currently the 'Committee' numbers one, though new organizing volunteers are welcome, especially to try and organize a field trip (or two?) for the following spring/summer.

The Sedimentology Division enjoyed a varied fall '98/spring '99 season of informative and interesting lunchtime talks ranging from modern clastic sedimentology to carbonate geochemistry. Average attendance to these talks was approximately 30 people, though some talks attracted audiences in excess of 80 people, requiring additional seating to be employed! All talks were extremely well delivered and brought forward lively discussion of key points.

September '98
Brad Spence (Chevron Canada)
"Sedimentology and diagenesis of the Lower Cretaceous Basal Quartz Formation, SW Alberta."

October '99
John Hopkins (U of C)
"Conduit flow, porosity evolution and reservoir development in the Pekisko Formation, west-central Alberta."

December '98
Dr. Zahoor Farshori (Consultant)
"Sedimentation and lithofacies relations in the Holocene Pahang Delta complex, east coast of Malay Peninsula, Malaysia."

January '99
Henry Williams (Omnichron Associates and Memorial University)
"The geology and hydrocarbon potential of western Newfoundland"

February '99
Dr David Eberth (Tyrell Museum)
"The Judith (Belly) River Group in the Alberta and Saskatchewan Plains: the big picture."

February '99
Maja Bushkuehle, Patricia Cavell, Hans Machel and Catherine Skilliter (U of A)
"Indications for tectonically-induced flow into the Rocky Mountain foreland basin – with implications for petroleum exploration."

March '99
Godfried Wasser (Eucalyptus Consulting Inc.)
"A visit to various depositional settings of the Dutch barrier island Terschelling – some musings on sequence stratigraphy."

April '99
James Duggan (Consultant)
"Dolomitization at Swan Hills, Simonette oil field (Devonian), Deep Basin, west-central Alberta."

June '99
Dr. Rudi Meyer (U of C)
"The Virgelle Member in Writing-on-Stone Provincial park, southern Alberta: depositional model and provenance of the sediments."

ENVIRONMENTAL GEOLOGY DIVISION
(Paul Whitby, Chairperson)

No report available.

HYDROGEOLOGY DIVISION (Phil Esslinger, Chairperson)

The CSPG Hydrogeology Division has continued its tradition of being one of the most active technical divisions. In the past year the hydrogeology division presented a full suite of 10 lunch hour talks. The high rate of attendance at the lunch hour talks is testimony to their popularity and educational value. The lunch hour talks continue to be of outstanding quality and diversity. The past years lunch hour talks addressed not only subjects integral to the petroleum industry,

but also addressed topics of interest to the mining and environmental industries.

The Hydrogeology Division also continued the policy of presenting two yearly field trips. The spring field trip "Hot and Cold Running Water" was offered as part of the June CSPG convention, however registration for the field trip was insufficient for the field trip to be run. The fall field trip, "Diagenesis and Fluid Flow" was run on September 11, 1999 with a full complement of 40 registrants. Interest in the field trip was such that several people had to be turned away for lack of space. Special thanks are in order to the leaders of the fieldtrip, Dr. Ron Spencer and Dr. Ian Hutcheon from the University of Calgary, Department of Geology and Geophysics and to the field trip coordinator, Dr. Dan Barson, Rakhit Petroleum Consulting Ltd.

The division has also begun planning for a special session at the GeoCanada 2000, titled "HYDROGEOLOGY of HEAVY OIL and TAR SAND DEPOSITS: WATER FLOW and SUPPLY, MIGRATION and DEGRADATION". Plans are also underway for a 5 day field trip to be run in conjunction with the special session.

Dr. Steve Burnie, Mobil Oil Canada, chaired the Hydrogeology Division during the 98/99 reporting period. However time constraints have forced Steve to step aside as chairman and Phil Esslinger of Rakhit Petroleum Consulting Ltd. has been selected to chair the division for the 99/2000 year.

The hydrogeology executive committee is made up of; Phil Esslinger (Chairperson), Steve Burnie (past Chairperson), Kent Wilkinson – Wascana Energy (Treasurer), Dr. Stefan Bachu – Alberta Geological Survey AEUB, and Eric Dahlberg – ECD Geological.

I would like to take this opportunity to welcome Dr. Stephen Grasby – Geological Survey of Canada, to the Hydrogeology Division executive.

I would like to thank the members of the Hydrogeology Divisions executive committee for their work in the past year, ensuring another educational and successful year. I would also like to thank everyone who

attended the past years talks and a special thanks to our sponsors, PanCanadian Petroleum for allowing the Hydrogeology Division to use the PanCanadian Theatre and supplying coffee and Norwest Laboratories for the delicious pastries.

I look forward to another successful and challenging year in 1999/2000

The following is a list of the titles and authors of all the talks presented in the 98/99 year.

September 17, 1998 - Formation Water Screening and Composition in the Jeanne d'Arc Basin, Offshore Newfoundland, Dr. Steve Burnie, Mobil Oil Canada

October 15, 1998 - Hydrogeology and Methane Productibility of Coal-bearing Rocky Mountain Sedimentary Basins, Dr. Stefan Bachu, Alberta Geological Survey, AEUB

November 19, 1998 - Petroleum Hydrodynamics of the Red River Fm. in the Williston Basin and oil migration pathways, Kaush Rakhit, Rakhit Petroleum Consulting Ltd

December 17, 1998 - Regional Hydrochemistry of Cambrian to Devonian Aquifers in the Williston Basin, Canada-USA, Adam A. Benn, Department of Geological Sciences, University of Saskatchewan

January 21, 1999 - Regional Fluid Flow and Sediment-Hosted Gold and Platinum in Devonian Limestones of N.E. Alberta – Never is a long time ..., Hugh Abercrombie, Birch Mountain Minerals

February 18, 1999 - Can natural gas be formed at room temperature? Isotopic evidence of thermal gases generated below 30°C, Devon Rowe, Rakhit Petroleum Consulting Ltd

March 18, 1999 - A Journey into Hyperspace: A Look at New Tools for the Unmixing of Water-Chemistry Data Sets, Dr.

Kevin Parks, Ph.D., Petro-Canada Oil and Gas, & Dr. Terry Gordon, Department of Geology and Geophysics, University of Calgary.

April 15, 1999 – Hydrogeology and Hydrochemistry of the Carbonate Rock Aquifer in Southern Manitoba – Origin of the Fresh Water Lens, Dr. Stephen Grasby, Geological Survey Of Canada

May 20, 1999 – Oil Quality and Distribution in the Western Canadian Sedimentary Basin – A Hydrogeologist's Viewpoint, Phil Esslinger, Rakhit Petroleum Consulting Ltd.

June 24, 1999 – Tectonic Controls on the Migration of Fluids Along Concentrated Pathways as Revealed by Structural Studies Using Satellite Imagery Data, Maks Posavec, Demofrac Geo-Sat International

GEOMATHEMATICS AND COMPUTER
(David Garner, Chairperson)

No report available.

INTERNATIONAL (Wayne Ashbourne, Chairperson)

No report available.

RESERVOIR/DEVELOPMENT GEOLOGY
(Darren Steffes, Chairperson)

No report available.

PALAEONTOLOGY DIVISION (Charles Henderson, Chairperson)

No report available.

SERVICES

MEMBERSHIP COMMITTEE (Kevin Polan, Chairperson; Marc Charest, Gerald Kvill, Keith Masters, John Ostrom, Deanna Watkins, ex-officio member)

The membership figures for the last five years are as follows:

	1999	1998	1997	1996	1995
Active	2676	2690	2715	2671	2662
Associate	237	230	105	195	185
Student	98	112	212	118	152

Emeritus	163	113	137	144	153
Corporate	55	65	56	32	36
Honorary	45	43	43	43	46
Total	3274	3273	3268	3203	3231
Subscribers	256	288	301	326	335

Total membership levels remained flat in 1999. The expected drop in active memberships due to an industry downturn did not materialize but a sharp increase in emeritus members may be an early indicator of a trend toward increasing retirements. The decline in student memberships continued its slide from a high in 1997 but a lack of data on university enrollments in the earth sciences precludes drawing any conclusions. Corporate memberships declined and this is a key issue to be addressed in the next year.

Kevin Polan tendered his resignation in July and we thank him for the time and effort he has spent with the Committee. Ross Pitman has assumed the role as Chairperson.

The Membership Committee is in the process of revisiting its goals and strategies. These will be reviewed with the Executive Committee in early October. Particular attention will be focused on increasing corporate memberships and gathering data to better understand trends in geoscience enrollment at Canadian universities so that students will be encouraged to join the Society early in their geoscience careers.

VOLUNTEER COORDINATOR (Blythe Lowe, Volunteer Coordinator)

No report available.

HONORARY ADDRESS (Elizabeth O'Neill and Barb Rypien, Co-Chairpersons; Tim Bird Rob Langill, Steve Haysom, Denis Hodder, Byron Cooper, Sherry Samborski, Jay Williams, Laraine Kish and Doris Chin Gamba)

The work of the Honorary Address Committee straddles the CSPG fiscal year, and so we are actually dealing with two presentations during this time period. The 1998 Honorary Address took place at the Jubilee Auditorium on October 6th, 1998.

The evening was entitled **DESTINATION MARS** and featured two speakers involved in the study and exploration of this planet. Michael Carr of the United States Geological Survey presented Mars: Aquifers, Oceans and the Prospects for Life, while Matthew Golombek, Project Scientist for the Mars Pathfinder Mission told us all about the mission, including the scientific results that have been determined to date. The address was sponsored jointly by both the CSPG and the CSEG, with the organizing committee comprising representatives of both organizations. There were 1676 people in attendance, approximately one third of these being children.

The rest of the year has been spent planning the 1999 Honorary Address which at the time of writing is coming up on Nov 3rd 1999. Again a joint presentation with the CSEG, this year's speakers are John Accorn "the Nature Nut" and Dr. Phil Currie from the Royal Tyrrell Museum. The title of the 1999 Address is "**Night of the Flying Dinosaurs**" and explores the relationship between modern day birds and dinosaurs. Besides the evening talk, the Committee has worked hard to put together the "**Afternoon of the Flying Dinosaurs**" which is a totally free presentation exclusively for school children. At no charge to the schools we are busing over 2700 children in Grades 3 through 8 to the Jubilee Auditorium to hear our two speakers. This addition to the Honorary Address has been overwhelmingly well received by the Calgary schools and unfortunately we could not accommodate all the requests for seats that were received. Our Committee mandate is to bring science to the public at large and we are very pleased this year to continue to do that through both our traditional address and our new afternoon presentation.

CALENDAR COMMITTEE (Gary Johannsen, Chairperson)

No report available.

PHOTOGRAPHIC COMMITTEE (Vic Panei, Chairperson)

During the year, the Committee provided photographic coverage at most of the Society's luncheon meetings, as well as at the Awards dinner. The Committee is looking for two more volunteers to share duties in taking photographs at the luncheon meetings. If interested, please phone Vic Panei at 213-7848.

ARCHIVES AND HISTORY COMMITTEE (Clinton Tippet, Chairperson)

The Committee continued to pursue a small number of projects over the last year. These included the attempt to determine when individuals originally joined the Society, in particular our longest serving members. Some consideration has been given to organizing a photographic archive of Society events and activities. A proposal to prepare a commemorative volume for the Society's 75th anniversary in 2003 is being evaluated. Initiatives to work together with the Petroleum History Society on items of common geological and exploration interest are being pursued, including a field trip to Turner Valley for the World Petroleum Congress and a revival of the Oral History Project to interview geologists about times-gone-by in the oilpatch.

GROUP INSURANCE (Robin Mann, Chairperson)

The CSPG Group Insurance Programs covering life, health, long-term disability, dental, automobile and home insurance are continuing to be offered by Ogden Financial Inc. (life and health) and Financial Management Ltd. (home and auto). The plans offered to the CSPG membership have very competitive rates and continue to be well received.

MANPOWER SURVEY (Keith Deutsch, Chairperson)

No report available.

NOMINATING COMMITTEE (Terry McCoy, Chairperson)

No report available.

PRESIDENT'S AWARD (Kathryn Scales, President)

The President's Award is the highest service award presented to individuals or organizations for outstanding contributions to the Society. Two individuals have been selected to receive the 1999 President's Award: John Chipperfield and Douglas Carsted. Mr. Chipperfield and Mr. Carsted were co-chairmen for the 1999 Annual Convention "*Digging Deeper: Finding a Better Bottom Line*", which was held jointly with the Petroleum Society in Calgary.

Mr. Carsted was born and raised in Winnipeg, Manitoba, and graduated from the University of Winnipeg with a Bachelor of Science Degree in Chemistry in 1979, and from the University of Manitoba with a Bachelor of Science (Honours) Degree in Geology in 1982. Upon graduation, he accepted a position with Imperial Oil Limited in Calgary as a Geologist.

His experience consists of 12 years with Imperial Oil Limited working in both Exploration and Production Geology. For the last five years at Imperial Oil Limited, he worked in the Reservoir Description Group and Decentralized Operations Group, looking after the reservoir management of both carbonate (Devonian) and clastic reservoirs.

Since 1994, he has been employed by Sproule Associates Limited as a Reservoir Geologist working in the areas of Property Evaluation and reservoir studies in Canada and in a number of other countries. Since 1995, he has been a shareholder in the firm.

He is a Member of the Canadian Society of Petroleum Geologists (CSPG), The Canadian Institute of Mining, Metallurgy and Petroleum (Petroleum Society of CIM), The Canadian Well Logging Society (CWLS), The American Association of Petroleum Geologists (AAPG), and the Indonesian Petroleum Association, Professional Division (IPA). He is also a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

AWARDS

Mr. Chipperfield was born in Toowoomba, in the state of Queensland, Australia in 1947. He emigrated to Canada in 1967. In 1972, he graduated from the University of Alberta with a Bachelor of Science degree in Geology, and went on to work for the ERCB, and Energy and Natural Resources for the following 8 years. John then went on to work for a series of smaller companies (Czar, Calais, Oz and Central Explorers) until 1990, when he joined the firm of Sproule Associates, where he is currently employed as Vice President Geology, and is a shareholder of the firm.

John is a Member of the Canadian Society of Petroleum Geologists (CSPG), the Canadian Well Logging Society, the American Association of Petroleum Geologists and a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

John has been an active member of the geological community, and a particularly strong supporter of the CSPG. He has several publications to his credit, including Reserves determinations for the Peace River Oil Sands deposit and the Wabasca Oil Sands deposit, and co-author credits for papers on the case history of the Cardium Formation Conglomerate at Bigoray and An Overview of the Stratigraphy and Hydrocarbon Distribution within Middle and Lower Mannville Sands in the Provost area. John presided as Chair of the Awards Dinner for four years, and represents the CSPG on the AAPG House of Delegates (currently as the group Foreman).

John Chipperfield and Douglas Carsted both work at Sproule Associates, and joined forces 3 years ago to become co-chairs of the 1999 Annual Convention, which was held jointly with the Petroleum Society. They had several obstacles to overcome to achieve their goal of a successful convention, not the least of which was following on the heels of one of our most successful conventions (Geo-Triad '98). Their task was made even more daunting by the low commodity prices that dominated the industry for the last quarter of 1998 and beginning of 1999,

making their sponsorship drive an uphill battle. It was also the first time we had partnered with the Petroleum Society. Attempting to merge methods with another Society always proves to be a challenge in the initial stages, but the cooperation and work ethic that John and Douglas brought to the table was evident by the end result. The theme of the Convention was inspired by both the low commodity price, and our partners in the venture, our engineering colleagues. "Digging Deeper – Finding a Better Bottom Line" provided the opportunity to re-enforce the critical need for interdisciplinary cooperation. In the end, the convention was not only a financial success, it was a resounding technical success, with an incredible turnout, well-attended technical sessions, a two-day core conference that pulled the engineers into the rock world, and the pilot for bringing us into the new millennium by having all of the abstracts available on both hard copy and on compact disc.

John and Douglas have worked diligently on behalf of, and to the benefit of, the CSPG, and I recommend both of them for the President's Award for 1999, for their exemplary service to our Society.

HONORARY MEMBERSHIP COMMITTEE

(N.J. McMillan, Chairperson; Ashton F. Embry, E.E. (Ned) Gilbert), D.A.W. Keith)

Honorary Membership in the CSPG is awarded by the Executive Committee on the recommendation of the Honorary Membership Committee. Nominations for Honorary Membership are received from the CSPG membership at large throughout the year.

The criteria for considering Honorary Memberships are:

- 1) persons who have made outstanding contributions to the Society;
- 2) geologists or other earth scientists who have made outstanding contributions to the cause of petroleum geology on a national or international basis;
- 3) there will be no restriction on age in

considering someone for honorary membership.

Ten nominations were considered by the Committee and the CSPG Executive. Gerald V. Middleton was selected as Honorary Member for his 40 years of documenting in textbooks and learned scientific articles his new knowledge. His work benefitted the whole world besides Canada.

Ned Gilbert has found it necessary to resign from the Committee. Ned has been a dedicated worker on the Committee for 14 years. The remaining colleagues on the Committee wish him good luck.

LINK AWARD COMMITTEE (Rick Steedman, Chairperson; Vaughan Allan, John Brook, Harry Crabtree, Julius DenHaan, Doug Flaig, Bob Leatherbarrow, Chris Link, Phil Nantais, Claude Ribordy, and Doug Stewart)

The Link Award was established in 1958 to encourage a high standard of presentation for oral papers given at the Society's Luncheon meetings.

In 1999, six of twelve papers were eligible for the award. Both numbers are lower than usual due to the change in the Society's year end, and reflect the shorter sample period, rather than the quality of the talks. The Committee recognized the high quality of both eligible and non-eligible presentations, and congratulates the Technical Luncheon Committee for their efforts.

The winner of the 1999 Link Award is Terry Joubert, for his paper entitled "Superstition, Baseball and Drilling Wells", presented May 11, 1999.

J.B. WEBB MEMORIAL TROPHY & CSPG TROPHY (Keith Bottriell, Chairperson)

1999 John B. Webb Memorial Trophy :

The John B. Webb Memorial Trophy is awarded to the best student speaker at the Western InterUniversity Geological Conference which was hosted at University of British Columbia in January 1999. The

winner was Eric Hanson from University of Alberta for his talk titled "Reservoir Limiting Factors and Enhancement in a Sandy Braidplain reservoir, Lower Cretaceous Cadomin Formation, Northeastern British Columbia."

1999 CSPG Trophy:

The CSPG Trophy awarded to the best student speaker at the Atlantic University Geological Conference. This years Conference was hosted by Memorial University Oct 15/99, and the winner of the CSPG Trophy was Tanya Costain from Dalhousie University, Halifax, NS for her talk titled "Stratigraphic Correlation of a Late Carboniferous Interval in the Stellarton Basin, NS, and Possible Evidence for Tidal Influence"

MEDAL OF MERIT (Brad Hayes, Chairperson; Jim Barclay, Adam Hedinger, Kevin Root, Rob Scammell)

The Medal of Merit is awarded each year for the best paper published during the previous year on a topic relevant to the petroleum geology of Canada. From a comprehensive search of petroleum literature in major journals and publications, the Committee selects a short list of papers to review in detail. For 1998, our short list consisted of five excellent papers; however, we were able to agree unanimously on the winner.

For 1998, the Medal of Merit has been awarded to R.A. McLean and G. Klapper for their paper: "Biostratigraphy of Frasnian (Upper Devonian) strata in western Canada, based on conodonts and rugose corals". It was published in the *Bulletin of Canadian Petroleum Geology*, v. 46, #4, p. 515-563.

Honourable mentions go to the authors of the other papers on our final list: J. Dixon and L.D. Stasiuk – "Stratigraphy and hydrocarbon potential of Cambrian strata, northern Interior Plains, Northwest Territories" (Bull. Can. Pet. Geol.); T.D.J. England and R.M. Bustin – "Architecture of the Georgia Basin, southwestern British Columbia" (Bull. Can. Petrol. Geol.); L. Lane

– “Latest Cretaceous – Tertiary tectonic evolution of northern Yukon and adjacent Arctic Alaska“ (AAPG *Bulletin*); and G. Lynch and J.V.A. Keller – “Association between detachment faulting and salt diapirs in the Devonian-Carboniferous Maritimes Basin, Atlantic Canada” (Bull. Can. Petrol. Geol.).

As Chair, I would like to thank the Committee members for their efforts in reading and evaluating many papers. Upon completion of my duties for the 1998 Medal, I will step down as Chair of the Committee. The remaining members will serve for another year, and will be seeking new volunteers to round out the 1999 Committee. Please note that all CSPG members are welcome to bring suitable papers to the attention of the Medal of Merit Committee.

R.J.W. DOUGLAS MEDAL (Andrew C. Newson, Chairperson)

The recipient of The R.J.W. Douglas Medal is Dr. Don Cook.

Don Cook is a nationally and internationally recognized scientist who has made a lasting impact on the Geological Survey of Canada in terms of his personal research, his scientific leadership, his role as a mentor to young scientists, his mapping of northwestern Canada, both surface and subsurface, and pioneering concepts in structural geology. These include recognition and analysis of the similarity and differences between Northern Cordilleran and Wyoming Foreland structural provinces, including a method of balancing basement cored folds, and recognition of the role of shear tectonics in forming structure of the Northern Interior Plains. Earlier he recognized the shale-out and structural characteristics of the Cambrian in Southern Cordillera Mt. Stephen area.

Like R.J.W. Douglas he was one of the leaders in the mapping of twelve 1:250 000 and 1: 500 000 scale geological maps of the Northern Cordillera and Interior Plains (>12,000 sq. kilometers), as well as preparation of regional reports on the Mesozoic of a large part of the Northern Cordillera. He also participated in Operation Bow and is a co-author on numerous 1: 50

000 scale maps of the southern Cordillera. Recently he has been involved in the compilation correlation and interpretation of seismic data across a large part of the Northern Interior Plains where he has made significant regional scale correlation between surface and subsurface packages of Proterozoic rocks and unraveled a complex multiple history of Proterozoic deformation. He is directly responsible for a significant number of advances in our understanding of the Cordilleran thrust and fold belt. In addition to the Northern Interior Plains, he is considered to be an expert in the Mackenzie Mountains and southern Cordillera, and in the structural rules and theories behind thin-skinned tectonics of the Cordillera. He has published 100 articles and maps, and has given dozens of talks at local CSPG forums, at GSA and AAPG conventions in the United States, and in France. He served the CSPG very effectively as President, playing an important role in restructuring the Executive Committee, in reversing a deficit oriented financial trend and initiating new scientific projects.

STANLEY SLIPPER GOLD MEDAL (John Hogg, Chairperson, Ed Wright, Peter Harrington, Peter Hay)

The Stanley Slipper Gold Medal is the CSPG's most prestigious award. The award is named for Mr. Stanley E. Slipper, 1890-1982, who was the Alberta Society of Petroleum Geologists first President and a pioneer of early exploration efforts in Alberta.

The medal is presented annually by the CSPG outstanding contributions to oil and gas exploration in Canada. The medal was established in 1989 and was designed by Calgary sculptor, Bob Stowell.

The contributions of the winner of this award can encompass one or more activities related to aspects of petroleum exploration. Such activities may include; initiating and/or leading exploration programs, teaching and/or training and mentoring of explorationists, innovative exploration concepts, and involvement and demonstrated leadership within geological societies and professional organizations.

The 1998 winner of the medal was Dr. William C. Gussow, ASPG Past President and Honorary Member of the CSPG. Dr. Gussow's profession activities as a petroleum geologist over his career took him literally around the world. After his time working as an exploration geologist within the Western Canada Sedimentary Basin, Dr. Gussow spent time exploring opportunities within petroleum provinces in the United States, France, India, Japan, and China.

Dr. Gussow is probably best known for the discovery of differential entrapment of oil and gas within hydrocarbon reservoirs and for the *Gussow Method* of enhanced oil recovery; a method which promises to recover all of the oil remaining in the ground, thereby doubling or potentially tripling the recoverable oil reserves world-wide. Bill still holds patents in Canada, the United States and the Soviet Union on this method of recovery.

Finally, I would like to thank Neil Hutton and Bill May for their dedicated service to the Committee during the last three years. Their efforts helped to make the Committee's decisions over the last three years a less difficult task.

CSPG GRADUATE STUDENT THESIS AWARDS COMMITTEE (Christopher Harrison, Chairperson; Andre Chow, Leslie Eliuk, Tony Hamblin, Don Keith, Wendy Shier, Caroline Williams)

Each year this committee evaluates submitted MSc and Ph.D. theses, and selects one of each that makes the most significant contribution, in that year, to sedimentary and/or petroleum geology in Canada. The awards for the top thesis in each category consist of a one-year membership in the CSPG, a combination of CSPG books and/or approved CSPG field trip registrations worth a total of \$1000, and a framed certificate presented at the appropriate luncheon. Illustrated citations, acknowledging the achievement of the winners, also eventually appear in the *Bulletin* and/or *Reservoir*.

This year (1999) 14 MSc. and 4 Ph.D. theses were submitted representing 9

universities across Canada. The winner of the MSc. award was **Susan J. Reid** (The University of Calgary, John Hopkins advisor) for "***Anatomy of a paleokarst reservoir: sedimentation and diagenesis of the Pekisko Formation in Twining Oil Field, Alberta.***" This thesis revisits a field studied over two decades ago (also a MSc. at the U of C) but, like the oil industry itself, has had much additional data and theory to bring increased understanding to the subject. Over 1½ townships and many hundreds of wells were mapped and a number of cores/wells were found to contain paleocaves. The karst processes were shown through petrography to also have enhanced reservoir porosity-permeability in distinctive shoal facies of a limestone ramp. This comprehensive study gives a better depiction of reservoir architecture.

The winner of the Ph.D. award was **Dr. Elizabeth C. Turner** (Queen's University) for "***Growth dynamics, framework composition and microstructure of giant Early Proterozoic calcimicrobial reefs, Little Dal Group, Mackenzie Mountains, N.W.T.***" Following up on Jim Aitken's initial work on these Precambrian reefs, Turner with her advisors Noel James and Guy Narbonne has already published most of her thesis in three articles. These Neoproterozoic buildups, the first to have a calcimicrobial and thrombolitic framework, represent a major change between earlier Proterozoic and Phanerozoic reef ecosystems making them the first representatives of 'modern'-style reef growth. The geometries of these ancient reefs were demonstrated to respond to environmental variations much like the better-known and ecologically-complex Phanerozoic reefs. Finally, detailed petrography showed that microbialite microstructures, previously thought to differ in origin, are a continuum where early diagenesis has acted to various degrees on a single progenitor community.

For information on a newly discovered 20 million barrel field in an excellently illustrated and researched study that further develops the paleokarst theme (along with Les Eliuk's

favorite, megalodont clams), the reader is referred to the runner-up Blake Ford's MSC. thesis (also U of C under Hopkins) "*Sedimentology and diagenesis of the Nisku Formation, Wayne, Alberta.*"

This annual CSPG competition is initiated with a poster advertisement sent out early each year to all Canadian university geology departments to the attention of both the students and faculty. Advertisements are also posted in GAC's *Geolog* and in the *Reservoir*. The committee would greatly appreciate any CSPG member informing them of possible candidates. Eligible theses are those that have been produced by students who have graduated at the preceding Spring or Fall convocation from a Canadian university, or who have completed research in the same period at a foreign university on a suitable Canadian topic. Theses are sent to the committee chairperson by early September. By mid December the winning theses are determined by the committee, and authors and respective supervisors are notified thereafter. The committee is keen to accept for consideration any thesis that might be of interest to the society members including (for example) topics relating to hydrogeology, sedimentary-hosted mineral or hydrocarbon deposits, remote sensing or subsurface imaging techniques in sedimentary basins, basin modeling or evaluation, biostratigraphy and geochemistry. Criteria by which these are judged include definition of purpose and success in reaching goals, method and logic of investigation, originality of topic, ideas and content, validity of interpretations and conclusions, completeness of data generation and presentation, contribution to science and industry, depth and thoroughness of research and overall effort as well as organization of chapters, quality of writing and effective use of illustrations. Successful theses will also provide, where appropriate: a full consideration of the economic implications of scientific contributions made from a small study area or topic; and will relate any observations made in modern depositional settings to the ancient record, and vice versa.

We thank for their contributions the recent past members Lawrence Bernstein, Lisa Griffith and especially Stephen Greer after 16 years on the committee including chairmanship. Their absence underlines our need for new committee members who personally benefit by keeping on top of the latest research. Chris Harrison is heartily thanked for his half-decade stint as our chairman, which he relinquishes (with no doubt a sigh of relief) while remaining on the committee. Special thanks are extended to continuing members, particularly to our social subcommittee for the finding and testing of various public venues for our regular Fall meetings and supper finale (take note prospective new members, and join Martin Teitz on the new-millennium committee).

REGIONAL GRADUATE/UNDERGRADUATE SCHOLARSHIPS (Shawna Christensen, Chairperson; Adam Hedinger)

No report available.

UNDERGRADUATE STUDENT AWARDS COMMITTEE (Patrick Elliott, Chairperson)

The objective of the Undergraduate Student Awards is to recognize the achievements of outstanding undergraduate geoscience students from across Canada. The awards are presented annually, to one deserving undergraduate student from each Canadian University that offers a geoscience program. The students are chosen by their respective professors for demonstrating outstanding proficiency in petroleum geology or the related fields of sedimentology, stratigraphy, palaeontology and structural geology. The students each receive a one-year membership to the Society, a certificate of achievement, and a \$50 cheque to defer costs incurred in framing their certificates.

The 1999 Undergraduate Awards will be presented to the following students:

School	Name of Recipient
Acadia University	Kaesy Gladwin
University of Alberta	Michelle Spila

Brandon University	Kerri Eastley
University of British Columbia	Chirsta Welsh
Brock University	Kristen Hynes
University of Calgary	Maria Gagliardi
Carleton University	Christopher Studnicki-Gizbert
Concordia University	Giovanna G. Carrelli
Dalhousie University	Michael Young
University of Guelph	Melissa Kakuda
Lakehead University	Justin Johnson
Laurentian University	Greg Huffman
Laval University	Bertrand Marcotte
McGill University	Marc-Olivier Spencer
McMaster University	Kristi Maguire
Memorial University of Newfoundland	Christopher Blackwood
University of New Brunswick (Fredericton)	Janetlee D. Bannister
University of New Brunswick (St. John)	Kate Bostwick
University of Ottawa	Miriam Campbell
Universite du Quebec a Chicoutimi	Renee-Luce Simard
Universite du Quebec a Montreal	Isabelle Masse
Queen's University	Carly J. Grimsen
University of Regina	Orrin Cameron
St. Francis Xavier University	Allison Hope Gunn
St. Mary's University	Ashley de Jonge
University of Saskatchewan	Robyn Tremaine
Simon Fraser University	Sheryl M. Beaudoin
University of Toronto	Seema Ahmad
University of Victoria	Malcolm Shaw
University of Waterloo	Gregory Kaidannek
University of Western Ontario	Michael Kreitner

This year's response for candidates was successful, with responses from all but two of the universities contacted. Two schools contacted (Universite de Montreal and Mount Allison University) have indicated that they no longer have a Geology program. We hope to have the certificates send out to the students in late August 1999.

I'd particularly like to thank the contact professors at each of the universities for making this possible. I would also like to thank Audrey Rennie and Maylie Mak for their superb clerical assistance and the staff

at the CSPG office for helping this Committee's operations run so smoothly. On behalf of the CSPG, I would also like to extend thanks to PanCanadian Resources Limited for providing funding for all the certificates and logistical support in the form of packaging and postal expenses.

TRACKS, SERVICE AND VOLUNTEER AWARDS (Shawna Christensen, Awards Coordinator)

The winners of the Tracks Awards for 1998-99 were:

Stephen Greer	Grad Thesis Comm - 16 yrs
Leslie Eliuk	Grad Thesis Comm - 22 yrs
Andre Chow	Grad Thesis Comm - 12 yrs
Dan Barson	Chair Hydrogeology Div - 2yrs; treasurer - 2yrs

The winners of the Service Awards for 1998-99 were:

Ned Gilbert	Honorary Membership Comm – 14 yrs
Louise Quinn	National Liaison Comm Chair – 6yrs
Lawrence Bernstein	Grad Thesis Comm – 6yrs
Al Schink	Co-Chair Tech Lunch Comm – 2 yrs
Patti Cucman	Co-Chair Tech Lunch Comm – 2 yrs
Colleen Sherry	Tech Lunch Comm – 5 yrs
Bruce Palmer	Geomath & Computer Div Chair – 1998
Steve Burnie	Hydrogeology Div Chair – 1998
Normand Begin	Structural Div Chair – 1998
Mike Maughn	Awards Dinner Chair – 1999
Kevin Polan	Membership Comm Chair – 1999
Dick Willott	Open Golf Comm Chair – 1999
Bev Pfeffer	Group Insurance Chair – 1999
Scott Oldale	Men's Golf Comm Chair – 1999
Vic Urban	10K Road Race Comm Chair – 1999
Derek Lee	Public Affairs Comm Chair – 1999
Lisa Sack	SIFT Comm Co-Chair – 1999
Denise Hodder	SIFT Comm Co-Chair – 1999
Bill May	APEGGA Liaison – 1999; Stanley Slipper Committee
Alice Payne	APEGGA Liaison – 1999
John Hogg	Pools 96 Editor – 1998
Stefan Bachu	Hydrogeology Div
Larry Strong	SIFT Comm – 10yrs
Dale Cederwall	Convention – Technical Program Co-Chair
Doug Minken	Convention – Technical Program Co-Chair
Brett Wrathall	Convention – Core Conference Co-

	Chair
Gretchen Johnston	Convention – Core Conference Co-Chair
Andre Chow	Convention – Poster Session Chair
Alexis Anastas	Convention – Short Courses Co-Chair
Mark Hearn	Convention – Field Trips Co-Chair
Jennifer Vezina	Convention – Field Trips Co-Chair
Ian Young	Convention – Finance Co-Chair
Richard Matthews	Convention – Finance Co-Chair
Mike Seifert	Convention – Exhibits Co-Chair
Paul Piovoso	Convention – Registration Co-Chair
Dan Barson	Convention – Sponsorship Chair
Joerg Wittenberg	Convention – Printing & Editing Chair
Tracey Jungwirth	Convention – Special Events Co-Chair
David Newman	Convention – Logistics & Accommodation Chair
Jennifer Wells	Convention – Judging & Awards Chair
Cal Jaycock	Convention – Secretary
Carl Hughson	Calendar Comm Chair – 5 yrs

The winners of the Volunteer Awards for 1998-99 were:

Lisa Griffith	Grad Thesis Comm - 2 yrs
John Varsek	Medal of Merit Comm - 2yrs
Bob Sullivan	AAPG House of Delegates -
Andrea Henry	Squash Comm
George Hassler	Squash Comm
John MacCrae	National Liaison Comm
Dave Brown	National Liaison Comm
Keith Aldridge	National Liaison Comm
Paul Batson	National Liaison Comm
Guy Plint	National Liaison Comm
Martine Savard	National Liaison Comm
George Dix	National Liaison Comm
Denis Lavoie	National Liaison Comm
Eric Mountjoy	National Liaison Comm
Tom Moslow	National Liaison Comm
Frank Simpson	National Liaison Comm
Scott McLellan	Convention - Core Conference Team Member
Cindy Riediger	Convention - Technical Program Team Member
Jean-Paul Zonneveld	Convention - Core Conference Team Member
Virginia Trapnell	Convention - Short Crse Team Mbr and Taxi Chit System
Barry Brassard	Convention - Field Trips Team Member
Lem MacDonald	Convention - Field Trips Team Member
Michael Le Strat	Convention - Registration and Field Trips Team Member
Chris Jauer	Convention - Publicity Co-Chair
Sherry Samborski	Convention - Special Events Team

	Member
Neil Hutton	Stanley Slipper Committee

SOCIAL EVENTS

PAST PRESIDENT'S DINNER (Ric Sebastian, Chairperson)
No report available.

AWARDS DINNER (Mike Maughn, Chairperson)

This years Awards Dinner was held at the Palliser Hotel on Tuesday February 16, 1999. Past president Terry McCoy presided over the evenings events, which were attended by 175 members, spouses, and guests. After an excellent dinner with wine and all the trimmings, the Society's major awards for professional and technical excellence were presented. The Society also bestowed Honorary Memberships on Mr. Bill Ayrton and Mr. Dave Organ. Following the dinner and award presentations, Andy Evans from Canadian Hunter gave an excellent talk about his successful trip to the summit of Mount Everest.

MEN'S ANNUAL GOLF TOURNAMENT (Scott Oldale, Chairperson)

The 1999 golf tournament was another great success excepting for Mother Nature who unleashed her fury on the truly dedicated golfers. The event was held at the Elbow Springs Golf Club for the third year. This was the first year of a three-year contract with Elbow Springs. The Committee did a superb job of organizing the event once again. The support for this event was truly evident this year as the severe market conditions in the oil and gas sector did not significantly affect the tournament. Sponsorship was on par with the past several years. The event had a waiting list of approximately 30 players. All the social events were well attended by the golfers and their spouses.

CSPG MIXED GOLF COMMITTEE (Dick Willott, Chairperson)

The 10th annual CSPG Mixed golf tournament was held at D'Arcy Ranch on

August 27th, 1999. The day was beautifully clear and cold in the early morning but improving as the day progressed. A record number of golfers (148) were included, and there were a disappointed few left on the waiting list. The increased number of players may have contributed to a slower round than usual (5 ½ hrs). As the popularity of this event continues to increase, we may have to look at a slight change in format, or to restricting the numbers, for next year's tournament, so get your entry in early.

The organizing committee consisted of Dick Willott (chairman), Penny Harley and Jane Crandall (registration), Doug McGlashing and Wendy Johnson (sponsorship), and John Ostrom and Rick Sereda (prizes). There is room on the committee for a couple more volunteers for the Year 2000 tournament; if you feel you can contribute a few hours and a little sweat in this way, please contact Dick Willott at Boyd PetroSearch.

Many thanks to my Committee members, whose hard work made for a wonderful, smoothly-run event, thanks to all the sponsors and contributors, especially to Financial Management, our Lead Sponsor, for their continuing and generous support, and thanks to all who enjoyed the day with us.

CSPG SQUASH TOURNAMENT (Gord Copp, Chairperson)

The 16th annual CSPG Squash Tournament came and went far too quickly. Great fun was had by all. The 3-day tourney attracted a record number—121 geoscientists. Special thanks to Committee members: Ann Burrage, George Hassler, James Dobson, Andrea Henry, Andrea Bell, Fred Laudel, Martin McGinnis and Bob Bonnar. Without the strong Committee support the tournament would not have been the success that it was. The 2000 Tournament is scheduled for February 3, 4 and 5th.

CSPG 10K ROAD RACE (Vic Urban, Chairperson)

The 10th Annual CSPG 10K Road Race was held on Wednesday, September 16, 1998. It was a perfect evening for the run, with a clear sky and the temperature in the mid 20's. As organizers we had to contend with the Corporate Challenge race-walk which started at the same time and overlapped our course for about half a kilometer. But as the 6:00 p.m. race start occurred the 100 runners in our race were off before the race-walkers appeared. The race took the runners on a loop of Prince's Island and then west over the new Crowchild pedestrian bridge, then returned to Prince's Island for a final loop before the finish.

A torrid pace was set by Tim de Freitas of Esso for the first half of the race, but the pack chased him down, with John Festival of Koch Canada and Kees Sinke of Petro-Canada passing Tim to result in these fellows being the first three finishers. John finished in 33:42, Kees in 34:08 and Tim in 34:13. The first overall female runner was Karen Haggard at 39:11. The top three female geologists were Denise Woofter at 39:41, Merry Milne at 42:10 and Jane Stevens at 46:27. The male counter parts were Tim de Freitas, (as mentioned above), Ted Sawford at 39:09 and Jim Maloney at 39:55. In the geophysical category only one female geophysicist entered and therefor won; congratulations to Marg Coutts of Gulf at 57:39. The male geophysicist top three were Kees Sinke who was second overall, Mario Ceccanese at 36:50 and Bob Fyvie at 37:45. The finish times for most of the entrants were quite fast this year and there were some suggestions the course was short, however it was checked twice and actually measured at slightly over 10K. Our contention is that this is a flat, fast course, and that this year with the summer being so favorable weather wise, all the runners were in superlative condition, besides better short than long. After this strenuous event what better way to relax than with a cool beverage and a large pizza which we all did at Zzips, where the category winners received their prizes and all the glory was recounted.

As organizers, we would like to thank all the sponsors:

**PIONEER NATURAL RESOURCES
 CANADA
 ADIDAS CANADA
 SUN MICROSYSTEMS
 TUCKER WIRELINE
 DECOLLEMENT CONSULTING
 BPB WIRELINE
 CANADIAN HUNTER
 CABRE EXPLORATION
 RENAISSANCE ENERGY
 CHEMTERRA INTERNATIONAL
 PRECISION SEISMIC PROCESSING
 CANADIAN SEISMIC RENTALS
 TOKPELLA RESOURCES-MOLE
 ALBERTA ENERGY COMPANY
 GORD'S RUNNING STORE
 EAU CLAIRE YMCA
 MOBIL OIL CANADA
 CANADA BROKERLINK
 ARCIS EXPLORATION
 AGAT LABORATORIES
 PROBE DATA INC.
 RILEYS REPRODUCTION**

It is now my sad duty to inform you that the current organizational Committee will be stepping down this year after a 5 year term, and as such we are open to applications from anyone to take over these roles. The current people will be available in an advisory capacity to assist in the transition period. To submit your name contact Blythe Lowe, Volunteer Coordinator, at PanCanadian Petroleum. Hopefully we can all run next year.

OUTREACH PROGRAMS

STUDENT INDUSTRY FIELD TRIP (Denise Hodder and Lisa Sack, Co-Chairpersons; Shaun Alspach, Crestar; Wes Bade, UPRI; Byron Bahnsen, GLJA; Henry Beshry, Cypress; Matt Caddel, BP Amoco; Alana Carswell, CNRL; Gela Crane, PCP; Leah DeJong, Bonavista; Mike DesRoches, CNRL; Doug Hamilton, PCP; Catherine Huff; Bruce McFarlane, Canadian Hunter; Marianne McKenzie, Husky; Sandra Noel, Husky; Indy Racychaudhuri, Cypress; Jamie

Schmidt, Warrior; Greg Soule, Rigel; Brad Spence, Numac; Larry Strong, Waterous))

The Student Industry Field Trip (SIFT) was initiated in 1978 by the Canadian Society of Petroleum Geologists based on a concept conceived by Bill Ayrton to introduce bright, young geoscientists to the petroleum industry. One student representing each of the Canadian Universities across Canada offering Bachelor degree programs in geology, geophysics and/or geological engineering are invited to participate each year.

This year's SIFT took place from May 1st to May 15th with 34 students participating. It was an action-packed two weeks consisting of lectures, field trips and an exploration game. Students were exposed to a variety of topics including clastic and carbonate sedimentology, sequence stratigraphy, geophysics and well logging, to name a few. Students used their new found knowledge in an exploration game, where they formed companies consisting of 4 or 5 individuals. Each company was given money to buy land and drill wells. At the end of the trip each company presented their results to a panel of judges. This year's winners of the Technical Award for best geologic interpretation were "Dartboard Oil" which consisted of Kelly Batten (U of Western Ontario), Marianne Mader (U of New Brunswick), Nathan Bruder (U of Alberta) and Frederic Besozzi (U. de Quebec à Chicoutimi). The winners of the Financial Award for making the most profit were "Zubunreast" which consisted of Sheryl Bunting (U of Toronto), Kerri Eastley (Brandon U), Jonah Resnick (U of British Columbia) and Cory Zubrowski (U of Saskatchewan). It was a tough decision choosing the winners as all the students did an excellent job!

Field Trips play a very important role in SIFT and are often one of the highlights of the trip. A one-day tour of Dinosaur Provincial Park introduced the students to the geology of southern Alberta and fossil treasures. A four-day excursion into the Canadian Rocky Mountains taught the students about the structural evolution and

development of the Canadian Cordillera. In spite of contending with sub-zero temperatures and snow covered outcrops, the students enthusiasm during the four-day trip was not dampened!

The SIFT program relies heavily on volunteers to make it a success. Many thanks are extended to the 1999 SIFT organizing committee for their efforts in organizing this year's trip. We would also like to thank the numerous volunteers, who assisted by giving lectures, core seminars and field trips. The quality of these presentations was exceptional and without the contributions of these individuals we could not offer such a fantastic opportunity to the students. Unfortunately, the group is too numerous to detail here, however a complete list of volunteers and schedule of events can be found under SIFT (Under Educational Trust Fund) on the CSPS web page (www.cspg.org).

Funding for SIFT is provided by the CSPG Educational Trust Fund. Many thanks to those who provide continuous support for this fund. Thanks also go to the additional sponsors who provide support with the Rocky Mountain flyover, core table rentals at the Core Research Center and CSPG Luncheon tickets. This year's sponsors include: BP-Amoco, Canadian Hunter Exploration Ltd., Canadian Natural Resources Ltd., Chevron Canada Resources Ltd., Crestar Energy, Gulf Canada Resources Ltd., Koch Exploration Canada Ltd., Merit Energy Ltd., Mobil Oil Canada, Northstar Energy Corp., PanCanadian Petroleum Ltd. and Petro-Canada.

A relatively new addition to SIFT is the summer job program. The Committee places students in summer work terms with companies in the petroleum industry. These students make excellent additions, as they are very enthusiastic and eager to use their new-found knowledge. Thanks to NCE Resources, PanCanadian Petroleum Ltd. and Husky Oil for hiring SIFT students this summer. If you are interested in hiring a student from the upcoming SIFT 2000, please contact Al Carswell at Canadian Natural Resources Ltd.

If you would like to learn more about the SIFT program (under Educational Trust Fund), please visit the CSPG website (www.cspg.org). Past SIFT students are welcome to let us know where they can be reached so we can post this information on the web and reunite past SIFT friends.

VISITING LECTURER COMMITTEE (Henry Klassen, Chairperson; Bill Beaudoin)

No report available.

SEDIMENTOLOGY DISPLAY COMMITTEE (Michael Breiteneder, Chairperson)

No report available.

CONFERENCES, CONVENTIONS, SEMINARS AND SYMPOSIA

1999 CONVENTION COMMITTEE (John Chipperfield and Douglas Carsted of Sproule Associates, Co-Chairmen)

The 1999 Convention was a resounding success, in spite of the steady decline in world oil prices leading up to the convention - to the lowest levels seen in 22 years. In light of the depressed economic environment, we chose the theme "**Digging Deeper – Finding a Better Bottom Line**" and our partnership with the Petroleum Society provided the opportunity to highlight the critical need for interdisciplinary cooperation. All aspects of the convention were top notch and the excellent attendance was very gratifying to all those who gave freely of their time and effort to stage the event. We begrudgingly acknowledge, however, that the oil price recovery during April, May and June, from US\$12 to \$17 may have contributed somewhat to our attendance.

Total attendance was 2750, including 393 exhibitors and 152 students. Society affiliation was approximately 80% CSPG and 20% Petroleum Society. During the convention, the engineers repeatedly expressed amazement at the incredible level of member participation within the CSPG. As an indication of the worldwide recognition of our conference, 337 people attended from outside Alberta, representing eight

provinces, two territories, nine US states and 16 other countries, including China, Norway, Saudi Arabia, Japan, Venezuela, Columbia and England.

An excellent Technical Program of 105 papers (85 CSPG and 20 joint papers) was assembled by Dale Cederwall (consultant) and Doug Minken (Maryanne Petroleum), in spite of many late changes in the line-up. This year, we introduced one-hour joint presentations by geologists and engineers, spotlighting the integration of both disciplines, as the centerpiece of the joint technical session. Two additional technical sessions were also presented by each Society, along with two student sessions, chaired by Matt Ursenbach (U of C). The two-day poster session, chaired by Andre Chow (Poco), was also a sold out success, with 29 presentations.

GEOCANADA 2000 -- The Millennium Summit (Ian McIlreath - General Chairperson, Ian Moffat - CSPG Co-Chairperson, Francois Aubin - CSEG Co-Chairperson, Glenn Gray - CWLS Co-Chairperson, Grant Mossop - GAC Co-Chairperson, Ian Hutcheon - MAC Co-Chairperson, Maggie Schofield - Special Advisor Entertainment).

No report available.

LIAISON COMMITTEES

EDUCATIONAL TRUST FUND (N. Desmond Smith, Chairperson)

The CSPG Educational Trust Fund was active in 1999, specifically in defining itself as the Outreach Committee of the CSPG. Our mandate has matured from solely a sponsorship of the Student Industry Field Trip to an ongoing sponsorship of the likes of EdGeo, Museums, Interpretive Centres and Speakers awards.

As a consequence of this Outreach commitment, the Trustees adopted a Millennium Strategy. This strategy, which has been displayed in the *Reservoir* and at the recent CSPG conferences, is designed to increase the capital base of the ETF. The ETF will be afforded the ability to commit to a

three year funding cycle for providing specific initiatives for the public, and professional awareness of the role of the CSPG in the Canadian Geological fraternity. The ability to increase the Society's presence in the Petroleum and National conscience is directly related to the ability to continue these funding activities.

In 1999 the ETF participated in the funding of EdGeo (\$12,500), The Andy Baillie Award (\$1,000), SIFT (\$35,000), Yoho Burgess Shale Interpretive Centre (\$1,500), and the Honorary Address (\$2,787). Additionally the ETF's investment in the Millennium Strategy, encompassing awareness campaigns and materials, was \$51,000.

The ETF is currently managing a capital base of \$777,105.88 as of 31, July 1999. Gift Planning, managed by Dr. Andrew Holder, realized approximately \$50,000 in donations during the year.

Once again it is with pleasure that I am afforded the opportunity to participate with the Trustees in volunteering for the Society and I thank them for their continued assistance.

AAPG HOUSE OF DELEGATES (Matt Woofert Chairperson)

1999 was a landmark year for the American Association of Petroleum Geologists (AAPG) House of Delegates. At the annual meeting in San Antonio, Texas, Canada and four other areas were designated as International Regions of the AAPG. The Canadian Society of Petroleum Geologists (CSPG) is an Affiliated Society of the AAPG and elected their Delegates to the House based upon the Delegates being joint members of the CSPG and AAPG. The development of Regions reflects the growing international nature of the AAPG. Canadian delegates have taken a leadership role in determining the future direction the organization. Going forward all Delegates will come from AAPG members anywhere in Canada.

E.E. (Ned) Gilbert was appointed as the first President of the Canada Region and George Eynon was elected as our

representative on the Advisory Council of the AAPG.

John Hogg was elected Chairman-elect for the 1998/99 House of Delegates. For the 1999/2000 term John will become the first Chairman of the AAPG House of Delegates from an Affiliated Society outside of the United States.

The Canada Region is entitled to one Delegate for every 70 active AAPG members. There are 1,050 paid Active AAPG members residing in Canada. Therefore, the Canada Region is represented by 15 Delegates who are serving three-year terms, as follows:

Term Ends	Delegate
June 30, 2000	John Chipperfield
	George Eynon
	Christopher Heath
	Debra Nishida
	Matt Woofter
June 30, 2001	Katherine Bergman
	Michael Clegg
	Paul English
	Tom Moslow
	Brad Maynes
June 30, 2002	David Scott
	Wes Bader
	Robert Dick
	Gerry Reinson

We acknowledge and thank John Hogg and Bob Sullivan who completed their term as Delegates June 30, 1999 for their numerous contributions as volunteers and their service to the organization.

The House of Delegates oversees all legislative affairs within the scope of the Constitution and Bylaws of the AAPG. Your elected Delegates are the appropriate channels for individual members to influence the affairs of the AAPG. Delegates also process all AAPG membership applications and Certified Petroleum Geologist applications submitted from Alberta and British Columbia.

During 1998-1999 term, the group met 8 times in Calgary, and at the full House of Delegates annual meeting in San Antonio, Texas immediately prior to the AAPG Annual

Convention. The new House Officers for the 1999-2000 term are as follows: **John Hogg (Chairman)** from **CSPG**; Lowell K. Lischer (Chairman-Elect) and Deborah K. Sacrey (Secretary-Editor).

The House of Delegates is responsible for nominating and endorsing candidates for AAPG Honors and Awards for 1998. We are proud to have succeeded in nominating Dr. Phillip Currie of the Royal Tyrrell Museum for the Michel T. Halbouty Award and Dr. Roger Walker of McMaster University, for a Distinguished Educator Award which they received in San Antonio.

The 1998-1999 AAPG Distinguished Lecture series will feature one Canadian lecturer; S. George Pemberton of the University of Alberta.

Canadian Delegates were active in AAPG affairs during the past year with Committee work performed by the following:

Martin Hewitt	Rules and Procedures 98/99
John Hogg	AAPG Advisory Council 94-99, Chairman-elect 98-99
Paul English	Credentials Committee 97/98
George Eynon	Honors and Awards Committee 97/99 (Chair) Constitution and Bylaws 98/99
Chris Heath	Future of Earth Scientists Committee 97/99
Deb Nishida	Nominations and Elections Committee 97/98

John Chipperfield and David Scott will serve as Foremen for the Canada Region Delegates for the term ending June 30, 2000.

WORLD PETROLEUM CONGRESS LIAISON COMMITTEE (vacant)

No report available.

NORTH AMERICAN COMMISSION ON STRATIGRAPHIC NOMENCLATURE

(NASCN) (R. W. Yole and Brian R. Pratt, CSPG Commissioners)

The 53rd Annual Meeting of NASCN, held in Toronto October 26, 1998 was attended by Commissioners Pratt and Yole. During the year, commissioners' efforts were mainly directed toward proposed amendments to the 1983 Stratigraphic Code and revision and updating of the Biostratigraphy section of the code.

Highlights of the year's NASCN activities, including the Toronto meeting, are outlined below, to alert CSPG members to items which may be of concern to them. Official summaries of the proceedings of NASCN are published biennially in the *AAPG Bulletin*; Note 62: Records of the Stratigraphic Commission can be found in the *Bulletin* for August, 1997, p. 1342-1345.

The Committee charged with proposing amendments to improve wording of the 1983 Code presented its report at the Toronto meetings. With subsequent revisions, the report was submitted to the *AAPG Bulletin* in April 1999 for publication in the *Bulletin* as Note 64. The main addition to earlier versions of the report involves a proposed amendment of Article 4 of the Code in include certain kinds of electronic publishing as "publication in a recognized scientific medium".

Following lengthy discussion of a draft version of revisions to the Biostratigraphic section of the Code (Articles 48 to 52), a near-final report has been prepared for submissions at the October 25, 1999 NASCN meeting in Denver.

A symposium on Allostratigraphy will be sponsored by NASCN at the Denver GSA meeting in October, 1999. Some clarification of the nomenclatural problems surrounding the relationship between Allostratigraphic units and the at-present informal terms of sequence stratigraphy is expected to ensue.

Commissioner Don Owen (Lamar University, Beaumont, Texas) is a member of the Working Group on Sequence Stratigraphy of the International Commission on Stratigraphic Classification (ISSC). This group is preparing to propose two ways for stabilizing nomenclature in

sequence stratigraphy: one would make extension of a sequence beyond a bounding unconformity an optional procedure, rather than a requirement; the other would adopt a dual terminology of descriptive units (i.e. synthems) and interpretive units (i.e. sequences). NASCN is now represented on ISSC by Commissioner Norm Lasca (University of Wisconsin at Milwaukee).

The status of another kind of stratigraphic unit, Diachronous Units, is also under discussion. A Committee of NASCN is responsible for a report to the Commission.

Compilation and editing of a digitized version of the Stratigraphic Code has made possible its installation on a web site, either of the American Geological Institute (of which NASCN is now a member organization) or of AAPG.

Commissioners Ferrusquia Villafranca (Universidad Nacional Autonoma, Mexico) and Ernest Mancini (Tuscaloosa, AL) were elected as Chair and Vice-Chair, respectively, of NASCN for the 1999-2000 Session.

CSPG/CSEG/APEGGA LIAISON (Bill May, Chairperson; Alice Payne, Darcie Greggs)

The Liaison Committee's role is to improve communication and understanding between APEGGA and the respective geoscience societies. The committee acts on concerns or problems that individual members may have with APEGGA and encourages geoscientists to contact the committee with their concerns.

Canadian Council of Professional Geoscientists

Traditionally, the majority of problems brought to the Committee are associated with the following areas: member registration/university accreditation/geoscience syllabi. To address these ongoing issues, the Committee has been a driving force in obtaining APEGGA's support for and funding of Dr. Gordon Williams (CSPG Pres., 1985) efforts to create the "Canadian Council of Professional Geoscientists". The CCPG has established a Standards Board that is developing national

syllabi in Geology, Environmental Geology, and Geophysics.

Permit to Practice

The Liaison Committee initiated a recommendation to reduce the "Permit to Practice" fees for sole practitioner companies as the requirement to have them pay both member fees and permit fees annually is perceived as double taxation. After more than seven years of effort on our part APEGGA Council has recognized this fact. A reduced Permit to Practice fee structure should be in place within the next few months.

Code of Ethics

The Liaison Committee carefully reviewed proposed changes to the Code of Ethics and recommended adoption of a new, shorter code, which subsequently was not passed by Council. This matter is of major concern to geoscientists; some of who feel that they cannot practice under the current code. The problem arises because engineers and geoscientists operate in different environments with different priorities. Geoscientists typically operate in an environment where confidentiality is of paramount importance. Engineers operate in an environment where public safety is paramount and confidentiality is perceived as an impediment to public safety.

Continuing Professional Development

Is a relatively new initiative of APEGGA. The Liaison Comm. is concerned that the member reporting procedure is far too complex and confusing. The Committee believes that for the system to work it must be simplified and it is actively working towards this goal.

Geoscience Task Force

APEGGA Council has created the Geoscience Task Force to address increasing dissatisfaction with APEGGA from within the geoscience community. A recent survey indicated that the geoscientists felt that:

- no value was received from their membership;
- the respective professions were not being treated equally; and
- APEGGA's commitment to address issues of concern to the geoscience community.

Alice Payne (CSPG Pres. 1991) has been appointed to the Task Force. We wish the Task Force success.

NATIONAL LIAISON COMMITTEE (vacant, Chairperson)

No report available.

CSPG/GAC LIAISON (Terry McCoy, Chairperson)

No report available.

PETROLEUM COMMUNICATION FOUNDATION LIAISON (Kathryn Scales, Chairperson)

The Petroleum Communication Foundation is a non-profit organization whose purpose is to increase Canadians' awareness of our country's petroleum industry. The CSPG has been a member of the PCF for over 12 years.

Highlights of the past year include the following:

Publications

The sixth edition of the Foundation's flagship publication "Our Petroleum Challenge" was completed at the end of 1998, and debuted in early 1999. The new version is larger than previous ones, and surlock bound for ease-of-use. It is divided into 3 sections that focus on the industry's past, present and future. A foldout map identifies Canada's petroleum-bearing regions, and areas with substantial commercial production. It will be officially classified as a book, having been assigned a reference and catalogue number from the National Library of Canada. The PCF printed 30,000 English copies, and 5,000 French copies, and are in the process of marketing a bilingual CD-ROM version.

The “*Technology for Exploration and Production*” backgrounder was produced in a French version, and “*The Oil and Gas Industry and the Canadian Economy*” was also printed in both English and French.

A publication called “*Sustain*” was developed to provide the industry with a voice in Canada’s climate change discussion. It featured information about the relationship between human activity and climate change.

Teacher Training Project

The educational initiative undertaken in conjunction with the Peace-Wapiti School District School Board has gotten underway. Educational materials from the PCF will be used to help educate high school students about the petroleum industry.

“The OIL GAME”

The OIL GAME is a project that was initiated by PanCanadian and Landmark, and subsequently sponsored by Petro-Canada, the C.S.E.G., and the C.S.P.G. This project was launched in June of 1999, in conjunction with the public and separate school boards, to help students to learn about oil and gas (upstream) industry. It is a board game in which students work in teams of five to create their own oil companies and explore for oil and gas. The ideas and practices of the game are based on the Western Canada industry. Future editions dealing with the other sectors, such as production and refining, are also planned. The CSPG provided seed money to the project, as a founding sponsor. Petroleum companies then sponsor individual games for \$1000 and donate the game to a school.

Website (<http://www.pcf.ab.ca>)

The Foundation’s Web site recorded more than 21,000 hits in 1998, from over 50 countries. It provides links to governments, companies, industry associations, etc., including the CSPG.

PROFESSIONAL DEVELOPMENT CONSORTIUM (Rick Young, Chairperson)

No report available.

APEGGA/UNIVERSITY OF CALGARY STUDENT LIAISON COMMITTEE (Timothy Bird, Chairperson)

No report available.

PUBLICATIONS

PUBLICATIONS COMMITTEE (Rory C. Hankel, Chairperson; Mark Cooper, New Publications; Richard Thom, Publication Sales; Ashton Embry, *Bulletin*; Ray Featherstone, *Reservoir*; Glenn Karlen, Electronic Media; Jaimè Croft-Ramos, Communications Manager)

The 1999 Committee, consisting of the above members, began work in February, 1999. Several new initiatives have been (or will be) undertaken since that time, specifically:

- 1) Establish the CSPG homepage on the Internet, complete with hot buttons to services, programs, links with conventions and other societies, addresses of Executive Members and office personnel, and advertising opportunities,
- 2) Create new public images and formats for both the *Reservoir* and the *Bulletin*,
- 3) Make the *Reservoir* self-supporting by way of advertising revenues and by reducing costs of production,
- 4) Introduce minor, limited advertising into the *Bulletin*; advertising that is highly focussed on geological matters and that is obtained from highly respected firms,
- 5) Create new publications for the Society, several of which are now underway, namely: a new updated version of the Geological Highway Map of Alberta, investigations of other provinces’ needs for a map, a special publication on Devonian reefs including global and regional examples, a publication ensuing from the International Congress on the Carboniferous and Permian held in Calgary in August, a joint publication with the Geological Society of London on Atlantic-style rifting, a joint publication with the Montana Geological Society, and the updating of certain Lexicons, and

- 6) Increase sales of Society publications to reduce inventory levels and costs.

In recent years, increased costs of printing, handling, and distributing Society publications have hit the balance sheet hard. To address these issues the Publications Committee has tried to bring costs into line by altering cover weights, page paper weights, and page limits; all of which have positively affected mailing costs. Advertising revenues have been increased for the *Reservoir*, with plans for expanding package rates for combined website/*Reservoir* adverts. The goal is eventually to make the *Reservoir*, and possibly the website, self-supporting, without sacrificing quality. Any future surpluses may go toward offsetting *Bulletin* costs.

STRATIGRAPHIC NOMENCLATURE

(Ashton Embry, Chairperson; Jim Barclay, Ed Niewinski, Tony Tankard, Ed Wright)

Two papers were reviewed by the Committee and recommendations for improvement were provided to the authors.

BULLETIN OF CANADIAN PETROLEUM

GEOLOGY (A.F. Embry, Editor; B. Chiang, Managing Editor; S. Wilson-McEwen and E. Snow, Production Editors; D.C. Elliott, Book Review Editor; A. Desrochers, C. Harrison, D. Issler, E. Johannessen, D. McAlpine, K. Osadetz, J. Wood (until December 1999); S. Bachu, K. Bergman, B. MacLean, D. Morrow, L. Quinn, G. Ross, J. Varsek (until December 2000); D. Cant, A. Embry, M. Fowler, I. Knight, L. Lane, D. Leckie, B. Martindale, T. Sami (until December 2001); N. Alwast, *Bulletin* Advertising)

During the 1998-1999 fiscal year four issues of the *Bulletin* (volume 46, numbers 3 and 4 and volume 47, numbers 1 and 2) were published. These issues contained a total of 22 scientific papers which dealt with a wide variety of topics of interest to explorationists. All manuscripts received by the *Bulletin* were read by two or more critical reviewers and their efforts, along with those of the associate editors, are essential for the maintenance of the high scientific standards

of the *Bulletin*. The accepted revised manuscripts were expertly polished and checked by our production editors, Sherry Wilson-McEwen and Elspeth Snow. Notably all the issues were sent out on time thanks to the hard work of the production editors and the staff at McAra Printing. All this activity was well coordinated by the managing editor, Billie Chiang. Thanks to the dedication of all these individuals the *Bulletin* remains a valued and respected scientific journal.

Our book review editor, Dave Elliott, continued to find reviewers for all the books received by the CSPG and provided a flow of succinct reviews of books of interest to explorationists. Another important task was performed by the indexing committee led by Peter Hay. Every year this committee provides a comprehensive index of the *Bulletin* and this data base will become even more valuable when it is available digitally.

The *Bulletin* underwent a facelift with volume 47 and the cover is now dominated by a colour, geological photograph. A further change will take place in the coming fiscal year when Tim de Freitas of Imperial Oil takes the editorial reins on 1/1 Y2K. Tim has served as an associate editor and has been processing all new manuscripts received in 1999. The current editor, Ashton Embry, will maintain his ties with *Bulletin* by becoming an associate editor.

RESERVOIR (Ray Featherstone, Co-editor and Chairperson, Julie Abbott, Co-editor (September, 1998 to August, 1999), Karen Manning, Co-editor (from September, 1999))

The monthly *Reservoir* magazine is a CSPG vehicle for communication. The *Reservoir* Committee, by coordinating with other committees, strives to keep the membership informed of upcoming events on a timely basis. The *Reservoir* has, for example, with the help of the Technical Luncheon Committee, been publishing the technical luncheon abstracts up to two months in advance. Other regular contributions include Technical Divisions lunchtime talks, Executive Comments, Continuing Education opportunities, the

Education Trust Fund and its beneficiaries such as the SIFT Program, Historical Snapshots by Aubrey Kerr, and the CSPG Bookstore *Bulletin*.

Articles of special interest, whether they be technical or perhaps human interest (from CSPG members), are also published to educate or encourage discussion among CSPG members. Excellent contributions over the past year have been submitted by Zeev Berger, Ashton Embry, Chris de Freitas, Peter Jones, Doug Cant, and Andrew Miall. These articles are generally not rigorously refereed.

The *Reservoir* Committee continues (with the excellent help of the CSPG Office staff) to wage the battle against the monthly deficit created by costs and lower than expected advertising revenue. MacDonaldCole Inc. has been handling the design and layout since June, 1999. McAra prints the publication and SLM now does the distribution of the magazine to Canada Post.

Julie Abbott has stepped down from the committee to pursue other opportunities. Karen Manning has volunteered to join the committee. The Committee thanks these people for their enthusiastic contributions. Jaimè Croft- Ramos at the CSPG office provides tremendous support by coordinating and collecting the *Reservoir* raw material electronically, and sending it off to MacDonaldCole Inc.; the *Reservoir* Committee thanks Jaimè for her great efforts.

ELECTRONIC COMMUNICATIONS COMMITTEE (Glenn Karlen, Chairperson)

The main activity of this Committee over the past year has been to acquire funding from the Executive to re-build our CSPG web site, manage the rebuild process and plan for the future.

Enthusiastic support from our Executive allowed for us to begin the rebuild process. Keying off our "one-stop shop" for publications, MacDonaldCole was retained to design the new site and McAra Printing was retained to build the site. MacDonaldCole was also charged with

finding advertisers to be placed on the site to offset development and maintenance costs.

The CSPG web site (www.cspg.org) is now operational and is becoming a valuable tool for our membership to access up to date information regarding our Society. Procedures are now in place to facilitate new additions to the web site as well as revisions to existing information. As of this report, we now have our first advertiser and will now begin to see some return on our initial web site investment.

A call for volunteers for this Committee was put out and to date we have had April Hammond of AEC, Karen Manning from the U of C and Peter Phillips of PanCanadian come forward to volunteer their time to the Committee. The role of the committee will be to oversee the further development of the web page and work with the other CSPG committees to help add additional information to the web site

BUSINESS

ADVERTISING COMMITTEE (Norbert Alwast & Tim Bird, Co-chairs; Bob Kuchinski)

It was a tale of continuing change for the Advertising Committee over the past year. Other commitments prompted the departure of Cheryl Wright and Tom Pierce. Cheryl carries on her volunteer efforts as part of GeoCanada 2000 and Tom is pursuing other chores. We thank them for their efforts and wish them well. We would like to have five people on the Committee, and have already been approached by some prospective members. If you are interested, please contact Blythe Lowe through the CSPG Office.

MacDonaldCole Inc. and McAra Printing started producing the CSPG *Reservoir* in September 1998. We believe the new *Reservoir* represents the Society well and is something all members can take pride in. Our Committee still maintains responsibility for overseeing advertising and marketing issues.

The Society business ad policy was revisited in consultation with the Executive and the result communicated to all

chairpersons in May 1999. We believe that the new arrangement balances member service needs with fiscal responsibility.

With the *Reservoir* issues dealt with, we hope to act on other important issues. We would like to have the *Reservoir* to be delivered to various corporate offices in the city. We want to enhance advertising at luncheons and pursue additional opportunities with the calendar and the website. We welcome your feedback and suggestions.

Revenues were up by 20% over 97-98 totals.