WANTED - TPG ARTICLES
Instructions to Authors

The TPG accepts articles of modest length for publication. Submittals should be no more than approximately 1600 words, or six typed pages, double spaced. Longer articles may be divided into parts (e.g. part I and part II), but this is not encouraged. Articles may be technical or professional in nature. General topics are listed below. Articles containing news of importance to professional geologists will also be considered. Except for news articles, or articles containing dated materials, submittals should be sent to AIPG headquarters twelve weeks in advance of expected publication. Some technical topic issues are planned up to one year before printing, therefore early submittals will be preferred.

Manuscripts should have the following section:
- Title
- Author(s) with CPG number and address
- Text
- Tables if included
- Figures with captions if included
- Appendix(es) if included
- Acknowledgements
- References Cited

One original and two copies of each manuscript should be submitted. Whenever possible, text should also be submitted on diskette. Headquarters uses WordPerfect 7 for Windows '95, which is preferred, but Word, ASCII, RTF, or translatable files are acceptable. The program or format of the text should be clearly marked on the diskette. Articles can also be transmitted by e-mail.

Graphics should be clear, camera-ready, line drawings whenever possible. Photographs (color or black and white) are also encouraged. Whenever possible, drawings may be submitted on diskette in .pcx, .bmp, .tiff, .gif, or other standard formats.

**TPG wants color photographs.** Photographs alone may be submitted for the cover. They should have a geologic theme and an informational caption.

**General Topics:**

**Technical**
- Mining (January)
- Petroleum Geology (March)
- Hydrogeology (July)
- Environmental Geology (September)
- Geophysical/Engineering (November)

**Professional (any issue)**
- Government and the Geologist
- Ethics and Standards of Practice
- Public Perception of Geology and Geologists
- Definition, Certification, and Licensing
- Practicing Geology Internationally

Other suggestions: Forensic Geology, History of Practice in a given field, Book Reviews, and Geology and the Military, Unusual Applications of Geology.

Authors are encouraged to communicate with Headquarters via mail, fax, or Internet. Send your article and/or photographs, or communicate questions to:

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J. Dale Nations, Editor
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The Professional GEOLOGIST

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Geophysical Prospecting for Oil and Gas Well Effluent

Paul F. Hudak and George Maxey

Introduction

Sand formations in the Cretaceous Trinity Group are an important source of groundwater in northern Texas. Thousands of oil and gas wells penetrate the unconfined outcrop zones of these formations, tapping underlying Paleozoic reservoirs (RCT, 1995). Saline water and drilling fluids from these wells are potential sources of surface water, soil, and groundwater contamination (Baker, 1990). In 1989, the Texas Railroad Commission prohibited the unauthorized use of saltwater disposal pits (RCT, 1993). However, pits used for drilling fluid and emergency salt water storage are still used during oil and gas production. These are also potential sources of environmental pollution (RCT, 1993). Efficient methods for detecting abandoned pits and past spills can enable the implementation of remedial measures to curtail environmental pollution. The objective of this study was to evaluate the utility of an earth resistivity system for detecting drilling effluent at a site in the Trinity Group outcrop zone.

Background

Electrical resistivity has been used in various prospecting, civil engineering, and environmental investigations. The method is advantageous because it yields useful information over a broad area at low cost, in a short amount of time, and without disrupting the subsurface.

In rock and mineral prospecting, lateral profiling has been used to locate faults, dikes, shear zones, veins, buried stream channels, and ore bodies (Zohdy et al., 1984; Telford et al., 1990). Applications of electrical resistivity to civil engineering include locating surface faults (Kreitler and McKalips, 1978), measuring depth of overburden, and evaluating structural properties of bedrock (Font, 1994). Environmental applications of the resistivity method include characterizing the layering of refuse in hazardous waste facilities (Carpenter et al., 1990; Westphalen, 1994), determining the location and properties of clay aquitards (Kalinski et al., 1993; Westphalen, 1994), and delineating zones of groundwater contamination (Subbarao and Subbarao, 1994; Ebraheem et al., 1997).

In this study, we used electrical resistivity to delineate a small area in the Trinity Group outcrop that was inundated by gas well drilling effluent. Alternative methods for surveying shallow brine contamination include measuring the salinity of soil samples in a laboratory, ground-based electromagnetic induction, and airborne methods (Paine et al., 1997). Collecting and measuring the salinity of soil samples is the most accurate method, but cost-prohibitive and impractical for surveying large areas of potential brine contamination. Above-ground, transmitter and receiver coils are employed during electromagnetic induction surveys. Electromagnetic surveys lack the resolution and depth penetration of resistivity surveys, but are relatively rapid and inexpensive (Zohdy, 1984). Airborne methods are more appropriate for surveying a broad region covering several square miles than detecting conductivity variations over a small area. They have been used to
identify anomalies in ground conductivity, which were explored in greater detail with ground-based methods (Paine et al., 1997).

**Methods**

A Bison 2350B earth resistivity system was used to survey a grassy area below the mouth of an earthen ditch (Figure 1). The ditch was used to drain pits containing gas well drilling effluent. Near-surface deposits at the site include a thin layer of sandy loam soil and semi-consolidated fluvial sand. To detect areal variations in electrical resistivity, an identical electrode configuration was used at 73 measuring points. Each point coincided with the center of a Schlumberger array. The measuring points were spaced evenly, at 2-foot increments, along three linear transects (Figure 1).

In a Schlumberger array, there are two outer current electrodes and two inner potential electrodes, all of which are collinear and symmetric about the midpoint of the array (Zohdy et al., 1984). In this study, we employed a spacing of 5 feet between the current electrodes and 1 foot between potential electrodes. A small spacing was used to acquire information for near-surface deposits. At each station, an apparent resistivity \( \rho_a \) was calculated as

\[ \rho_a = \frac{I}{A} \cdot \frac{2aV}{I} \]

where \( I \) is the current transmitted between the outer electrodes, \( A \) is the voltage drop across the inner electrodes, \( AB \) is the distance between the current electrodes, and \( MN \) is the distance between the potential electrodes. The earth resistivity instrument outputs a value for \( 2aV/I \). For the electrode configuration used in this study, the quantity in parentheses is equal to 3 ft. The calculated resistivity values were contoured to depict spatial variations across the site.

**Results**

Apparent resistivity values ranged from 318 ohm-ft near the middle of the east transect to 3090 ohm-ft at the northern end of the west transect. The highest value is representative of background conditions at the site. The ability of earth material within the survey area to conduct an electrical current was enhanced by saline effluent and clay sediment from the recirculation pit. Lower resistivity values correspond to more highly conductive materials, which would indicate an impact of salt water and drilling effluent.

Lower resistivity values were observed along an east-west axis, oriented collinear with the drainage ditch (Figure 1). This zone was probably inundated by a large fraction of the total volume that was discharged from the ditch. Much of the liquid and sediment settled near the mouth of the ditch, accounting for the low resistivity values which were observed in that area. In general, the resistivity values increased to the north and south of the east-west axis. Superimposed on that trend were small areas of anomalously high or low resistivity. For example, two low anomalies are apparent at the southern end of the middle transect.

Collectively, the apparent resistivity contours suggest that effluent drained out of the ditch, flowed along the east-west axis, and dispersed laterally. The lateral spreading was asymmetric, with greater inundation occurring to the south. Possibly, the resistivity anomalies were caused by subtle, local-scale troughs and ridges in the terrain. These troughs and ridges would pool or disperse the liquid effluent, causing lower or higher apparent resistivity values. The anomalies are more common near the middle and west survey transects. Further from the source, slow-moving sheet flow in those areas would more likely be impacted by subtle topographic features.

At the western margin of the study area, it is apparent that the flow bifurcated into two smaller branches. This result is consistent with the site topography. West of the surveyed area, there is a small mound that separates two swales.

The entire survey was done by a two-person crew in approximately two hours. In comparison, it would take at least the same amount of time to collect 73 soil samples. At $100/sample, the analytical costs would be pro-

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**American Geological Institute**

**1998-1999 CONGRESSIONAL SCIENCE FELLOWSHIP**

The American Geological Institute is offering a new Congressional Science Fellowship for the geosciences. The successful candidate will spend a year (September 1998 - August 1999) in Washington working as a staff member for a member of Congress or congressional committee. The fellowship is a unique opportunity to gain first-hand experience with the legislative process and make practical contributions to the effective and timely use of geoscientific knowledge on public policy issues.

Prospective applicants should have a broad geoscience background and excellent communication skills. Minimum requirements are a master's degree with three years of post-degree work experience or a Ph.D. at the time of appointment. Prior experience in public policy is not required, but a demonstrable interest in applying science to the solution of public problems is desirable. The fellowship carries a stipend up to $42,000. Funding is provided by the AGI Foundation.

Interested candidates should submit a cover letter and a resume or curriculum vitae with three letters of reference to: AGI Congressional Science Fellowship, 4220 King Street, Alexandria VA 22302-1502. For further details, call 703-379-2480, visit <www.agiweb.org>, or e-mail <govt@agiweb.org>. BOE

Application materials must be postmarked by Feb. 1, 1998.
hibitive. There would also be a lag time before obtaining the laboratory results. An airborne survey would be most expensive and not provide the level of detail in Figure 1. The cost for such a survey would be on the order of $10,000. Electromagnetic induction is the most competitive alternative to electrical resistivity for this study. An electromagnetic survey would take less time, but provide less detail than the electrical resistivity survey. Leased or purchased, electrical resistivity and electromagnetic induction devices provide real-time data and can be used repeatedly for environmental investigations.

Conclusions
Effluent from oil and gas wells is a potential source of soil and groundwater contamination in northern Texas. Brine and drilling effluent increase the ability of subsurface deposits to conduct an electrical current. Consequently, these liquids and their residues can be detected by electrical resistivity surveys. These relatively inexpensive surveys are a useful reconnaissance tool. In situations where oil and gas well effluent pose a major threat to water resources, resistivity surveys can be followed with conventional sampling and laboratory analysis methods to prioritize areas for possible remediation.

References


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Recognizing Junk Science

Ron W. Pritchett, CPG-7063

For those who have scientific training, it is all too easy to classify people as either scientists or non-scientists. Scholastic achievement alone, however, does not guarantee scientific products. Staying on course toward an ideal scientific product takes uncommon diligence. Fear, greed, sloth, and a few other elements of the human condition tend to degrade science. Anyone or any institution can stray from a scientific path to yield “junk science” unless we test the work against defining criteria. Superior science includes communication on many levels, such that findings are accurately described for non-scientists and a general audience.

Science is...

Science is dispassionate, systematic study. Science requires a lack of prejudice, yet prejudice is a strong tendency in humans. When science is done well, emotion is absent, opinions are irrelevant, and desire has no place. These criteria make science unattractive to many people who may find science offensive because it seems cold and uncompromisingly honest. Science can exclude customary traditions that a society considers to be morals, but are in fact neither right nor wrong.

To obtain objectivity beyond desire, science requires discipline. Understanding nature parallels maturity in emotions. Science reveals nature’s secrets for those who have patience, yet most scientists I know are quick-of-mind, and they are creative, imaginative, humorous, wonderful, caring people. Why? Can it be because their emotions are under control, as they must be, in coming to understand the physical world?

Science is a powerful tool because of its objectivity. As a tool, science can be used and abused. The adversarial system of law, for example, uses results from science. The scientific method provides evidence useful to both plaintiffs’ and defendants’ counsel, who are charged to emphasize supporting information. Thus, unimpressive scientific findings may be excluded from legal debate. Through law we may achieve a framework for civilization, though we must remember that findings in law may contradict certainties in science. The scientific method, in contrast, includes all the evidence, and certainty in science is detached from zealous arguments. Carl Sagan (1996) wrote of the value of including all available evidence in the scientific method:

“Because of our well-demonstrated fallibilities, [science] rules out of court, beyond serious discourse, a wide range of uplifting images, playful notions, earnest mysticism, and stupefying wonders.”

Sagan also listed a few criteria associated with performance in credible science:

Sagan’s Tools for Science:
- think in a skeptical way;
- seek independent confirmation of the facts;
- encourage knowledgeable debate;
- question authorities;
- develop multiple hypotheses—test each one;
- try to logically reject your favorite hypothesis;
- quantify—numbers can help find the best hypothesis;
- every link in an argument chain must be logical;
- simplicity can guide a choice between explanations;
- ask if the hypothesis can be falsified;
- design experiments that include impartiality and control;
- separate the variables in the argument

Junk Science is...

The term “junk science” is associated with advocating a cause, paying little attention to the investigative process. Peer review (Weimer, 1997) can reveal “junk science” by identifying incorrect assertions.
The term refers to the act of selecting evidence that only supports an advocate's belief, and discrimination alone may exclude contrary evidence. A "junk science" advocate believes the "end justifies the means" and, if the person does not include evidence contrary to a favorite set of facts, behavior becomes zealous. Zealous advocates may claim a scientific foundation, but subjectivity or unwillingness to appreciate a different perspective nullifies the claim. Lindzen (1996) reviews a few criteria associated with "junk science:

Lindzen's Criteria Typical of Junk Science
- assume a high moral purpose;
- emphasize facts over process;
- issue a simplistic message (misrepresent facts and physics);
- use a recent event to dramatize their argument;
- seek a "forged consensus" of scientists who may lend credibility to the case;
- defer to political will, or social pressure.

Yet differences can be subtle. Credible scientists advocate ideas, though they tie their findings to process evidence. Credible scientists combine processes and facts, including processes that test arguments. Credible scientists may simplify messages, though they define the ideas first in peer-reviewed technical language. Scientists may show recent events as examples, though examples become credible only when they fit historical contexts. Sagan also listed a few criteria for non-science:

Sagan on "Baloney Detection"; Fallacies of Logic and Rhetoric
- ad hominem arguments -
  Latin for "to the man" - i.e. attacking the arguer instead of the hypothesis (such as "right-wing fundamentalist" or "environmental extremist");
- arguing from authority (as a chief argument);
- justification because of adverse consequences (things will be bad if we don't agree with this idea);
- claim whatever is not proved false must be true;
- claim whatever is not proved true must be false;
- invoke a special divine plea (argument based only on faith);
- creating an argument to fit an answer (we desire X, therefore Y is the best course of action);
- counting the "hits" and forgetting the "misses" in observations;
- showing general statistics based on very small samples;
- inconsistent applications (between causes and effects);
- non sequitur - Latin for "it doesn't follow"- misplaced cause and effect;
- post hoc, ergo propter hoc - Latin for "it happened after, so it was caused by";
- meaningless question (misdirected question);
- considering only extremes and no intermediate alternatives;
- considering only short-term vs. long-term;
- slippery slope (If-then from a position to an extreme);
- confusion of correlation and cause;
- straw man - description of an irrelevant position to attack the "straw man" position;
- suppressed evidence, or half-truths;
- weasel words (emotive words or phrases that have no precise definition, such as "environmental justice" or "acid rain" or "global warming" or "global cooling" or "the ozone hole").

"Junk science" advocates believe a single event or crisis justifies their message, and they believe in choosing events that justify the message.

For example, one hot summer may be held as proof of manmade climate change. Zealous advocates confound science by misrepresenting physical principles in their messages, thereby leading to fear and uncertainty. When advocates pursue money, power, or ego satisfaction over dispassionate scientific truth, advocates unbalance the arguments centered on physical principles.

Anyone may depart from the scientific method and backslide to "junk science." Coordinating science with economics and law is a major task in practical applications, and people who are not familiar with an objective process may be tempted to reject bad news. Yet, tragedy and despair visit a public ignorant of science and the reasons for objective methods. Therefore, superior performance in science includes effective communications beyond technical circles.

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Popular support for both credible and "junk" science depends on effective communications. As writers and presentational speakers, both credible and "junk" scientists can engage, convince, and persuade. When credible scientists fail to communicate beyond a technical audience, junk scientists (who may have political ambitions and a destructive message) can win majority support or obtain funding contingent on their findings.

In April 1997, three AIPG members presented their views on abuses in the name of science:

Susan M. Landon, Past President of AIPG (CPG 4591 - presiding), John M. “Jack” Parker (CPG 0230 - originator), and Robert J. Weimer (CPG 0098 - speaker). The event was the American Association of Petroleum Geologists Annual Convention in Dallas, session titled, “Science vs. Junk Science, How Bad Geology Makes Bad Law; The Role of the Geologist.” Landon, Parker, and Weimer expressed their concerns about shifts in technical reporting that lead to damage and injustice. The speakers called for action to improve the role of science as a driver for decisions in the legal system, in business, and in the combination of politics and government research. All too often, authorities choose degraded (“junk science”) reports out of ignorance, or by design. Perhaps more AIPG members will think of writing and speaking as vital acts of scientific integrity.

References:

Lindzen, Richard S., 1996, “Global Warming and Eugenics” in Risks, Costs, and Lives Saved, Robert W. Hahn ed., Oxford University Press, New York, p. 85 [R.S. Lindzen, Ph.D., is Alfred P. Sloan Professor of Meteorology at MIT, teaching previously at Harvard University and the University of Chicago. He is also the author of Dynamics in Atmospheric Physics and co-author of Atmospheric Tides.]


Ron W. Pritchett, CPG-7036, 8244 South Leyden Court, Englewood, Colorado 80112.

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California Council of Geoscience Organizations is Accepting Applications for the Position of Executive Director

The California Council of Geoscience Organizations (CCGO) is an organization being formed to advocate the use of sound geologic knowledge and practice in California by proposing, reviewing, and monitoring statutes, regulations, and public policies.

The Executive Director is to:

• Manage the routine affairs of the CCGO,
• Perform the administrative duties and responsibilities prescribed by the Board of Directors,
• Represent the CCGO as directed by the Board or, in their absence, the President of the Board.

The ideal candidate will have:

• A good understanding of geologic hazards, engineering geology, and hydrogeology,
• Excellent written and spoken communication skills,
• Excellent interpersonal skills,
• Ability to respond rapidly to the CCGO’s needs, some of which will require time in Sacramento.

• Ability to develop and maintain effective relations with regulators, law-makers and legislative staff, state and local government leaders, and professional organization leaders,
• Registration as a geologist in California (or Ph.D. in geology).

During the CCGO organization period, the Executive Director must be willing to serve on a volunteer basis. Reasonable expenses will be reimbursed. CCGO organizers intend that ultimately the Executive Director post will be a paid, half-time position.

The position will remain open until filled. Applicants should submit a letter of interest and a current resume. Please direct applicants or questions to Jim Parsons at:

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DECEMBER 1997 • The Professional Geologist
The Canadian Council of Professional Geoscientists

Conseil canadien des géoscientifiques professionnels

Gordon D. Williams, Ph.D., P. Geol., Chair,
Canadian Council of Professional Geoscientists

Introduction

For several years, professional associations that license (register) geoscientists in Canada have recognized that a national organization was needed to fulfill a threefold purpose: 1) help coordinate standards and other activities affecting professional geoscientists in Canada; 2) act as a forum through which common issues could be addressed; and 3) represent Canadian geoscientists nationally and internationally.

Until about ten years ago - when the need was less pressing - only two jurisdictions, Alberta and the Northwest Territories had legislation in place to license geoscientists. British Columbia, Newfoundland and Saskatchewan have since been added to the list of provinces that require geoscience licensure, and Manitoba, Ontario, Nova Scotia and New Brunswick currently are at various stages of implementing their own requirements. At present, all the professional associations that license geoscientists also license engineers under single combined engineering and geoscience acts of their provincial or territorial legislatures.

National coordination for the engineering professions has been provided by the Canadian Council of Professional Engineers (CCPE) since the 1930s. To meet the needs for a parallel national organization in the geosciences, the Canadian Council of Professional Geoscientists/Conseil canadien des géoscientifiques professionnels (CCPG) was established in March, 1997, with the active assistance of the CCPE. A federally chartered not-for-profit corporation headquartered in Calgary, Alberta, the CCPG will become fully operational on January 1, 1998. It is a completely independent entity whose members are those provincial and territorial associations that license or certify geoscientists under right-to-practice or right-to-title-legislation, or are working towards licensure or certification.

Current Status of Licensure in Canada

More than 5,000 geoscientists are now licensed as Professional Geoscientists (P.Geo.), Professional Geologists (P.GeoL.) or Professional Geophysicists (P.Geph.) under combined engineering and geoscience right-to-practice legislation in Alberta, British Columbia, Newfoundland, Northwest Territories and Saskatchewan. Over the next few years, approximately 10,000 geoscientists will be licensed in Canada as the remaining jurisdictions enact similar legislation. The status in the remaining provinces and territories is as follows:

- In Nova Scotia, a bill to establish the Association of Professional Engineers and Geoscientists of Nova Scotia was introduced in the legislature in 1996, but was subsequently withdrawn because of difficulties between engineers and architects in defining certain areas of overlapping professional practice. Geoscientists have now formed the Association of Professional Geoscientists of Nova Scotia to work with the Association of Professional Engineers of Nova Scotia to ensure that combined engineering and geoscience legislation is enacted as soon as possible.

- In Manitoba, a new act to create a combined Association of Professional Engineers and Geoscientists of Manitoba is the result of several years of intense effort on the part of geoscientists and engineers in that province. The act was scheduled for introduction at the fall, 1997, sitting of the legislature but, because that sitting was cancelled, it will probably appear on the spring, 1998, agenda.

- In Ontario, the Association of Geoscientists of Ontario has been working with Professional Engineers Ontario to revise that province’s current
engineering act to incorporate geoscientists. A draft of the new act could be in the legislature by early 1998.

- In New Brunswick, a joint task force of the Association of Professional Geologists of New Brunswick and the Association of Professional Engineers of New Brunswick (APENB) recommended joint licensure under a combined act. The task force report was accepted by both organizations and a new engineering and geoscience act is currently being developed. The new act is scheduled to be presented for approval at APENB's next annual meeting in February, 1998.

- Geoscientists in Québec have been seeking professional licensure or certification for almost 30 years but the body responsible for licensing engineers in Québec - the Ordre des ingénieurs du Québec - has not been sympathetic towards combined licensure. The geoscientists' organization, the Association Professionnelles des Géologues et Géophysiciens du Québec (APGGQ) have therefore approached the provincial government directly to provide right-to-title certification. The Office des Professions du Québec recommended several years ago that a new Order be created for geoscientists and given exclusive right to use specified titles under existing legislation. Unfortunately, the legislation, as it relates to geoscientists, has yet to be proclaimed by the government despite continuing efforts on the part of the APGGQ to encourage them to proceed.

- The number of geoscientists practicing in Yukon and Prince Edward Island is very small. As licensure of geoscientists spreads to more of the other provinces, the engineering associations in these jurisdictions may well recommend including geoscientists in their acts.

**Organization of CCPG**

The CCPG is an umbrella organization that exists solely to serve its constituent geoscience associations, with no power of compulsion over its members or their existing statutory authority. Individual professionals will not be members of CCPG nor will CCPG license or certify individual professionals. Professional geoscientists will belong to their provincial or territorial associations which, in turn, will hold membership in CCPG.

Figure 1 illustrates the current membership of CCPG and, for comparison, CCPE. Most of the constituent association members are common to both CCPG and CCPE or will be when current legislative activity is completed. In the future, geoscientists and engineers will undoubtedly be better served by having a single combined national organization.

The CCPG Implementation Task Force was formed by CCPE in January, 1996, to establish the CCPG with-
e) promoting the advancement of geoscience and related education;
f) generally carrying out their various objectives and functions;

- act on behalf of, and to present the views of, its constituent associations and organizations in matters that are national or international in scope, including international registration or certification of geoscientists and reciprocal practice;
- act in respect of other matters of Canada-wide or international nature concerning the geoscience professions, either alone or together with other bodies.

Geoscientists, perhaps more so than some other professionals, often practice outside the jurisdiction in which they are licensed. Increasingly, their practice spans more than one province or territory, and many individuals work internationally. A priority of CCGP is to facilitate the mobility of professional geoscientists within Canada by encouraging its member associations to make transferring registration from one jurisdiction to another as easy as possible. A related objective is to develop arrangements whereby geoscientists will be able to practice outside their home province or territory for specified short periods without having to become licensed in each of the other jurisdictions where they might work.

The development of reciprocal relationships with licensing or certifying organizations elsewhere in North America and beyond is an explicit objective of the CCGP. In this regard, contact has been made with the American Institute of Professional Geologists, the National Association of State Boards of Geology, the European Federation of Geologists and the Geological Society in Great Britain. Contacts with the Australasian Institute of Mining and Metallurgy and the Consejo Profesional de Ciencias Geologicas of Argentina are being developed.

The Canadian Geoscience Standards Board

Compatible academic and experience requirements for licensure are prerequisites to easy mobility of professionals, within Canada and elsewhere. To assist its member associations in developing and maintaining such standards, the CCGP has established the Canadian Geoscience Standards Board (CGSB). Composed of representatives of each member association of CCGP, and chaired by Dr. Philippe Erdmer of the University of Alberta, the CGSB has held two meetings and will meet once again before the end of 1997. Its mandate is to:

- provide guidance to the constituent associations of CCGP on matters relating to professional qualifications and practice.

- publish and periodically update national guidelines and examination syllabi in the geosciences for use by the constituent associations.
- develop methods of assessing the extent to which Canadian geoscience degree programs meet or exceed educational standards acceptable for licensure as a geoscientist in Canada and to publish a list of geoscience programs which it considers meet or exceed those standards.
- conduct research into foreign geoscience programs to determine the extent to which such programs may satisfy all or some of the academic requirements for licensure in the constituent associations.
- ascertain the equivalency of accreditation programs in other countries, recommend mutual recognition agreements with foreign organizations and to monitor the activities of those organizations with which mutual recognition agreements have been signed.

The first priority of the CGSB is to ensure that academic and other standards adopted by the member associations of CCGP are sufficiently compatible so that the transfer of membership between jurisdictions by individual geoscientists is not impeded.

Contact Information

The CCGP exists to address Canada's rapidly growing need for national and international coordination in the geoscience disciplines. It is committed to inclusivity and will work with its member organizations, the CCPE, universities and learned societies to enhance the professional qualifications and stature of individual geoscientists and the geoscience professions. More information may be obtained by contacting the Council at the following address:

Canadian Council of Professional Geoscientists
Suite 1600, 734 Seventh Avenue SW
Calgary, Alberta, Canada
T2P 3P8
Telephone: (403) 232-8511
Facsimile: (403) 269-2787
E-mail: gordonw@cadvision.com
Internet: http://www.ccgpg.ca
(Under construction, available January 1, 1998)

Figure 1: Relationship of provincial constituent associations (member organizations) to the Canadian Council of Professional Geoscientists (CCPG) and the Canadian Council of Professional Engineers (CCPE). Solid heavy and light lines indicate membership in CCPG and CCPE respectively. Dashed lines indicate combined engineering and geoscience acts in the legislative process or under development.

APEY - Association of Professional Engineers of the Yukon
APEGBC - Association of Professional Engineers and Geoscientists of the Province of British Columbia

(Figure 1 caption continued)
APEGS - Association of Professional Engineers and Geoscientists of Saskatchewan
APEM - Association of Professional Engineers of the Province of Manitoba
AGO - Association of Geoscientists of Ontario
PEO - Professional Engineers Ontario
APGGQ - Association of Professional Geologists and Geophysicists of Québec
OIQ - Ordre des ingénieurs du Québec
APGNB - Association of Professional Geologists of New Brunswick
APENB - Association of Professional Engineers of New Brunswick
APGNS - Association of Professional Geoscientists of Nova Scotia
APENS - Association of Professional Engineers of Nova Scotia
APEGN - Association of Professional Engineers and Geoscientists of Newfoundland
APEPEI - Association of Professional Engineers of the Province of Prince Edward Island.

The American Society for Photogrammetry and Remote Sensing (ASPRS) is Accepting Applications for the Position of Executive Director

The American Society for Photogrammetry and Remote Sensing (ASPRS), headquartered in Bethesda, Maryland, seeks a dedicated professional to act as its chief operating officer. Founded in 1934, ASPRS is a 6,000-plus member professional and scientific (non-profit) organization focused on the development and exchange of information about photogrammetry, remote sensing, geographic information systems, and related cutting edge geospatial information technologies. These technologies include ground-based, aerial, and satellite-based procedures for precise mapping and monitoring of Earth surface features and the collection of data incorporated in modern, spatially oriented decision support systems. The Society's membership is balanced among the private, governmental, and academic sectors, and also includes approximately 150 corporate members. The Society provides a broad spectrum of member services including: technical meetings, publications (including a monthly journal), professional certification, and a scholarship program. The annual budget for the Society is approximately $2 million and the Executive Director is responsible to the Board of Directors, through the President, for Society management and administration. Additional information about ASPRS is available at its Website <www.asprs.org/asprs>.

The successful candidate for this position must possess a blend of executive and senior-level management skills, including: budget and program planning and management, communication, personnel management, marketing, teambuilding, strategic vision, automated information management, and ability to interact with a broad range of members, related organizations, and the public. Association management, and ability to interact with a broad range of members, related organization, and the public. Association management experience and familiarity with geospatial information sciences desirable. Compensation package commensurate with qualifications and experience.

The position is available March 15, 1998. To ensure consideration, applicants should mail (not fax or e-mail) cover letter and resume (including relevant experience, references, and preference relative to confidentiality by December 31, 1997 to:

Dr. Thomas M. Lilesand, Chair
ASPRS Executive Director Search Committee
Environmental Remote Sensing Center
University of Wisconsin-Madison
1225 West Dayton Street
Madison, WI 53706

ASPRS is an Affirmative Action/Equal Opportunity Employer.
Drawdown of the Strategic Petroleum Reserve

Submitted by John J. Dragonetti, CPG-2779

As early as 1912, the federal government recognized the strategic value of oil and the need to establish national reserves as a hedge against future supply disruptions. Since 1995, the government has also recognized that sales of and from these reserves can serve as a deficit reduction tool. Congress recently approved the removal and sale of 207.5 million worth of oil from the Strategic Petroleum Reserve (SPR) during fiscal year 1998, which would be the fourth such sale since 1995. The provision was originally proposed by President Clinton and is included in the FY 1998 Department of the Interior appropriations bill, which the President is expected to sign. The money from the sale is specifically targeted for facility development, operations, and program management of the SPR. Several senators who opposed the sale have sought instead to use funds generated from the ongoing sale of the naval petroleum reserve in Elk Hills, California. Critics have warned that repeated sales from the SPR at a time of record oil imports represent unsound policy.

The SPR program was established as an emergency response device in reaction to the Arab oil embargo of 1973 and consists of stockpiling large quantities of crude oil in underground salt dome caverns in Texas and Louisiana. Although the program was launched in 1975, actual underground injection did not take place until the following year. The SPR, however, was not the first instance of governmental stockpiling of oil, an activity that dates back to the early part of the century when oil-bearing lands were preserved for national defense purposes as naval petroleum reserves (NPR). Four such sites, dominantly located on public lands, were created by executive order between 1912 and 1933. The first two reserves were set aside in 1912 in California at Elk Hills (NPR #1) and Buena Vista Hills (NPR #2). Perhaps the most well-known was NPR #3, established in 1915 at Teapot Dome, Wyoming. During the 1920's, it was at the center of a notorious scandal afflicting the Harding Administration. After the control of Teapot Dome and Elk Hills had been transferred from the Navy Department to the Department of the Interior, Interior Secretary Albert B. Fall leased both fields to private interests without the required competitive bidding. Later an investigation found that the Secretary had received large sums of money from the purchasers. Fall was convicted of accepting bribes, sentenced to a year in prison, and fined $100,000. Both fields were restored to the federal government by a 1927 Supreme Court decision. The final reserve, NPR #4, was created on the Alaskan North Slope in 1933. For many years, no substantive production occurred at these sites except for that authorized by Congress at Elk Hills during World War II. The next call for increased production from the naval petroleum reserves was issued by President Nixon in 1973 to deal with the nation's oil supply vulnerability so dramatically illustrated by the Arab oil embargo.

The profound impact of the OPEC embargo led many to conclude that additional reserves were needed. Despite a great deal of wrangling between President Ford and the Democrat-controlled Congress, the Energy Policy and Conservation Act of 1975 (Public Law 94 163) passed by large margins in both houses and subsequently was signed by the President. The Act included provisional goals and general guidelines for the SPR program. Actual implementation of the program became the responsibility of the Federal Energy Administration, which later moved to the newly created Department of Energy in 1978.

During the 1980's, there were numerous executive branch and congressional squabbles and analyses concerning several aspects of SPR activities including oil acquisition, storage capacity, financing, private sector involvement, and potential withdrawal and distribution of reserves.

Beginning in 1995, the Clinton Administration with congressional approval conducted three sales of crude oil from the SPR primarily to finance the $200 million annual operating costs of the reserve and the one time cost of transferring oil from the Weeks Island, Louisiana reserve site, which had sprung a leak. The underlying purpose, however, was to raise revenues to balance the federal budget. During mid 1996, sales were also being used "to flood the market" to combat sharply increasing gasoline prices. These operations were being characterized by opponents, including the Independent Petroleum Association of America, as the first non-emergency sales since the inception of the program. Furthermore, critics argued that the government paid
more for the oil it has in storage than it can receive in today's market, estimating a loss to the U.S. Treasury of $100 million. And most certainly, the oil glut produced by the sale would have serious impacts on marginal domestic producers. Perhaps the most troubling issue is that of the nation's energy preparedness considering the fundamental purpose of the reserve was as a protection against economic or oil supply disruptions.

At the same time that controversy was raging over the sale of oil from the SPR, the defense authorization bill for fiscal year 1996 included a provision permitting the sale of the Elk Hills Naval Petroleum Reserve by 1998. The Department of Energy was given the responsibility to resolve ownership issues with Chevron Corporation, which owns 22 percent of the field, prior to any sale. Although Chevron was interested in purchasing the remainder of the field, Occidental Petroleum Corporation came up the winner, acquiring Elk Hills for $3.65 billion, a sale price significantly higher than anticipated by either the Department of Energy or Congress. The sale reportedly triples Occidental's U.S. oil reserves and doubles its domestic gas reserves, making it the largest independent operating in California.

The high sale price for Elk Hills came too late for two senators, Jeff Bingaman (D NM) and Frank Murkowski (R AK), who earlier had proposed to cancel the SPR sale and instead use proceeds from the sale of Elk Hills to pay for ongoing SPR costs. Their amendment to the Interior appropriations bill passed the Senate but was dropped during negotiations with the House on a final bill. They have vowed to keep trying to attach their amendment to other legislation before the SPR sale takes place in 1998.

Although it can be assumed the sale of significant portions of the SPR will have a positive effect on the national deficit, history has demonstrated that the embargo of 1973-1974 was followed by sharply increased oil prices and an economic jolt; after the Iranian revolution in 1980, oil prices again increased with further economic consequences; and the recession of 1991 followed the Iraqi invasion of Kuwait the year before. It remains for the future to tell us whether the reduction of strategic oil inventories is a wise national maneuver.

The Government Affairs column is a bimonthly feature written by John Dragonetti who is Senior Advisor to the American Geological Institute’s Government Affairs Program.

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**GeoRef Announces New Preview Database**

Users of the World Wide Web can now get up-to-date information on recently published geoscience literature simply by visiting the American Geological Institute’s AGI10 web site. The new Preview Database, released by AGI’s GeoRef Information System, became available in August and can be accessed free of charge. This new service provides access to bibliographic references going into the GeoRef database before they are in their final edited and indexed form.

The Preview Database is updated weekly on the AGI web page. When the listed information is in its final form it is removed from the Preview Database and loaded into GeoRef. Every week new references beginning the GeoRef production process will be added to the Preview Database.

The Preview Database is easy to use. Visit the AGI home page at [http://www.agiweb.org](http://www.agiweb.org) and go to the GeoRef page. Then find the Preview Database. Articles may be located by any of three methods. There are 30 subject categories and numerous subcategories which may be searched; you can look up specific journals; or do a keyword search. When the related titles are listed, click on the title you are interested in to see the full bibliographic listing.

GeoRef is a bibliographic database of more than 2 million references to the geoscience literature of the world and is used by an international list of subscribers. It is considered the most comprehensive geoscience database in the world. Now, with the arrival of the Preview Database, geoscience literature can be accessed much more quickly than before.

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**Professional Services Directory**

Starting in the January, 1998 issue of *The Professional Geologist*, advertising will be available in a Professional Services Directory portion of the magazine. The service is open to AIPG Members as well as non-members. The Professional Services Directory is a 12-month listing offering experience and expertise in all phases of geology. Advertising rates are based on a 3 3/8" x 1 3/4" space.

- **AIPG Member** $200.00
- **Non-member** $300.00

The *Professional Geologist* reaches approximately 7,000 readers.

**Send in your business card today!**
AGI GOVERNMENT AFFAIRS PROGRAM SPECIAL UPDATE

(Update prepared by David Applegate and Kasey Shewey)

Congress Adjudgs, Leaves Trail of Bills In Its Wake

IN A NUTSHELL: The first session of the 105th Congress ended yesterday with the passage of a flurry of legislation, including the last remaining appropriations bills for fiscal year 1998. Congress also passed a four-day-old bill to exempt the National Research Council from the Federal Advisory Committee Act. In recent weeks, bills have been introduced to protect the producers of databases from "unfair use" and to create a National Institute for the Environment within NSF. In addition, the House passed several pieces of legislation on nuclear waste and land sovereignty issues.

Yesterday, Congress went home for the holidays, ending the first session of the 105th Congress. The second session will begin on January 26th when the House returns with the Senate expected back a day later. Although much of the attention over the past several months has been focused on the appropriations process, action has also occurred on a number of issues outside that process. After a brief wrap-up on appropriations, this update focuses on several issues relating to environmental, resource, and science policy. These synopses are taken from longer updates that appear on the AGI web site (www.agiweb.org) under "Government Affairs."

Appropriations Process Over...Almost!

Working under a fifth continuing resolution, Congress was able to complete work on the last of the thirteen fiscal year 1998 appropriations bills on November 13. Although President Clinton is expected to sign all the bills, individual provisions not included in his budget request could still fall victim to a line-item veto.

After passing the Senate on November 9, the Commerce, State, and Judiciary conference bill, which funds NOAA, was finally passed by the House on November 13 and now awaits the President's signature. The House passed the conference version of the Labor/HHS/Education bill, which includes increased funding for the Eisenhower Professional Development Program, on November 7 and the Senate followed by passing it the next day. President Clinton quickly signed it into law on November 12. Earlier today, Clinton signed the Interior bill but has yet to act on the Agriculture bill.

New Law Exempts Academy From Public Disclosure Requirements

Congress appears to have spared the National Research Council from having to comply with a November 3 Supreme Court ruling that held its committees subject to the Federal Advisory Committee Act (FACA). Without comment, the Justices let stand a lower court ruling that Research Council committee meetings and deliberations must be open to the public. FACA also assigns government officials certain roles in committee operations. The case arose when animal rights activists sued for access to a committee preparing a federally funded study on the care of laboratory animals.

The National Research Council is the principal operating arm of the National Academy of Science and its sister organizations the National Academy of Engineering and the Institute of Medicine (all referred to collectively as "the Academy"), which are congressionally chartered but not part of the federal government. The Academy argued that FACA would give the government "an intolerable degree of control over the Academy's committees," undermine the credibility of its reports, and slow response time. Executive Director William Colglazier told the New York Times that the ruling "is certainly a crisis for the Academy, probably the most serious we have ever faced."

In an unusually quick process, Rep. Steve Horn (R-CA) introduced H.R. 2977, which amends FACA to exclude the National Academy of Science and the National Academy of Public Administration, on November 9. The bill passed the House the following day and the Senate on November 13. The bill has been presented to the President, who has indicated that he will sign it. In a letter to Congress, Franklin Raines, director of the White House Office of Management and Budget, stated that the Administration believes that FACA was not intended to include the Academy.

Bill Introduced to Create Environment Institute within NSF

On November 7, Rep. Neil Abercrombie (D-HI) and Rep. Jim Saxton (R-NJ), along with 33 additional cosponsors, introduced H.R. 2914, the Sound Science for the Environment Act. The bill authorizes and directs the National Science Foundation to establish a National Institute for the Environment (NIE). According to the bill, funding for NIE would come from congressional appropriations, other federal agencies, states, and private institutions. No money would be taken from existing NSF programs to fund NIE.

The semi-autonomous NIE would assess the current state of knowledge on environmental issues; award competitively peer-reviewed grants for research; establish a National Library for the Environment with "easy to
use, electronic, state-of-the-art system for scientists, decision makers and the public; and sponsor education and training programs to improve scientific literacy. The bill has been referred to the House Science Committee to be taken up after Congress returns in January.

**Database Protection Bill Introduced**

On October 9th, Rep. Howard Coble (R-NC) introduced H.R. 2652, the Collections of Information Antipiracy Act, a bill "to prevent the misappropriation of collections of information." The bill would create new intellectual property protections for databases, particularly electronic ones, that are not otherwise covered by existing copyright law. Similar legislation introduced in the last Congress (H.R. 3531) produced a storm of criticism from the scientific community, and it remains to be seen whether the new bill fully addresses their concerns. Coble chairs the House Judiciary Subcommittee on Courts and Intellectual Property, which held a hearing on this legislation on October 23rd.

When he introduced the bill, Coble stated that in crafting the new bill, he was "particularly mindful of the concerns of the library, scientific, research, and educational communities" in drafting the bill. He went on to say that the concerns raised over H.R. 3531 had been alleviated in the new bill "by specifically allowing access and use for those purposes, while still providing necessary protection to ensure continued investment and production of collections of information." Unlike H.R. 3531, which created a new, special form of protection for databases, the new bill instead prohibits the unfair use of the data collected in a database.

This issue has been the source of major concern within the scientific community, including AGI and a number of its Member Societies. On October 31st, the AAAS Board of Directors unanimously voted to approve a statement on database protection that will now go to the presidents of the 235 AAAS affiliate societies for their endorsement. The statement and related information on this issue is available through the AGI website.

**Nuclear Waste Legislation Moves Ahead on Two Fronts**

On October 30th, operating under restrictive rules that limit debate and allow the leadership to choose which amendments may be offered, the House of Representatives passed H.R. 1270 by a veto-proof majority of 307-120. Attention now shifts back to the Senate, which passed a similar bill, S. 104, in April that was two votes shy of the two-thirds majority necessary to override the threatened presidential veto. The House vote took place on a version of the bill passed by the Commerce Committee. The Resources Committee had produced a competing version that included several provisions added by the Nevada delegation, but that version was blocked by House leadership.

Earlier in October, the House passed H.R. 629, which would allow a low-level radioactive waste compact between Texas, Maine, and Vermont to go forward. The measure passed over objections from some of the Texas delegation who raised environmental justice concerns. Companion legislation in the Senate is awaiting a floor vote.

**Progress on Land Sovereignty Bills**

On October 7th, the House of Representatives passed two bills dealing with public lands. The first, H.R. 901, the American Land Sovereignty Protection Act, would end US participation in the United Nations Biosphere Reserves and World Heritage programs and eliminate the designation of 67 sites in the United States unless they are approved by Congress. The legislation, which passed the House by 236-191 vote, must now pass the Senate before going to the President. The Administration is firmly opposed to the bill and issued a veto threat on September 23rd.

The other bill, passed by a similar margin, is H.R. 1127, the National Monument Fairness Act of 1997. This legislation, sponsored by House parks subcommittee Chairman Jim Hansen (R-Utah), would limit the President's ability to designate national monuments under the Antiquities Act of 1906. The bill is a reaction to President Clinton's designation of the Grand Staircase-Escalante National Monument in Utah last year in order to halt resource development in the area, a move vigorously opposed by Utah officials. H.R. 1127 requires approval from Congress and the governor and legislature of the affected state(s) for proposed monuments larger than 5,000 acres. The bill must now pass the Senate before going to the President. The Administration is firmly opposed to the bill and has promised a veto. In a related development, the White House recently complied with a subpoena to give documents related to the President's 1996 designation of the Grand Staircase Monument to the House Resources Committee as part of an ongoing investigation.

Monthly and special updates go out to members of the AGI Government Affairs Program (GAP) Advisory Committee as well as the leadership of AGI's member societies and other interested geoscientists as part of a continuing effort to improve communications between GAP and the geoscience community that it serves. Prior updates can be found on the AGI web site under "Government Affairs" <http://www.agiweb.org>. For additional information on specific policy issues, please visit the web site or contact us directly at <govt@agi-web.org> or (703) 379-2480.
Report Ownership and
ASFE Contract Reference Guide
(Columm 23, October, ’97)

Peter H. Dohms, CGP-7141, wrote, “I just read and was pleased with the discussion of the ASFE Contract Reference Guide in Column 23. Thanks also for the plug.

“Two items:

1. While ASFE began life in 1974 as “Associated Soil & Foundation Engineers,” that name went by the boards long ago (before 1990). The formal name, in use today, is:

ASFE - Professional Firms Practicing in the Geosciences

Yes, we get a lot of confusion over the name and periodically we struggle with how to change it without losing the ASFE name recognition (one wag suggested that ASFE means Against Standards For Engineers, in reference to the ASTM fracas. If you haven’t heard about that, let me know and I’ll fill you in).

2. In my discussion of who “owned” the report, the position I adopted was in no way meant to be in conflict with the rules of the AIPG Code of Ethics. I see those requirements as being a parallel issue, not a conflicting issue. That was why I made the comments about the moral (and perhaps also contractual—see the Contract Reference Guide) duty of the consultant to the former client. The sections you quoted from the Code of Ethics do not conflict in any way with the language I quoted about ownership of instruments of service. I would suggest, however, that if a consultant had a client who insisted that the products of the work belonged to him (the client) that the consultant negotiate some sort of “product liability” release as well as language in the contract and the report that would protect the consultant from it later coming back to haunt him/her. This could be accomplished with “sunset” dates, a notation that third parties are obligated to contact the consultant prior to any later use (with the consultant retaining the right to review the situation for changed circumstances/new information and, more importantly, retaining the right to make appropriate modifications as the consultant [in his/her sole and exclusive judgement] deems necessary). These safeguards are unfortunately necessary in today’s society (as your story about the odyssey [no, not all consulting firms are like that] made clear).”

I appreciate Dohms’ comments and clarifications. A thoughtful review of the “report ownership” discussion in column 23 along with the pertinent portions of the Contract Reference Guide and the foregoing clarifications suggest that things are not as simple as they seem on the first pass. This reflects inherent tension between differing ownership interests in a report and the results of litigation resulting from this tension. Like most of the good subjects discussed in this column, issues are not black and white.

Ethics of Diversity

The following observations were submitted by a member who works for a government agency. Anonymity was requested and granted. The ideas are more important than the diversity characteristics (see below) possessed by the author.

“In my government agency, ‘diversity’ is not defined. By usage and by context it is essentially representation of all customer groups of people with vaguely labeled characteristics, such as age, ‘color,’ religion, creed, disability, marital status, veteran status, national origin, race, and gender or sexual orientation. My agency wishes that we (our staff profiles and advisory committees) ‘look’ more like our customers.

“The first goal of the Diversity Plan states: We will have a broad and diverse applicant pool for hiring, promotion, and transfer opportunities. Key performance indicators for this goal include a demographic profile demonstrating increased diversity, reflecting the population we serve and higher percentages of people from under-represented communities who are hired, promoted, and given transfer opportunities (move to cushier jobs).”

“The second goal is that programs and activities will reflect the ‘perspectives’ of the constituencies we serve. Key performance indicators include increased diversity among members of advisory councils and committees and internal advisory groups.

“Goal three is not a contentious issue: diversity of background, abilities, etc. will be considered a valued and primary strength of the agency.

“Among the search and hire process suggestions is ‘...Managers should submit a candidate summary indicating, to the extent possible, the diversity (gender, ethnicity, etc.) of candidates in the selection pool. Key information provided in resumes and cover letters, such as professional and fraternal affiliations and self-identification, should be used to develop data on the pool.’
YET

"Every publication of my agency states: 'this agency) does not discriminate on the basis of age, color, religion, creed, disability, marital status, veteran status, national origin, race, gender or sexual orientation in...the programs and activities which it operates...’"

Caught betwixt the rock and the hard place. Our federally employed members deal with the Freedom of Information Act, which supports the position that all records possessed by the government should be open to the public, and the Privacy Act, which supports the position that all information about individuals is non-public. There are criminal penalties for the violation of both Acts. Similar statutes and rules affect those employed at other governmental levels.

As in the discussion of report ownership above, conflicting interests create ethically difficult situations. None of the foregoing topics are strictly geologic in character yet they represent significant aspects of many of our professional lives. The ethical issues are both clearly present and debatable in application. How do you navigate through such fog-shrouded, shoal-filled waters?

The Truth, the Whole True; Lies, Damned Lies, Statistics; and Spin

There is a connection between all the words in the heading, what is true and what is not. You can present strictly true statements and yet effectively lie. In the securities laws, this is called omission to state all the facts necessary to make the statements made, in light of the circumstances under which they were made, not misleading (or in effect tell lie); the failure to state the whole truth. Several recent events including conversations with a couple of colleagues about professional ethics and recent news articles about the perils of dihydrogen monoxide focused my attention on this topic.

Consider the following statement by the spokesman for a government research lab issuing an EIS covering contamination of the groundwater resulting from the operation of the lab over the years. "There is no evidence that dilithium contamination will ever be a problem." How do you read that statement? What is the "spin"? Does it say that dilithium contamination has been studied and concluded that no problems exist? Or does it say that dilithium contamination has not been studied and therefore no evidence exists that it will be a problem, or that it won’t. In fact the quoted statement fails to clearly state the whole truth so that the answers to the questions are ambiguous. One can interpret the statement either way depending on how one weighs "no evidence" and "no problem."

Because of the penalties for violating environmental protection laws, enormous pressure exists to present findings those in charge want to hear. The quoted statement is strictly true, and certainly is the sort of statement those in charge like to hear. But is it an ethical statement?

Another, but related problem faced by government scientists (and others) is the production of scientifically sound answers by politically dictated deadlines, which tend to be set for reasons not concerned with the amount of time, including the serendipitous success and failure, inherent in research, for example, adequately investigating the impact of dilithium on the environment. How do ethically responsible geologists juggle the problem of doing adequate science within the time and budgetary restraints imposed on a project? Is this problem more difficult when the results will set regulatory standards?

A final example of truth, lies, and spin was recently resurrected by Nathan Zohner, 14, of Idaho Falls, Idaho. Zohner distributed a flyer with text more or less similar to that below to his classmates and took a poll about what should be done. Most of those polled felt that DHMO should be banned. I got the text from the internet a couple of years ago. My experience with it is similar to Zohner’s, though I never performed as rigorous a test. Most of the non-scientists to whom I showed it failed to see the joke.

The point is that while the assertions are strictly true, the whole spin is a lie. As a joke, it’s one thing. But as viewed by an unfortunately large percentage of the population, this is no joking matter. How many scares based on little science have disrupted this country?

Ban Dihydrogen Monoxide!

The Invisible Killer:

Dihydrogen monoxide is colorless, odorless, tasteless, and kills uncounted thousands of people every year. Most of these deaths are cause by inhalation of DHMO, but the dangers of dihydrogen monoxide do not end there. Symptoms of DHMO ingestion can include excessive sweating and urination and a possible bloated feeling, nausea, vomiting, and body electrolyte imbalance. For those who have become dependent, DHMO withdrawal means certain death.

Dihydrogen Monoxide:

- Is also known as hydric acid, and is a major component of acid rain.
- Contributes to the greenhouse effect.
- May cause severe burns.
- Accelerates corrosion and rusting of many metals.
- May cause electrical failures and decreased effectiveness of automobile brakes.
- Has been found in excised tumors of terminal cancer patients.
Contamination is Reaching Epidemic Proportions!

Quantities of dihydrogen monoxide have been found in almost every stream, lake, and reservoir in America today. But the pollution is global, and the contaminant has even been found in Antarctic ice. In the Midwest alone DHMO has caused millions of dollars in property damage.

Despite the Danger, Dihydrogen Monoxide is Often Used:
- As an industrial solvent and coolant.
- In nuclear power plants.
- In the production of Styrofoam.
- As a fire retardant.
- In many forms of cruel animal research.
- In the distribution of pesticides. Even after washing, produce remains contaminated by this chemical.
- As an additive in certain “junk foods” and other food products.

Waste DHMO is allowed to pollute our precious lakes, rivers, stream, and the ocean itself. The impact on wildlife is extreme, and we cannot afford to ignore it any longer!

The Horror must Be Stopped!!

The American government has refused to ban the production, distribution, or use this damaging chemical due to its “importance to the economic health of the nation.” In fact, the Navy and other military organizations are conducting experiments with DHMO, and designing multi-billion dollar devices to control and utilize it during “warfare” situations. Hundreds of military research facilities receive tons of it through a highly sophisticated underground distribution network. Many store large quantities for later use.

Minerals Exploration Coalition Engages New Executive Director

The Minerals Exploration Coalition (MEC) announces the appointment of Kathleen Benedetto, CPG-7853, (Past AIPG National Secretary), as the new Executive Director of the organization. The Minerals Exploration Coalition is an advocate on public policy issues involving the access to, and the use of, public lands of the United States for mineral exploration and development. Membership includes over 30 corporations, represents a diverse group of individuals and companies engaged in mineral exploration on the public lands.

Tucson Gem and Mineral Show

The Arizona section of AIPG invites you to join us at our section activities scheduled during the Tucson Gem and Mineral Show. Arizona section activities include sponsoring a public talk by a NASA researcher who is bringing the Mars meteorite with signs of life (AHS84-001) and possibly a prototype of the Mars rover, a section meeting with the 1998 AIPG National President Stephen Testa as the featured speaker, a “behind the scenes” tour of the Tucson Gem and Mineral Show lead by AIPG member Erick Weiland, and an evening dinner.

The Gem and Mineral Show will start with wholesaler’s shows the week of February 2nd, followed by the public show at the Tucson Convention Center February 12-15. AIPG activities will start on Thursday, February 12 with the NASA talk. The section meeting and tour will be on Saturday, February 14. The date of the dinner has not been determined at the time of this submital, but will be either Friday or Saturday night. All AIPG members and their guests are welcome at the activities.

For additional information please contact the following:

General Show Information:
www.rockhounds.com/rockshop/scripts/toc/toc.cgi

Section Activities: 1998 Arizona section president Richard Allen (602) 481-9001 or rxallen@msn.com
Dawn Garcia, Tucson AIPG member (520) 326-1898 or kdgarci@flash.net

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- Sending a slide or photograph for the cover of the magazine
- Volunteering to become an Associate Editor (peer-review articles)
- Advertising in The Professional Geologist and/or the annual Membership Directory

For more information contact National Headquarters at (303) 431-0831 or e-mail: aipg@aipg.com.

We hope to hear from you soon.
34th National AIPG Meeting
HOUSTON, TEXAS

October 8-11, 1997
The 21st Century Professional Geologist -
Training, Credential, Business and Political Considerations

The Texas AIPG Section is pleased to announce that the 1997 Annual AIPG Conference was held in Houston on October 7-11th at the Double Tree-Post Oak Hotel in the Galleria area of Houston. The weather was cool with frequent, warm rains. The Conference went well, although attendance was not up to expectations. The field trips were cancelled as a result of flooding in the areas to be visited.

Approximately 60 papers were presented on oil and gas, environmental management, and mining topics. Photographs of the Special Presentations to Mrs. Carolyn Shoemaker, of USGS, to Dr. David S. McKay, of NASA, and to Dr. Wayne A. Pettyjohn, as well as selected speakers will be included in the Program Section of the AIPG Program website as they become available. The Final Program is available on the Texas Section website at http://www.elajet.com/AIPG/aipg.html.

The AIPG conference in Texas was not like the old days. Plenty of professional training, a few exhibits, plenty of discussions of issues, and appropriate diversity were available at the Conference.
Summary of the Executive Committee Meeting of AIPG

Frank W. Harrison, Jr., CPG-2500, Advisory Board Representative

The Executive Committee met at the annual meeting in Houston, Texas on October 8, 1997. All members of the Executive Committee were present.

The following are some of the significant actions taken by the Executive Committee as well as information concerning important issues which were reviewed or discussed.

1. A policy was established and notice is given to all Sections that the bylaws require that the National Treasurer or Executive Director be a signatory on the Section's bank account.

2. The request of the Missouri Section to host the 2001 National Convention in St. Louis, Missouri was approved. This will be the first meeting to be held jointly with the AEG. The schedule of confirmed National Conventions and their locations is as follows:
   - 1998 - Baton Rouge, Louisiana
   - 1999 - Anchorage Alaska
   - 2000 - Milwaukee, Wisconsin
   - 2001 - St. Louis, Missouri

Dr. M.B. Kumar, 1998 National Meeting Chairman of the Annual Convention to be held in Baton Rouge, reported that Steering Committee for the 30th Annual Convention is functioning well and has completed tentative arrangements for the convention. Dr. Kumar cordially invited all AIPG members to attend and enjoy Louisiana's famous "Cajun" hospitality.

3. Robert Colpitts, the Treasurer, reported that as of August 31, 1997, the assets of AIPG total $257,278.00 some $11,445.00 lower than last year, primarily due to capital expenditures for the iMIS System. The financial condition of the organization is healthy. Estimates are, as of August 31, 1997, that the budget for 1997 will be met.

4. The Executive Committee voted to continue sending membership cards to members when their payment is received.

5. After a lengthy discussion the Executive Committee adopted a motion to establish a Task Force to study and report on the feasibility and desirability of introducing requirements for continuing education for renewal of CPG, for examination for granting of certification, and for requiring periodic recertification.

6. A report was made to the Executive Committee by President Price on the successful "Fly-in" to Washington, D.C. and the Committee agreed to sponsor a "Washington Fly-in" in 1998.

7. A committee comprised of Frank W. Harrison, Tom Fails, Robert Font, and Bill Knight was appointed to explore with AAPG the possibility of a mutual reciprocal agreement relative to membership. The committee is to report back to the Executive Committee at its next meeting.

8. The Executive Committee was informed that application packages for the new categories of membership approved by the recent bylaw changes are available and are being distributed. There will be an application form included in the October TPG as a Pull-Out Section. The possibility of putting applications on the AIPG web page is being considered.

9. Upon request of the Executive Committee, Presidential Citation Awards will be available to Sections who wish to recognize those who have given long time service to the Section.

10. The Executive Committee approved the exchange of membership lists with other societies of AGI on the basis the lists would be for organizational use only.

11. The Executive Committee reviewed a letter from Bill Knight informing the committee of his planned retirement at the end of his current contract term, April 30, 1999, approximately 19 months. The Executive Committee acknowledged the planned retirement and President Price will appoint a committee of former presidents to begin a search for a new director.

12. The final item on the agenda was a brainstorming session led by President Price. Members of the Executive Committee along with the Headquarters Staff aired such issues as annual meeting policies, revision of the Code of Ethics, membership recruitment, AIPG publications, membership services, better communication with Sections, and many other topics. A final draft of the recommendations and new ideas to come out of this session will be drawn up and submitted to the 1998 Executive Committee for its consideration.
Combined AIPG Advisory Board Section Reports 1997 and 1998

Alaska Section
Robert N. Braunstein, Section President and Delegate

A) Recent Successful Meetings and Programs:
- The Alaska Section sent Robert N. Braunstein to the May 1997 Washington Fly-In. Mr. Braunstein reports that this was a generally successful trip, especially the meetings with Senators Murkowski and Stevens from Alaska, in support of the USGS Geologic Mapping Bill. Our Section continued its tradition of holding monthly lunch meetings (September through May), with invited speakers, who presented topics including volcanoes, the status of the Alaska Division of Geophysical and Geological Survey, business grant opportunities, oil exploration on the North Slope, and dinosaurs.

B) Significant plans for the future:
- The 1999 annual meeting steering committee has been meeting twice per month of late, to lay the foundation for what we are sure will prove one of the most exciting AIPG annual meetings.
- We have tentatively selected a theme for the 1999 annual meeting: "Frontiers in Global Geology - Looking Forward to the Next Millenium". We look forward to preparing an interesting and exciting annual meeting for our colleagues. We also anticipate continued slow growth in the active membership of our Section.

Arizona Section
William M. Greenslade, Section President
Richard Allen, 1997 Section Delegate

A) Recent successful meetings and programs:
- In 1997 we have had three meetings: February in Tucson for a dinner at Dawn Garcia’s and a tour of the Tucson Gem and Mineral Show, July in Flagstaff for a field trip to local volcanic areas and Meteor Crater, and October in Jerome for a field trip among Precambrian massive sulphide deposits and a scenic train ride through the Verde Canyon. Additionally, we took part in a USGS Water Resources Division internal discussion to improve communications, formed a committee to assess the Arizona Geological Survey, and took part in the Washington, D.C. Fly-in.

B) Significant plans for the future:
- Goals for 1998 include an increase in membership of 100%, participation in AGI’s Earth Science Week in October, and further development and marketing of our Speakers Bureau. Current meetings planned are those to coincide with the Tucson Gem Show in February, and a tentative field trip to the Pinacate Volcanic field in Sonora in the spring. Also, possible contact with geologists in Sonora, Mexico.

California Section
James A. Jacobs, Section President and Delegate

A) Recent successful meetings and programs:
- Teaming with other local geology groups. November, 1996: Meeting with Dr. John Cherry regarding remediation of solvents using innovative methods. September, 1997: Workshop with Dr. Jay Lehr on Phytoremediation. Evening lecture on the state of the industry. Summer field trip to Sierra gold country.

B) Significant plans for the future:
- Providing a leading role in the foundation of the California Council of Geoscience Organizations, a lobbying group.

Carolina Section
Alexander S. Glover, Section President

A) Recent successful meetings and programs:
- Spring - joint meeting with SME (Society of Mining Engineers) and AEG (Association of Engineering Geologists), topics covering Environmental Geology (Regulation; Mining Geology Regulation; General Geology. Meeting was held at historic Reed Gold Mine near Concord, North Carolina, first reported gold mining in the U.S.

Colorado Section
Patricia C. Beaver, Section President
Susan M. Landen, 1997 Section Delegate

A) Recent successful meetings and programs:
- The Section has held ten regular meetings during the year. Nine were in the Denver metropolitan area, area most of our members reside. Our annual field trip and meeting was held on the Western Slope in June. Monthly Executive Committee meetings are held separately throughout the year.
- The annual Legislative Reception was held in late January, just after our new lobbyist was hired. We had a great turnout of 30 Legislators but only 35 geologists from AIPG and other organizations, primarily due to the Prospect Fair for petroleum geologists in Houston. There were 16 co-hosts and 10 exhibitors. This annual event has increased the stature of the Section in the Colorado Legislature.
- At our annual awards ceremony, the Colorado Geologic Heritage Award was presented to seven Legislators who have been strong supporters of the geologic community in Colorado. Two special awards were presented to the House and Senate sponsors of a bill to provide additional funding to the Colorado Geological Survey and other natural resources agencies.
- The Section publishes 11 issues of The Colorado Professional Geologist, the Section newsletter, per year. During the current year advertising has been consistent and is covering a significant part of the publication cost.
- The Section’s first Student Day was highly successful, with participation from about 50 students. In cooperation with the Wyoming Section, a full one-day program on professionalism and career guidance was offered to geology students from colleges in both states. It hoped that one or more student sections may evolve from this event which will be held every other year.
- The Continuing Education Committee sponsored an 8 hour course on “The Internet for Geologists” which was well-attended by members and non-member geologists.
• The Section participated in Colorado State University's Career Day, providing geologists from various disciplines as speakers.

B) Significant plans for the future:
• The Continuing Education Committee, intended to be a long-term program, has an objective to provide Continuing Education opportunities to all geologists and geological education to members of governmental and other groups (e.g. Realtors) who often have a need for geological information.
• The Section has formed an "Inter-society Coordinating Counsel" to exchange ideas, positions, and concerns regarding geological/political issues. The objective is to build a consensus and unified position on political issues that could affect geologists or involve geology. Two meetings have been held, with an upcoming social gathering planned.

Florida Section
Mark Stephens, Section President
A) Recent successful meetings and programs:
• Technology Transfer Meetings
• Participation and joint sponsorship in the annual Regional Phosphate Conference.
• Financial assistance to AWG to prepare mineral kits for students.
• Financial assistance to the Florida Association of Professional Geologists for lobbying efforts.

B) Significant plans for the future:
• Continue the above.
• Joint meetings with other geological associations in Florida.
• Lobbying for privatization of the Florida Board of Professional Regulation for Geologists.
• Field camp scholarships.

Georgia Section
Harold Gill, Section President
Ken Nelson, 1997 Section Delegate
A) Recent successful meetings and program:
• Georgia Section of AIGP was instrumental in the formation of the "Council of Georgia Earth Science Societies" on June 25, 1997. Six Earth Science Organizations in Georgia belong to this group. They include (1) AIGP Georgia Section (2) AEG Georgia Section (3) Atlanta Geological Society (4) EPA Geological Society Region IV (5) Georgia Geological Society and (6) Georgia Ground Water Association. Three of the screening members of the council are AIGP members.

B) Significant plans for the future:
• Increase membership when new levels of membership are authorized.

Kentucky Section
Ronald E. Alexander, Section President and Delegate
A) Recent successful meetings and programs:
• Kentucky Section's Spring banquet was held on Friday, April 18 and was attended by 35 members and guests.
• John Dragonetti senior advisor to AGI's Governmental Affairs Program and AIGP member as the guest speaker. Mr. Dragonetti spoke on trends in the profession and the importance of political activism and its impact on decision-making within state and federal government. A

revised Section directory was published in the Spring with over 900 copies sent to state and county government members, legislators, regulatory agencies, attorneys, oil/coal resource associations, registered geologists, etc.

B) Significant plans for the future:
• The Sections' Fall meeting, typically a continuing education seminar will be held on Saturday, October 25. The topic will be computer applications in geology and will include internet offerings. The Section has continued to discuss hosting a Career Day at a state university and hopes to schedule such in the coming year.

Louisiana Section
David P. Elfert, Section President
Frank Harrison, 1997 Section Delegate
A) Recent successful meetings and programs:
• No response.

B) Significant plans for the future:
• Try to increase membership with new categories of members.

Michigan Section
Mark Sweetman, Section President and Delegate
A) Recent successful meeting and programs:
• Spring Quarterly meeting, speaker: Mr. Jim Janicek, Michigan Department of Environmental Quality.
• Summer Quarterly meeting, joint session with Michigan Association of Environmental Professionals, Speaker: Mr. Daniel Rogers, P.G., Geology of Southeastern Michigan.
• Involvement of Section with MDEQ rules making work groups.

B) Significant plans for the future:
• Additional Joint Meetings with MAEP. Also, continued involvement with MDEQ rules-making work groups.

Minnesota Section
Gary E. van Guilder, Section President
Paul Putzier, 1997 Section Delegate
A) Recent successful meetings and programs:
• The Minnesota Section has continued its tradition of monthly meetings, January through May and October through December, including monthly executive board meetings throughout the year.
• The Minnesota Section was honored to have Jonathan Price as our guest speaker on January 7, 1997. His speech was titled "Issues Facing the Geologic Profession". Our Section also had the opportunity to discuss the current bylaw changes and the concerns individuals had and how the changes would be implemented.
• February 11, 1997, Dr. Calvin Alexander, University of Minnesota "Hydrogeology of Southeastern Minnesota, the Use of Tracers in Karst Topography".
• March 4, 1997, John Seaberg, CPG and Andrew Steitz, Minnesota Pollution Control Agency "Twin City Metro Area Regional Groundwater Model".
• April 1, 1997, Val Chandler, Minnesota Geologic Survey "Gravity Survey and Buried Valleys".
• May 6, 1997 monthly meeting, awarded $500 scholarship grant to deserving geology student from the University of Minnesota.
• April 3, 1997, the Minnesota Registration of Geoscience bill was enacted. The Minnesota Section organized lob-
bying efforts and meetings with other organizations to assist in successfully passing the bill.

- 1st Annual Minnesota Teachers Minerals Education Workshop was held August 5-7, 1997. Minnesota Section contributed funds, organized the financing responsibilities and attended the workshop.
- All executive board meetings have been held at the Minnesota State Senate and House office building. This gave us an excellent opportunity to meet State Senators and Representatives.
- AIPG field trip September 26-27, 1997, Karst of Southeastern Minnesota including speakers from the Iowa, Minnesota and Wisconsin geological surveys and the Minnesota Pollution Control Agency. This year’s field trip was also hosted by AWG and the Minnesota Ground Water Association.

B) Significant plans for the future:
- To work within one institution and with other organizations whose members are affected by the Registration of Geoscience to strengthen lobbying efforts at the State Capitol.
- A Minnesota Section Continuing Education committee was established to have direct input to the Minnesota State Board of Registration in efforts at the State Capitol.
- The Section has the opportunity to assist in the planning and funding of a Geologic Interpretive center. Over the past ten years Minnesota Section members and a lobbyist have coordinated the efforts. The state recently approved funds for the design.
- Strive to invite members and non-members to our monthly meetings.
- Recruit new active members to assist in building the local membership.
- To establish a committee whose goal is to bring our profession to the classroom. The committee will organize classroom visits to give geologic presentations.

Mississippi Section
Danny W. Harrelson, Section President

A) Recent successful meetings and programs:
- Held meeting at conclusion of and with members of Mississippi Geologist Registration Task Force Meeting in January.
- Provided financial assistance to the Mississippi Geological Registration Task Force for Mississippi's registration effort.
- Five of the 20-25 members of the Mississippi Geological Registration Task Force were AIPG members. The efforts of the Task Force resulted in passage and enactment of a registration act.
- Upon passage and enactment of the Mississippi Registered Geologist Practice Act, one of the five board members appointed by Mississippi's Governor is an AIPG member.

B) Significant plans for the future:
- Joint meeting with Mississippi Geological Society planned for January.
- Meet in Biloxi in May and host the Mississippi State Board of Registered Professional Geologists and the National Association of State Boards of Geologists Executive Committee.
- Seek additional joint meetings with other organizations.

Missouri Section
C. George Lynn, Section President
John Howard, 1997 Section Delegate

A) Recent successful meetings and programs:
- The Missouri Section of AIPG held two meetings in 1997. On May 10, 1997, the Missouri Section held our Spring field trip in conjunction with the St. Louis Section of AEG. The day started with a breakfast business meeting for the executive committee, and was followed by visits to two locations in the St. Louis area.
- The first location was the Bussen Quarry where Ordovician-age limestone is actively surface-mined to support the local construction industry. Visits were made to several key outcrops in the quarry to view stratigraphic relationships and gain an understanding of the economic value of the different rock types. Equipment operations were also visited, which provided insight on the mechanics and costs associated with operating a stone quarry.
- At the second stop on the field trip, participants were given the opportunity to examine the same lithologic units exposed in Bussen quarry, but with some distinct differences. At this location, known as the Eureka-house Springs Anticline, a broad monocline in the Ordovician limestone is exposed along an excellent roadcut. This is one of the most impressive structural features in the St. Louis area and also contains discrete bentonite layers unique to the area. The field trip concluded with a picnic at a nearby park where all 50 in attendance participated in a general discussion of the business climate for geologists in Missouri.
- On September 19, 1997, the Missouri Section will hold our second meeting as part of the Association of Missouri Geologists’ Fall Field Trip. This is our annual business meeting and will cover a variety of subjects important to the Section and committee leaders, bylaws changes, and membership opportunities.

B) Significant Plans for the Future:
- Our plans include maintaining the two-meeting and field trip schedule for 1998, with special emphasis on joint activities that include the AEG and AMG members. Because our Section is small, we benefit from our association with these two organizations.
- As in the past years, we will continue to monitor legislative activities in the state that impact the profession and our members, although the level of activity has decreased since the successful passage of registration in 1995. We will work closely with the Missouri Board of Geology Registration to promote the science, and work to increase Section membership. We are currently considering jointly hosting hosting the National Meeting in 2001 with the Illinois/Indiana Sections. We hope to make a decision on our ability to host the event before the end of the year.

Nevada Section
Earl W. Abbott, Section President
Mark Stock, 1997 Section Delegate

A) Recent successful meetings and programs:
- University Nevada Reno - Career Day, 4/19/97, 50 attendees.
• Mammoth Mountain/Long Valley Caldera Field Trip - 9/26-28/97, 32 attendees.
• Mining Industry Outlook - 1997 - 12/18/96, 75 attendees.

B) Significant plans for the future:
• Mining Industry Outlook - 1998 - 12/18/97, estimated 125 attendees.
• Career Days at University Nevada Reno and University Nevada has Las Vegas - 4/98, estimated 50 attendees each.
• "Advanced Structural Geology" Short Course - 9 days in late May, 1998, estimated 30 attendees.
• "Geology and Mineral Resources of the Wine County, Napa and Sonoma Counties, California" - Field Trip.
• "Mining Districts of the Nevada Test Site" - Field Trip, October/November, 1998.

New Mexico Section
Ralph D. Gruebel, Section President

A) Recent successful meetings and programs:
• During 1997 the New Mexico Section continued to become more organized so that we could provide better service to Section members and present a professional image to the public and the geologic community. This year we had each committee chair filled with different individuals so that no one was overburdened. The Section is still working on developing a meeting format that will interest Section members to attend the meetings. This past year we used a format of quarterly meetings held in communities where there is a larger than normal contingent of members in the town and surrounding area. Meetings were scheduled for Albuquerque, Socorro, Santa Fe, and the annual Section meeting in Roswell. At each meeting there is a geologic related presentation followed by a brief business meeting to address old and new business. We have had only one meeting (Albuquerque) where there was any substantial attendance (18/125 Section members).
• Finances improved during 1997. As of September 1, 1997 we had approximately $1,800.00 in our account. To support the newsletter we continued selling advertising space. To date we have sold enough advertising to support the publication of the newsletter for 1997. We are still looking for sponsors for newsletter postage. We are also looking at ways to secure funding for other Section activities. The following is an outline of the New Mexico Section’s 1997 activity highlights.

• Membership - During the first nine months of 1997 there has been an increased interest in AIPG among the geologic community. There have been numerous requests for membership applications. Currently there are between 15 and 20 application packets/applications in the screening process. Between the follow-up efforts within the Section and at National AIPG we anticipate a significant membership increase by year end.

Newsletter - The New Mexico Professional Geologist.
During the 1996 annual Section meeting we decided to go to quarterly newsletter publication. The newsletter is sent to members, advertisers and the regional geological societies. The publications includes:
• presidents message
• letters to the editor
• regular monthly Section informational news
• geological event calendar for the state
• committee reports

• feature articles
• articles on how to use the Internet as a resource and tool, and advertising.

B) Significant plans for the future:
• Starting in 1998 we will have a managing editor for the newsletter that will be responsible for collecting the information to go into the publication. The managing editor will then submit the information to the production editor who will layout and process the publication. The managing editor position has been added to the Section’s election ballot. We are continuing to work towards building a newsletter staff that will spread the work load and increase member participation.
• Speakers Bureau - The Section is encouraging it’s members to become active with the Highlands University Visiting Scientist Program that provides speakers for the primary and secondary schools throughout New Mexico.
• 1997 Annual Section Meeting - The 1997 annual meeting is scheduled for November 15th in Roswell, New Mexico. The schedule includes Section planning, installation of new officers, service recognition, and presentations on mining, petroleum and environmental topics.
• Goals for 1998 - 1998 will be a challenging year as we continue to secure more participation in Section decision-making and activities. Our goal is to maintain the current level of Section activity while:
  • expanding member participation on Section committees,
  • continuing to develop draft legislation for a licensure act, and
  • increase sales of advertising in the Section newsletter.

Northeast Section
Curtis Kraemer, Section President

A) Recent successful meetings and programs:
• On May 20, 1997, the Northeast Section co-sponsored (along with the New York-Philadelphia Section of AEG and the Geological Association of New Jersey) a Symposium on the Professional Licensing/Registration of Geologists in New Jersey. Presentations were made by Robert Jordan, Delaware State Geologist, and Richard Wright, Member of the Pennsylvania State Registration Board for Professional Engineers, Land Surveyors and Geologists, and William Kelly, President of the New York State Council of Professional Geologists. The meeting was well attended and there is considerable interest in licensing in New Jersey (after we push NY through).

B) Significant plans for the future:
• Fully support the New York State Council of Professional Geologists in the drive for registration in New York. This is expected to take another two to three years, and is the Section’s primary focus at this time.
• Continue the financial growth of the Angelo Tagliacozzo Memorial Geologic Scholarship Trust Fund. The Section currently gives out $3,000 worth of scholarships every year out of its own treasury, and once the Trust fund has reached $50,000, it will be become self perpetuating.
• Establish affiliations with localized professional geologic organizations/develop Chapters within the Section.
Ohio Section
Richard J. Trippel, Section President
Tom Jenkins, 1997 Section Delegate

A) Recent successful meetings and programs:
- Wrapped up 1996 National Meeting and submitted final report.
- Met with State Engineers and Surveyor's Registration Board to discuss benefits of including geologists in their Board if we successfully pass registration legislation in the State of Ohio.
- Prepared for major drive to establish additional student chapters.

B) Significant plans for the future:
- Continue efforts to introduce registration bill in state legislature.
- Review necessity to revise Section bylaws.
- Explore opportunities to meet, and mingle with, engineers more often to share knowledge and concerns.

Oregon Section
John H. Haag, Section President

A) Recent successful meetings and programs:
- No reply

B) Significant plans for the future:
- Under current advisement among the membership.

Pennsylvania Section
Peggy L. Carpenter, Section President and Delegate

A) Recent successful meetings and programs:
- The Pennsylvania Section AIPG Home Page is up and running on the Internet; visit us at <http://www.aipg.org>! The page was developed with donated time by our Secretary, Bill Hammen, and our space was sponsored by the company he works for, CDS Solutions Group, Red Lion, Pennsylvania (717/569-7728).
- In conjunction with AIPG National and the Colorado School of Mines, the Pennsylvania Section successfully sponsored an operational management seminar February 28 - March 1, 1997.
- Our Section Annual Meeting is scheduled for September 27, 1997. An exciting interactive seminar on geologic report content and professionalism/ethics has been planned with speakers from four different perspectives in our industry, a PADEP representative, industry representative, an attorney, and a peer. Our four great speakers were lined up for the meeting by Wally Koster, Past Section President.
- Successful Eastern, Central, and Western Pennsylvania division meetings were held during the past year with various topics of discussion.
- We have manned booths at select local conferences to increase name recognition and obtain new applicants including the Northeast GSA meeting.

B) Significant plans for the future:
- An active Pennsylvania Section membership drive has just begun. The first step in this drive was a call in our newsletter to current members to bring in new members. Our second step was to obtain a copy of the Pennsylvania PG list, computerize the list, and mail the newsletter and annual meeting invitations to not only AIPG members, but to Pennsylvania PG's as well (if they have the credentials for a PG, they are most probably eligible for AIPG membership). One of the goals of our newsletter is to reinforce the importance of active AIPG membership. A continued membership push is planned including manning booths at select local conferences to increase name recognition and obtain new applicants.
- We are planning an electronic Pennsylvania job-mart on our webpage - we currently have the capability and hope to have the beginnings of this goal met by early 1998.
- In conjunction with AIPG National and the Colorado School of Mines, our second career development seminar is scheduled for October 24-25, 1997, entitled "Marketing Techniques and Contract Negotiation and Problems". Depending on continued interest, the Pennsylvania Section plans to sponsor the entire series of seminars offered by AIPG National at the rate of approximately two seminars per year (Spring and Fall).

South Dakota Section
Gary H. Haag, Section President

A) Recent successful meetings and programs:
- We conducted our annual meetings on March 19 during the South Dakota Department of Environment and Natural Resources 9th Annual Ground Water Quality Conference. Unfortunately due to the conference's location and our limited budget I was the only Section officer present. However, I did talk to several people who were interested in AIPG membership. We also discussed the possibility of having a field trip to the gold mining district in the Black Hills.

B) Significant plans for the future:
- Develop a newsletter.
- Encourage membership in the South Dakota Section.
- Annual fieldtrips to areas of geologic significance in the state.

Tennessee Section
James D. DeCinque, Section President
Larry Weber, 1997 Section Delegate

A) Recent successful meetings and programs:
- The West Region held a meeting on March 11, 1997. Several issues were discussed at the meeting including the plans for requiring Professionally Registered Geologists to complete testing for their registration. Dr. Sterns from Vanderbilt University led a discussion on the effects that geology and physical geography had on the outcome of a naval battle of Reelfoot Lake during the Civil War. The East Region continues to have success by holding combined monthly lunch meetings of the East Tennessee Geological Society and the AIPG Section.

B) Significant plans for the future:
- Plans continue to develop for creating student AIPG Chapters at both the Universities. Both of the Geology Departments have indicated interest in working with the local Sections. Work continues by AIPG members to create interest in the Safford Society, a general, non-technical geological society for middle Tennessee geologists.

Texas Section
Larry Doyle, Section President and Delegate

A) Recent successful meetings and programs:
- The Texas Registration Bill failed for a third time. On 6 September, 1997 Representative Kent Grusendorf, who
called the point of order killing the bill, accepted our invitation to speak to the Texas Executive Committee to give us insight into his rationale for doing so. The meeting was open to all interested geoscientists. Those attending included members of the Registration Task Force, Dallas Geological Society, and others.

B) **Significant plans for the future:**

- Support registration in the 1999 Legislature. Request Registration Task Force members to continue for a fourth try. Learn from Mr. Grusendorf's insights. Ferret out any presently unknown influences that caused the bill to fail.
- Increase membership.
- Revitalize District Representative System.

**Wisconsin Section**

*David S. Voight, Section President*

*Jack Travis, 1997 Section Delegate*

A) **Recent successful meetings and programs:**

- Good attendance and interest shown at Spring Conference which focused on "Consultant Liability". The Wisconsin Section is providing financial support for the National ASBOG meeting, to be held in Madison in October. Wisconsin Section members presented a Student Education Workshop at the most recent GSA-North Central Section meeting.

B) **Significant plans for the future:**

- AIPG National 2000 meeting (planning)
- AIPG Open House at the State Capitol (November)
- Fall Section Meeting/Field Trip (November)
- Development of Wisconsin Section web page

**Summary of Recommendations from Section Reports**

During the 1997 Annual Meeting in Houston (Compiled from Section Reports to the Advisory Board) Seventeen Section reports were received and reviewed prior to the combined 1997 and 1998 Advisory Board meeting being held on October 9, 1997, as part of AIPG's annual meeting in Houston, Texas. A summary of responses regarding consideration for a dues increase, and ideas provided by each respective Section, is presented below.

**Support of a Dues Increase to Help Pay for Additional Services**

Out of 17 Section Reports, no Section approved outright a dues increase. However, 8 Sections responded that a dues increase would be considered providing there was tangible benefit to the membership, justification of need for additional funds relative to overall financial status of AIPG, clarification of what additional services are to be provided, the amount of the increase, and only if such additional funds are directed to the Sections.

The remaining 9 Sections either indicated very clearly that due to competition for funds from other geological organizations and inability for employers to fund such costs, among other factors, that an increase in dues would hinder growth. Some Sections suggested that a concerted nationwide effort to increase membership, with other means such as publications, should be implemented prior to consideration of a dues increase.

These responses are similar and consistent to those provided by the respective Sections during the 1996 Advisory Board Meeting held in Ohio.

Ideas for AIPG National and Headquarters to Better Serve the Sections and the Membership by Category:

**Communication**

- Better communication with AGI needs to be established
- Increase communication concerning pertinent issues
- National needs to be more active at Federal Level
- Consider/encourage establishment of a web page for each Section
- Consider increasing and dissemination of information to Sections via internet and e-mail
- Consider National effort to partner with other organizations (AEG, AAPG, SEG, etc.) Ass a means to strengthen and enhance the profession

**Membership Services**

- Concerted effort by Headquarters to stress benefits of AIPG
- Hold nationwide membership drive
- Keep paperwork flowing to keep interested parties informed
- National needs to communicate more frequently and timely with Sections about current issues so Sections can provide comment and input
- Develop geo-ethics studies
- National should report to Sections on meetings and actions of Executive Director, and share information, ideas and issues
- Maintain awareness of level of membership apathy

**Annual Meetings**

- Develop guidance for hosting the National meeting based on experience
- National provide guidance and suggestions (lessons learned)

**Membership Drive**

- Headquarters could help with establishment of geology career day activities at colleges/universities by inquiring, maybe via e-mail, which institutions would be interested in such program. Such a program could be coordinated by National but served locally.
- Complete revisions to membership application packages to minimize lag between requests and shipment to potential members

**Candidate for Membership Screening**

- Specifically develop guidelines pertaining to flexibility of Sections to approve/disapprove candidates lacking certain education requirements

**Certification**

- Compare and better clarify State certification/registration programs to AIPG certification
- Standardize geology registration/license tests
- Promote reciprocity between States
- Continue efforts to address member's requests for assistance with registration exam preparation in the form of a course prepared and given, or sponsored, by AIPG
AIPG’S HONORS AND AWARDS PROGRAM

The American Institute of Professional Geologists (AIPG) has a history of effective and outstanding service to the profession of geology. From its beginning in 1963, the Institute has emphasized the role that professional geologists play in this fascinating, changing, and highly complex world in which we live.

In an Institute such as this, there are so many highly motivated geologists contributing to the profession, the Institute, the public, and the nations in which we live and work that the identification of a select few for particular awards is a monumental task. The continued success of the Honors and Awards Program is dependent on an accessible nominating process and a diligent screening of those nominated. This is done by the Honors and Awards Committee.

Currently, there are six honors bestowed by the Institute: Ben H. Parker Memorial Medal, Martin Van CouVERING Memorial Award, John T. Galey, Sr., Memorial Public Service Award, Award of Honorary Membership, Outstanding Achievement Award, and Presidential Certificate of Merit.

1997 HONORS AND AWARDS COMMITTEE

Members of the Honors and Awards Committee

William L. Fisher, Chair
Charles J. Mankin
Russell G. Slayback
Stephen M. Testa

BEN H. PARKER MEMORIAL MEDAL

The Ben H. Parker Memorial Medal is the Institute’s most distinguished award. It was established by the Executive Committee in 1969 in posthumous honor of a truly great leader, who devoted much of his life to improving the quality of geology and geologists and the services they provide. The medal is awarded to individuals who have long records of distinguished and outstanding service to the profession.

The most important criterion for this medal is a continual record of contribution to the profession of geology. A wide variety of contributions can be considered, such as (a) the education and training of geologists, (b) professional development of geologists, (c) service to the Institute, (d) leadership in the surveillance of laws, rules, and regulations affecting geology, geologists, and the public, and (e) activity in local and regional affairs of geologists.

Citation for
Marcus E. Milling, Sr., CPG-4518
1997 Recipient of the
BEN H. PARKER MEMORIAL MEDAL

Some events prove to be critical and fundamental. One in recent years has been the remarkable revitalization of the American Geological Institute, our federation of earth scientists of which the American Institute of Professional Geologists is a prominent member. Coming on board in 1992 as the new Executive Director of AGI, it was Marcus E. Milling who engineered and effected this significant turnaround and who continues to advance AGI as a major force in the modern day earth sciences. Marcus has applied, in a most effective way, the basic skills and wide contacts he has developed over his varied career to bring AGI from debt to robust fiscal health, from a federation with too many disaffected member societies to one with highly supportive members, and to sustained growth with not only the addition of new societies but also the reaffiliation of several major societies. The impact, and perhaps even more importantly the potential impact, of AGI as a consolidating professional force during these times of change, is crucial to the health of our earth science professions. It especially reinforces the AIPG’s long-time commitment to professionalism and professional development.

Marcus Milling has brought a perceptive and clear vision to AGI and has enlarged several programs in geoscience education, in government affairs, and in training. Marcus has also established several new programs at AGI including the National Geoscience Data Repository System and the Russian Geoscience Training Program.

Marcus E. Milling, Sr. is a native of Galveston Island, a historical and unique part of Texas. He did his undergraduate work a short way up the coast at Lamar University in Beaumont and migrated to the University of Iowa where he
received an M.S. in Geology in 1964 and a Ph.D. in 1968. Marcus has been a long-time member of the Department’s Advisory Council at Iowa where he has also been named a Distinguished Alumnus.

In 1968, Marcus began a 12-year stint with Exxon Company USA, moving rapidly through the ranks to District Geologist. He played a major role in several important Gulf Coast Basin discoveries. Marcus developed a series of seismic stratigraphic models for exploring submarine fan deposits that has been used extensively by Exxon in worldwide exploration. In 1980, Marcus joined ARCO Oil and Gas Company as General Manager of Geological Research and later as Manager of ARCO’s Geological Exploration Staff.

After 20 years in the industry, Marcus was interested in a new challenge, and I was fortunate to lure him to The University of Texas at Austin as an Associate Director of the Bureau of Economic Geology. There he expanded and refocused our environmental and hazardous waste research programs. Marcus used his oil and gas background to initiate new industrial associate programs, including the prominent and now well-known Applied Geodynamics Laboratory at the Bureau. He worked with the U.S. Department of Energy and a number of public and private research interests to establish the Geoscience Institute for Oil and Gas Recovery Research, which was administered by the Bureau and directed by Marcus.

After five years of day-to-day association, it was with obvious reluctance that I saw Marcus leave to take the AGI post in 1992, but AGI needed help desperately, and many of us felt Marcus was the right person at the right time. He proved to be. His varied experience, both public and private, as a researcher, practitioner, and manager was to serve him well. But the real secrets of Dr. Milling’s success are his remarkable talents in working with people, his sense of direction with clearly defined agendas, and his uncanny ability to recognize quality in both people and products. The professions of the earth sciences owe much to Marcus and his dedicated, distinguished, and most of all, effective service.

The Ben H. Parker Memorial Medal is this Institute’s most distinguished award and is to be given to individuals who have long records of distinguished and outstanding service to the profession. Marcus Milling thoroughly meets these high standards.

William L. Fisher, CPG-2398

Response

This is a unique period in the history of the American Geological Institute. The Institute celebrates its 50th anniversary in 1998. On November 15, 1948, a group of distinguished geoscientists from eleven geosocieties met in Washington, D.C. at the National Academy of Sciences to formally inaugurate the American Geological Institute. The first President of the Institute was A.I. Levorsen. Other members of the Executive Committee included vice President W.B. Heeny Sr., Secretary-Treasurer Earl Ingerson, and Executive Director David Delo.

The original concept for an over arching geoscience umbrella organization was perceived and presented six years earlier by Carey Croneis at the 1942 American Association of Petroleum Geologists meeting in Denver. Croneis envisioned an organization to provide a united front representative of all the geosciences, without loss of individual member society entity. The perceived need for the American Geological Institute was largely to assist in coordination of inter-societal affairs and serve as a focused voice at the national level for the diverse geoscience community. As has been so aptly pointed out by Bill Fisher, that “if there was a need for a geoscience federation to serve as a collective voice and facilitator in the 1940s, the need is imperative in the 1990s” as the geosciences face a world of fundamental change.

The geosciences have a major stake in the changes in the new world we are facing in the 21st Century. Globalization is increasingly the mode of existence. Economization will be required by all institutions — both in the private and public sectors — and seems to be the future way of life. Employment in the natural resource industries is and will be constrained as we shift from the historic economies of scale to economies of efficiency. During the past ten years we have seen support of basic geoscience research and development reduced as it competes with other cost demands in the private and public sectors. At the same time, we will see continued population growth along with aspirations for an improved quality of life, especially in the developing countries, which translates to continued and increased demand for natural resources. Increasing concerns over the environment must be met and effectively addressed. The geosciences must collectively address these needs while at the same time increasing public awareness of the Earth around us, for a better informed public with increased scientific literacy. The American Geological Institute, in coordination with our Member Societies, stands ready to serve. The critical posture of AGI should be to listen, learn, assist, anticipate, and, when appropriate, provide the required leadership to address specific needs and opportunities.

I am immensely pleased to accept the Ben H. Parker Medal on behalf of the Institute. Over the past six years, the Institute has moved from a position of financial instability to one of financial strength. Even more importantly, the Institute’s membership has grown from 19 Member Societies in 1992 to 31 member Societies in 1997. Most importantly, a number of key programs and Member Society services have been enhanced and several new programs in earth science education, geoscience informational services, and government affairs have been initiated. There clearly are still opportunities for major improvements, and we are facing major challenges, but it is important to note that we are effectively addressing an increasing number of geoscience community interests.

Over the past five years since joining AGI, I have personally experienced a lot of pleasure and at times anxiety and
frustration but overall have realized a great deal of satisfac-
tion seeing the Institute succeed. One of the greatest senses
of accomplishment I have had is working with the AGI staff
and Institute's executive leadership in reorganization the
Institute and charting our future course. Without them and
the cooperation and support of the Member Societies, our
accomplishments to date would not have been possible. With
continued support and input from the Member Societies, the
Institute can have a profound impact on the future directions
of the geosciences.

Marcus E. Milling, CPG-4518

MARTIN VAN COUVERING MEMORIAL AWARD

The Martin Van Couvering Memorial Award was estab-
lished by the Executive Committee in 1979 in posthumous
honor of the first president of the Institute. Martin Van
Couvering made the presidency a full-time occupation for the
first two years of the Institute's history. His dynamic leader-
ship, diplomacy, and organizational abilities established the
solid foundation from which the Institute has grown. Few, if
any, have given so much to the Institute.

The most important criterion for the Martin Van Couvering
Memorial Award is service to the Institute. As in other awards,
a wide variety of contributions to the Institute may be con-
sidered. By far the most important contribution a geologist
can make to the Institute is that of time. It is the contribu-
tions by individuals to the Sections, the committees, and spe-
cial projects that enable the Institute to enhance the practice
of geology.

Citation for
Robert K. Merrill, CPG-4984
1997 Recipient of the
MARTIN VAN COUVERING MEMORIAL AWARD

The Martin Van Couvering Award is presented to an indi-
vidual who has made outstanding contributions to our
Institute. It is my great pleasure to cite Robert K. Merrill for
this award. His contributions to the Institute have been
remarkable.

Bob could receive this award for his many years of service
to AIPG Sections in Colorado and Oklahoma, for his work on
annual meetings, for his two-year chairmanship of our
National and International Affairs Committee, or for his tire-
less efforts on the Executive Committee as Secretary in 1992
and 1993, as President-Elect in 1995, and as President in
1996. But to me, his crowning achievement has been his
behind-the-scenes work to bring about the change that is nec-
essary to make AIPG an even better organization for the sci-
ence and profession of geology. As President, Bob helped keep
up the momentum for bylaws revisions. When it looked as if
the major change that was necessary to move the Institute
forward might get mired in protracted wordsmithing and
debate, he and last year's Martin Van Couvering Awardee,
Bill Knight, proposed a ballot measure that ultimately won
the membership's approval by a four-to-one landslide. Bob's
commitment to the Institute did not stop there. After his pres-
idency he made sure that we revised the bylaws in a reason-
able manner by pulling together comments from the mem-
bership, Sections, and Executive Committee and producing
the essence of the draft that was recently accepted.

What is remarkable is that Bob has accomplished all this
while currently gaining upstream opportunities for UNOCAL
in Kazakhstan and Central Asia. His love for geology has roots
in his B.A. degree from Colby College in 1967 and his Master's
degree in 1970 and Ph.D. in 1974 from Arizona State
University. He is well known for his publications on the ge-
ology of the White Mountains, Arizona; the origin and migra-
tion of petroleum in the overthrust belt of Wyoming and Utah;
deep, overpressured gas in the Green River Basin; and risk
and reserve analysis. Bob's work with UNOCAL, Occidental
Petroleum, and Cities Service Company gave him the oppor-
tunity to volunteer his time not only to AIPG but also to the
American Association of Petroleum Geologists. In addition,
he's an active member of the Geological Society (of London),
as a Fellow and Chartered Geologist, and of the Geological
Society of America. In all respects, Bob is the essence of a
professional geologist.

Bob has made other contributions to AIPG through his lead-
ership. His vision helped catapult AIPG Headquarters onto
the Internet, and he kept fellow members of the Executive
Committee enthralled with the latest Web sites that serve the
profession, the oil and gas industry, and international busi-
ness in general. He brought the business skills he developed
while working in industry to the tables of the Executive
Committee and Advisory Board, but nobody quite knows
where he acquired the sense of humor that gave his meetings
the levity needed to make the long hours of volunteer service
thoroughly enjoyable.

Please join me in thanking Bob Merrill for his dedication
and service, which has set the Institute on a course to serve
the profession and the science of geology well into the fore-
seeable future.

Jonathan G. Price, CPG-7814

Response

Jon, Thank you for your kind words. Any success I have
achieved as part of AIPG should be shared by the many mem-
bers of the Institute who have served with me on committees
and boards. To me AIPG clearly embodies what it takes to be
a "professional. I see at least four things: 1) interest in the
field, 2) recognized credentials, 3) maintenance of credentials
and 4) involvement in professional affairs. Through active par-
ticipation in AIPG I am able to integrate these things into my
career.

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First of all, I have always been interested in geology. Today, my interest is undiminished, as my family can attest from my uncontrollable enthusiasm cruising down the Green River in Utah with them last year. Interaction with professionals outside of my field of petroleum geology as part of AIPG keeps me from becoming too myopic and gives me the opportunity to find new ways of doing my job.

Second, to have influence, a professional today needs to have credentials recognized by people and organizations outside our profession. I have generally lived in states that have not required registration of professional geologists. AIPG has given me the credentials that have helped me at various times during my career.

Third, as professionals we must maintain our credentials or in other words, practice “continuous improvement” by keeping up with the changes in our profession. This can be through formal courses or training, conferences and reading. A few years ago I tried to correlate the number of geologists with the number of memberships in geological organizations. I assumed that memberships would be an indicator of who was keeping up with technological advances. I was astonished to learn that a large number of individuals practicing geology were not members of any of professional organizations. Hopefully they are receiving continuing education somewhere to satisfactorily serve their clients, but certainly, it is not from reading technical articles. Credential maintenance is one area that AIPG can expand its influence to help what all we gathered here feel is important, professionalism.

Finally, active AIPG participation is synonymous with involvement in professional affairs. These are the issues of Professional practice, Employment and Regulatory affairs. Professionals who felt that involvement is a critical part of being a professional founded AIPG. Our membership remains committed, taking leadership on significant issues facing our profession over the last 35 years.

I do not see my work with AIPG as anything extraordinary. I am honored by this prestigious award and remain committed to AIPG as a cornerstone to my profession. Thank you all very much, and I look forward to continuing to work for AIPG.

Robert K. Merrill, CPG-4984

JOHN T. GALEY, SR., MEMORIAL PUBLIC SERVICE AWARD

The American Institute of Professional Geologists' Public Service Award was established by the Executive Committee in 1982 in recognition of one of its primary purposes: service to the public. In 1992, it was renamed the John T. Gailey, Sr., Memorial Public Service Award, in posthumous honor of our fourth President, whose long professional career was a continuum of service to both the geological and the general public.

Recognition of public service is important because so many Members have distinguished themselves and the Institute by giving expert testimony to governmental commissions and committees, and by providing geological expertise where it was needed by the public at large.

The application of geology to the needs of the general public may be in many different forms. Recipients of this award have outstanding records of public service on the national, state, or local level well beyond their normal professional responsibilities.

Citation for
James E. Slossen, CPG-1109
1997 Recipient of the
JOHN T. GALEY, SR., MEMORIAL PUBLIC SERVICE AWARD

Each year AIPG recognizes an individual whose professional career exemplifies public service with the presentation of the John T. Gailey, Sr. Memorial Public Service Award. This year’s honoree is Dr. James E. Slossen who for over 45 years has demonstrated a persistent commitment to the proper use of geologic data and information in addressing societal issues and needs, increased use and acceptance of geology in the development of public policy, and helped to raise the overall standards of professional practice.

Jim was born and raised in Van Nuys, California, and was influenced at the early age of 10 to become a geologist by his cousin Eugene Reed, former State Geologist of Nebraska and Chairman of the Geology Department of the University of Nebraska. After serving as a second lieutenant in World War II, Jim attended college on an athletic scholarship at the University of Southern California, where he received his Bachelor of Arts and Master of Science degrees, receiving his Ph.D in geology in 1958. Jim’s Master’s thesis was on stream sedimentation in the area of a proposed diversion dam in New Mexico; his doctoral dissertation on lithofacies and paleogeographic analysis of the Repetto Basin in Los Angeles was completed under the eminent K. O. Emery. During the summer seasons, he worked on a variety of assignments throughout California and New Mexico for the California Department of Water Resources, Gulf Oil and the United States Geological Survey.

From 1950 through 1973, Jim was a professor of geology at what was then known as Los Angeles Valley Community College, where he also served as chair of the geology department from 1950 through 1965. Jim has also served as a guest lecturer and visiting professor at over 15 universities across the country including USC, UCLA, CalTech, and Harvard University where for 10 years he taught an annual class in terrain analysis in the School of Architecture.

During his tenure, Jim started working as a consultant and to date has worked on over 6000 projects. Noteworthy are the many housing tracts in the Santa Monica Mountains and Northern San Fernando Valley where he was able to influence the master plans for these developments. It was this work that eventually led to his participation through AEG in
the creation of Chapter 70 of the Uniform Building Code. Prior to 1963, geologic input in the formulation of building and grading codes and guidelines was required in California only if a civil or structural engineer thought that such a need was deemed appropriate, and if so, the report had to be co-signed by the engineer. The requirement for geologic input across the country was even less so. Jim went on to assist in the development of building codes and guidelines for the City of Los Angeles in 1963, the Counties of Los Angeles in 1965, and the State of California in 1970. Jim also assisted in the development of the California Division of Mines and Geology Notes 37 and 44.

In conjunction with his work on the Building Codes, Jim volunteered to develop basic applied geology programs for the education and training of grading inspectors and engineers of the City of Los Angeles, and to enhance their understanding of the cause, effect and mitigation of losses and damages resulting from frequent above-average rainfall which plagued Southern California. A workshop at USC was also conducted by Jim in 1985 on seismic mitigation management for seaports. Between 1950 and 1980, Jim presented numerous talks on earthquakes, landslides and other geologic hazards, providing firsthand knowledge of geologic-related disasters such as the 1952 Kern County and 1971 San Fernando Valley earthquakes, and the numerous damaging landslides and other forms of ground failure which occurred throughout the western states during the past four decades. In 1973, Jim left LAVCC and became State Geologist and Chief of the California Division of Mines and Geology with the intent to increase the division’s activities in engineering geology. In 1975, Jim returned to Los Angeles and founded Blosson and Associates which he continues to run today.

Jim’s technical specialties include engineering geology, forensic geology, hazard mitigation and prevention, ground failure abatement, and earthquake seismic hazard mitigation. Jim has published more than 100 articles emphasizing the geologic processes associated with landslides, sedimentation and flooding. Jim was editor of Volume IX of GSA’s Reviews in Engineering Geology, and co-author of the book published in 1992 titled Forensic Engineering: Environmental Case Histories for Civil Engineers and Geologists, for which in 1996 he was co-recipient of the GSA E. B. Burwell Sr. Award for the publication that best advances the principles and practice of engineering geology.

Although Jim’s technical contributions to the profession of applied geology have been significant, it is his emphasis on the interrelationship of geology and public policy, and public service record, that I wish to emphasize. Jim’s volunteer service includes participation at the local, state and national levels on over 50 technical advisory boards and commissions involving issues that directly relate to the public’s health, safety and welfare. It is noteworthy that such appointments have been made by elected officials from members of both political parties, and in most cases the appointment was made from one party with re-appointment from the other. Some of these appointments include the California Seismic Safety Commission, where Jim currently serves as Vice Chair (appointed by Gov. Jerry Brown from 1975 thru 1978, and re-appointed by Gov. Pete Wilson from 1991 to present), Board of Registration for Geology and Geophysics (appointed by Gov. Jerry Brown and reappointed by Gov. Dueckmejian, and where he served as Chairman in 1978 thru 1982), and to State Geologist and Chief of California Division of Mines and Geology (appointed by Ronald Reagan and asked to remain by Gov. Jerry Brown). Some of the other important boards and committees Jim served on include FEMA’s landslide hazard mitigation and earthquake prediction committees, National Research Council Committee on Ground Failure Hazards, National Academy of Sciences Advisory Committee on Hazardous and Municipal Liability, and National Academy of Science’s Panel on Mudslides, among numerous others. As with many of these activities, Jim has continually volunteered his time and expertise, while providing significant influence in how geologic data should be obtained and utilized in addressing societal issues and needs.

Jim is a member of 15 professional organizations, a fellow of GSA (1967) and the Earthquake Engineering Research Institute, and life member of the American Society of Civil Engineers. His numerous technical contributions to the profession have not gone unnoticed. In 1989, Jim was named the first Richard H. Jahns Distinguished Lecturer in Engineering Geology, and in 1992 received the Distinguished Practice Award from the GSA Engineering Geology Division, and was the first to be chosen as the GSA Roy Shlemow Applied Geology Mentor. In 1996, Jim was awarded Honorary Member status by the Association of Engineering Geologists.

Public service can take many forms. Jim's professional career exemplifies public service academically, professionally and personally. Jim stands firmly as a role model for many geologists, including myself, demonstrating by example as a scientist, teacher, political appointee and official, businessman and mentor, the role geologists fulfill in society. In appreciation of Jim's exemplary dedication to public service, we honor him as the 1997 recipient of the John T. Galely, Sr. Memorial Public Service Award.

Stephen M. Testa, CPG 6464

Response

I want to thank Steve Testa for being the citationist for this award. It is a great honor to be the recipient of the Galely Award. But to have Steve, the incoming President of AIPG, as the presenter is a double honor as he was a freshmen student in my Geology I class in 1969. Hopefully, I was a worthy mentor in his very successful development from student to very capable professional stature of geology, as well as being a great fan of Martin van Couvering, it pleases me beyond words to be the recipient. I feel so fortunate to follow in the footsteps of the finest geologists involved in the early stages of AIPG, when I look at the list of previous recipients, I am even prouder.

It is always a real pleasure to accept an award from a former student who has achieved so much in his professional
career — very similar to seeing the records fall in the track and field world by those I have coached. Steve has been very successful in the professional world as well as in his career with AIPG. Hopefully, there will be many more recipients of the Galey Award as the public service award should be one of the highlights each year as the profession continues to strive for the benefit of society. I take pride in being able to use my knowledge of geology to protect and assist people. As I review the roster of past recipients of the John T. Galey, Sr., Memorial Award, I am certainly appreciative to be included with outstanding geologists such as Bill Fisher, Art Spaulding, John Rold, and Bob Jordan, to name just a few, who have devoted so much time to the public and the geologic profession.

I am most grateful and proud to have Charlie Mankin stand in for me to accept this honor. He is a gentleman that I have respected and admired for many years. I most certainly hope to be with you next year to greet the 1998 Awardee. The plaque itself is outstanding in its design and a beauty to behold with the medal resting on the blue velvet in all its glory — a medal of honor indeed. It should be held in esteem by all who are as fortunate as I to receive it.

James E. Slosson, CPG-1109

AWARD OF HONORARY MEMBERSHIP

Since 1984, AIPG has conferred Honorary Membership to those who have an exemplary record of distinguished service to the profession and to the Institute.

Citation for

Adolf U. Honkala, CPG-7
1997 Recipient of the Award of HONORARY MEMBERSHIP

It is a singular privilege and honor for me to relate to all of you why Honorary Membership in the American Institute of Professional Geologists is being bestowed today on Adolf U. Honkala. I have known and intermittently worked with Ad since 1967, and I have valued his friendship, his knowledge, his skills and, most important, his professionalism ever since.

Ad Honkala was ahead of the wave when in 1961 he helped organize the Virginia Association of Professional Geologists, which became the Virginia Section of AIPG in 1964. He has always been active in the Virginia Section, serving as its President in 1967. He was a leading member of the organizing committee for the highly successful 1981 AIPG Annual Meeting in Williamsburg and was Chairman of their Legislative and Regulatory Affairs Committee for many years.

When AIPG was founded, the inspirational leaders, whose names are honored by two other awards being presented today, were Martin Van Couvering and Ben Parker. Ad Honkala participated in the organizing committee that met in Oklahoma City in the summer of 1963 to outline the need for AIPG. When AIPG was formed in November 1963, Ad became a member of the first Executive Committee on which he served until 1965. His contributions, which you will never hear about from this most modest of men, were recognized by his Charter Membership as CPG-7.

Adolf U. Honkala and Russell G. Slaback

In 1973, Ad Honkala served as President of the Institute; in 1981, he received AIPG’s highest honor as the Ben Parker Medalist; and now, 16 years later, the Institute is recognizing the fact that Ad has never stopped working for AIPG in ways too numerous to mention, including work on many committees. It is an inspiration to us all to consider Ad’s devotion to his profession and especially his commitment to the ethical and public service aspects of being a Professional Geologist.

Ad Honkala was born and brought up in New Hampshire of sturdy Finnish stock. He earned his B.S. degree in Geology from the University of New Hampshire and went on to gain an M.S. in Geology from the University of Nebraska. Ad now serves on the Alumni Advisory Board to the Geology Department at Nebraska. In 1993, Ad was an AIPG delegate to the European Federation of Geologists meeting in Helsinki, Finland.

His early career was with the U. S. Army Corps of Engineers, where he worked in the Boston and Norfolk Districts from 1942 to 1953, completing his service as District Geologist for the Norfolk District from 1951 to 1953.

In October 1953, Ad became an Independent Geologist in engineering geology and industrial minerals. From 1955 to 1956 he worked as Vice President and General Manager of a sand and gravel firm in Richmond. He went on from there to contract consulting as a member of a consulting team on an earth and rock fill dam project in Turkey from 1956 to 1959. Since 1959, Ad has practiced as an Independent and Consultant, mainly in the field of industrial minerals, with a heavy involvement in the cement industry including work for five major producers.

One of these projects stands out; a limestone and shale quarry and cement plant in Clarksville, Missouri, which became home to the largest rotary cement kiln in the world.
at that time, 765 feet long. Ad began working on that project in 1961. Bud Rue was a member of Ad's project team, and I was fortunate to be assigned by my firm to supervise the ground-water testing program. The quarry was less than a mile from the mighty Mississippi River. The valley-fill overburden alluvium was connected to the river, and the river was held above local land surface elevations by a navigation lock. The hydrogeologic testing showed that the river was not an operational concern. It was a great experience for a young hydrogeologist to work with Ad and be exposed to his thoroughness during the field days and at dinner each night, and my own career has benefited from this experience ever since. We have since worked with Ad on quarry projects in Ohio, Michigan, South Carolina and Virginia, and I have never ceased to admire his professionalism.

Ad is a founding member of the AIPG Foundation and, along with Bud Rue and Ernie Lehmann, was instrumental in establishing the fiscal policies that got the Foundation back on its feet in 1985. He served as Treasurer of the Foundation from 1985 to 1994 and remains a Trustee.

Service to his community and his church is part of Ad Honkala's commitment to professionalism. He has been a Sunday School teacher, a Deacon and an Elder of the Tuckahoe Presbyterian Church in Richmond, Virginia. He served as an Election Judge in Chesterfield County, Virginia for many years. He was active in and a Past President of the Richmond Cosmopolitan International Club and was Governor of the Capital Federation of that service club in 1969.

His stature in his profession is evidenced by his appointment by three Virginia Governors to the Board of Conservation and Economic Development from 1970 to 1978 and from 1980 to 1984, ultimately becoming Vice Chairman.

As most of you will recognize, Ad and Eileen Honkala are fixtures at AIPG Annual Meetings and probably hold the all-time attendance record.

It is for these reasons that Adolf U. Honkala, CPG-7, is being awarded Honorary Membership in AIPG today.

Russell G. Slabyack, CPG-2305

Citation for
Ernest K. Lehmann, CPG-583
1997 Recipient of the Award of HONORARY MEMBERSHIP

What does an organization do to say thank you to someone who refuses to rest on past laurels? In this case, the American Institute of Professional Geologists presents Honorary Membership to Ernest K. Lehmann to acknowledge "an exemplary record of distinguished service to the profession and to the Institute." This award is our way of saying thank you for continuing service to AIPG and the profession.

Ernie currently serves as the Chairman of the AIPG Foundation which was resurrected as a result of his dedication. Ernie has worked to raise funds, identify new creative methods of gift-giving, and keep the grasping hands of past presidents (like me) out of the pot until a critical mass was achieved. Ernie, a charter member of the Institute, has served as President of the Minnesota-Wisconsin Section (1966), National Vice President (1981), National President-Elect (1984), and National President (1985). In 1987, Ernie Lehmann was awarded the Ben H. Parker Memorial Medal. He has served on many committees and worked as a volunteer on a variety of projects. Ernie has also provided support to government affairs activities of the Institute including testimony on revisions to the 1872 Mining Law before the Rahall Committee. In 1991, Ernie was awarded a Presidential Certificate of Merit for his continued service. Several civic organizations in the Minneapolis area have benefited from Ernie's interests and beliefs.

Ernie, born in Heidelberg, Germany, graduated from Williams College in 1951, did post graduate work at Brown University, and completed the Owners and Presidents Management Program at Harvard Business School. He also spent a couple of years in active duty with the U.S. Army. Ernie began his career in the mining industry with Signal Mining Company. After several years with Kennecott Copper Company and its subsidiary, Bear Creek Mining Company, Ernie moved into a successful career in consulting. For thirty years, Ernie has been one of the most respected geological consultants to the mining industry, conducting exploration and evaluation programs for mineral deposits on five continents. As anyone who has tried to call him lately knows, Ernie continues to actively work with mining companies, especially in South America.

The details of this illustrious career have been documented in previous award booklets. We thank Ernie for all the elbow-grease provided to the Institute over nearly thirty-five years; we thank Ernie for fighting for the foundation; and, personally, I thank Ernie for his support of a younger professional even if she was a petroleum geologist. This award of Honorary Membership recognizes the continuing commitment that Ernie Lehmann devotes to the Institute and the profession.

Susan M. Landon, CPG-4591

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OUTSTANDING ACHIEVEMENT AWARD

The Outstanding Achievement Award was established by the 1989 Executive Committee to honor a non-member of AIPG who is widely recognized as a major contributor to the profession of geology. The award is not necessarily given annually, but only when the Awards Committee recommends an outstanding candidate to the Executive Committee for their consideration.

Citation for John McPhee
1997 Recipient of the Outstanding Achievement Award

This year AIPG recognizes, through the presentation of its Outstanding Achievement Award, an individual who exemplifies excellence in the writing of geological non-fiction. Since the inception of this award in 1989, there have been only two other recipients: Stephen Jay Gould in 1989 and Ron Redfern in 1995. This year's recipient of AIPG's Outstanding Achievement Award is John McPhee.

John McPhee was born in Princeton, New Jersey, in 1931, where he has lived for the greater part of his life. McPhee attended Princeton High School followed by one year at the Deerfield Academy before entering Princeton University with the class of 1953, where he wrote and edited for several magazines, papers and student publications. During his four years of undergraduate study McPhee also appeared on a weekly television and radio program called "Twenty Questions," and he played basketball during his first year. Following his years at Princeton, McPhee pursued postgraduate study at Cambridge University, where he read literature and continued to play basketball. In 1957 he became a staff writer for Time magazine before moving on in early 1965 to staff writer for The New Yorker, a position that he holds to this day. Since 1975 McPhee has conducted a seminar titled "The Literature of Fact" at Princeton University as the Ferris Professor of Journalism, where he teaches the application of creative writing techniques in journalism and other non-fiction writing. Since 1964, McPhee has authored 24 books on a variety of subjects, including seven non-fiction books pertaining entirely or in part to geology.

For the past two decades McPhee has traversed North America in the company of geologists of one specialty or another, and individuals whose work brings them in contact with geologists. Following each of these excursions McPhee proceeds with the arduous task of writing. What has resulted from these efforts is a priceless legacy and tribute to our profession. From his early work of a geological nature, Encounters with the Archdruid (1971), McPhee brings together the archdruid himself, David Brower, former director of the Sierra Club, and three formidable antagonists: a resort developer, a mining engineer, and a builder of dams. The group travels together and argues together, as they proceed to a coastal island, Glacier Peak Wilderness, and on a raft down the Colorado River. With absolute impartiality, we discover (paraphrase William Howarth) that Brower is no mere druid (a religious figure who sacrifices people and worships trees or, in today's terms, an environmental wacko), and that his antagonists are not simply out to exploit the land.

In McPhee's tetralogy under the Annals of the Former World and beginning with Basin and Range (1980), followed by In Suspect Terrain (1982), Rising from the Plains (1986) and Assembling California (1993), McPhee tells the story of plate tectonics, which only ten years prior was just emerging and beginning to be seriously taught in universities around the country. As he travels essentially along the fortieth parallel, he captures the basic essence of plate tectonics and geology through the lives of the geologists, and the geology that is observed. These impressive literary works also bring to light the cultural impacts and relationships that exist, and the various scientific, public and societal issues that arise, as population continues to grow and natural resources continue to diminish.

In addition to the tetralogy, McPhee has also authored The Control of Nature. Contained in this book are three short stories of places where people either continuously, episodically or seasonally take arms against nature. McPhee tells of the efforts of the United States Army Corps of Engineers on the Old River Project and of their constant effort to maintain the present course of the Mississippi River, versus losing the Mississippi to a distributary known as the Atchafalaya. He tells of the attempts being made in Iceland and Hawaii to control the episodic lava flows by cooling, thus stopping or, at minimum, slowing down the rate of movement, and the construction of 150 stadium-sized basins to collect and contain the huge volumes of soil and rock debris flows which seasonally emanate from the canyons surrounding Los Angeles.

Most recently, McPhee presented several short stories in Irons in the Fire (1997), two of which emphasize the varied and unique roles in which geologists can find themselves. In "The Gravel Page," McPhee illustrates how forensic geology has been used by the military, FBI and other law enforcement agencies to assist in tracking high explosives, providing military intelligence, expert testimony and solving major crimes involving kidnapping and murder. In "Travels of the Rock," McPhee tells of the efforts by the State of Massachusetts to repair Plymouth Rock, our Nation's most hallowed lithic relic.

McPhee brings to the public at large a wonderful unbiased perspective of what geologists do, and the problems and issues they must contend with in the course of the daily practice of their profession. No other living author has written so much about geology and practicing geologists for the general public and in such a positive light. McPhee is a professional treasure. The diverse group of professional geologists that comprise AIPG wishes to acknowledge the efforts set forth by John McPhee over the past 25 years in influencing the way geologists are perceived by the general public -- for this we honor him today with AIPG's Outstanding Achievement Award.

Stephen M. Testa, CPG-6464
PRESIDENTIAL CERTIFICATE OF MERIT

Each year, the AIPG President may award one or more certificates of merit to individuals who, through dedicated and meritorious service, have made an outstanding contribution to the Institute.


1997 Recipients of the PRESIDENTIAL CERTIFICATE OF MERIT

Presented by
Jonathan G. Price, 1997 President

David M. Abbott, Jr., CPG-4570 - for his outstanding efforts in upholding ethical standards for the profession, including chairing the AIPG Ethics Committee and writing the ethics columns in The Professional Geologist.

Robert N. Braunstein, CPG-7690 - for his extraordinary efforts in coming from Alaska to meet with his Congressional delegation during the May 1997 AIPG Washington, D.C. fly-in.

Curtis J. Coe, CPG-6240 - for his dedication in making the 33rd annual meeting of the AIPG in Columbus, Ohio, a resounding success.

Barbara H. Murphy, CPG-6203 - for her leadership in the Arizona Section and continued service at the national level, including chairing the AIPG Membership Services Committee.

James D. Shotwell, CPG-8290 - for his efforts of vitalizing the National and International Affairs Committee, including formulating proactive positions and helping to organize the May 1997 Washington, D.C. fly-in.

Gary E. Van Guider, CPG-9659 - for his leadership in the Minnesota Section, including help in formulating Minnesota's new registration law and regulations.

1998 AIPG National Meeting
Hosted by the Louisiana Section-AIPG and the Baton Rouge Geological Survey

Professional Geology, Mineral Resources and Our Environment

October 3-8, 1998
Convention Headquarters: Baton Rouge Hilton

The Louisiana Section will be hosting the AIPG annual meeting in Baton Rouge next year. Louisiana Section's Booth had many visitors. Ron Alexander, Conrad Kuharic, and Jon Price were just a few that checked out the tabasco sauce and cajun spices that were being given away.

M. B. Kumar, General Chairman of next years annual meeting, hands James F. Howard, CPG-2538, the gift basket he won from the drawing the Louisiana Section held.

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Jan. 11-16. American Meteorological Society Annual Meeting, Phoenix, AZ. Contact: M. Tolson, AMS, 1200 New York Ave., NW, Washington, DC 20005, Ph.: (202) 682-9006, Fax: (202) 682-9298, e-mail: toolson@acm.met-soc.org.


Jan. 17. World Wide Web Short Course for Geologists and Geotechnical Engineers, Fluor Daniel GTI, Martinez, California. Sponsored by the San Francisco Section of the Association of Engineering Geologists. Contact: Jack Alt at (510) 791-1986 or jalt@home.com.

Jan. 26-29. Tailing and Mine Waste '98, Fort Collins, CO. Contact: Linda L. Hinshaw, Dept. of Civil Eng., Colorado State University, Fort Collins, CO 80523, Ph.: (970) 491-6081, e-mail: hinshaw@vines.colorado.edu.

Jan. 28-29. The 2nd Annual Exploration & Production Company Mergers & Acquisitions Institute, Houston, TX. Contact: Fulcrum Information Services, Inc., 150 Fifth Ave., #200, New York, NY 10011, Ph.: (800) 869-4302, fax (212) 647-9511.


Feb. 5-8. The Petroleum Landman's Association of New Orleans Ninth Annual Oil and Gas Seminar - PLAN, Beaver Creek, CO. Contact: David W. Ruch, 1795 W. Causeway Approach #203, Mandeville, LA 70471, Ph.: (504) 626-8484, Fax (504) 626-9416.


Feb. 16-20. Intl. Erosion Control Assn., 29th Annual Conference and Trade Exposition, Reno, NV. Contact: 1998 IECA Conference Program, P.O. Box 774904, Steamboat Springs, CO 80477, Ph.: (800) 455-4322, e-mail: ecinfo@ieca.org.

Feb. 17-19. SPE India Oil & Gas Conference and Exhibition, Hotel Ashok - New Delhi. Contact: Society of Petroleum Engineers, William Anderson, P.O. Box 833836, Richardson, TX 75083, Ph.: (972) 952-9393, e-mail: spedal@spelink.spe.org.


May 14-18. Linking Spatial and Temporal Scales in Paleoecology and Ecology, Annapolis, MD. Contact: Lois J. Elms, Western Experience Penrose Conference Coordinators for the GSA, 4881 Evening Sun Lane, Colorado Springs, CO 80917, Ph.: (719) 597-9201, e-mail: ljelms@aol.com.

May 17-22. American Society for Surface Mining and Reclamation, Mining—Gateway to the Future, St. Louis, MO. Contact: Dianne Throgmorton, Coal Research Center, Southern Ill. Univ., Carbondale, IL 62901-4623, Ph.: (618) 536-5521, e-mail: diannet@siu.edu.

AIPG Membership Totals

As of 11/30/96 As of 12/05/97

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AIPG ANNUAL MEETINGS

October 3-8, 1998
Baton Rouge, Louisiana

October 5-8, 1999
Anchorage, Alaska

October 11-15, 2000
Milwaukee, Wisconsin

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Applications for certification must meet AIPG's standards as set forth in its Bylaws on education, experience, competence, and personal integrity. If any Member or board has any factual information as to any applicant's qualifications in regard to these standards, whether that information might be positive or negative, please mail that information to Headquarters within thirty (30) days. This information will be circulated only as far as necessary to process and make decisions on the applications. Negative information regarding an applicant's qualifications must be specific and supportable, persons who provide information that leads to an application's rejection may be called as a witness in any resulting appeal action.

Applicants for
Certified Professional Geologist
FL-Clem, K.V.

NV-Hodges, Wade A.
601 Adaline St., Carson City NV 89703. Sponsors: Ronald Parratt, Radu Conelea, Mike McCulla.

NE-Shroder, John F. Jr.
338 S. 70th St., Omaha NE 68132. Sponsors: Denny Jorgensen, Terry Thonen, David Becker.

New Certified
Professional Geologists
KS-Bailey, Kevin James CPG-10206
5655 Gleason Road, Shawnee KS 66226, (913) 631-3300, x7222

NY-Bass, Jonathan P. CPG-10190
126 Midland Avenue, Rye NY 10580, (914)84-9500

SO-Bowden, Wilson L. CPG-10198
0415 Harvey Gap Road, Silt CO 81652, (970) 945-2809

NV-Bowman, Bruce D. CPG-10199
7891 Stone Wall Dr., Las Vegas NV 89123, (702) 433-0330

MI-Campbell, Larry G. CPG-10194
2012 Cuyuga Trail, West Branch MI 48661, (517) 873-5977

OH-Chavez, Becky CPG-10184
6580 Worthington Galena Rd., Worthington OH 43085, (614) 891-5501

MT-Carrigan, William C. CPG-10205
7500 Priest Pass Road, Helena MT 59601, (406) 443-7559

TX-Chung, Stephen P. CPG-10200
1435 Bering Dr., Houston TX 77057-2503, (713) 228-8601

TX-Condit, Corey D. CPG-10201
2851 Wallingford Dr. #1402, Houston TX 77042, (281) 931-8674

MI-Finch, Anthony J. CPG-10196
2874 Benson, Walled Lake MI 48390, (810) 426-8970

NY-Kolka, Mossbah M. CPG-10180
160 Third Street, Troy NY 12180, (518)273-3247

CT-Kovach, Robert R. II CPG-10181
320 Abbe Road, Enfield CT 06022, (860)546-2469

MN-Miller, Rolf CPG-10207
2421 33rd Ave. South, Minneapolis MN 55406, (612) 481-0804

MN-Nickson, Michael L. CPG-10208
2317 E. Maple Lane, Maplewood MN

55'09, (612) 770-1500
ON-Shriner, Patrick CPG-10197
7773 Cortina Crescent, Niagara Falls ON L2H 3B4, (905) 357-6424

TX-Simonson, Gregory D. CPG-10204
8802 Brigadoon, San Antonio TX 78250, (210) 244-4252

PA-Weible, Deborah A. CPG-10189
1108 Eagles Nest Lane, Monroeville PA 15146, (412) 371-6551

New Candidate for Certification
OH-Muller, Albert J. CFC-0140

New Student Affiliates
CO-Feller, Dean SA-0079
1112 18th St., Golden CO 80401, (303) 273-3800

CO-Schwertfeger, Travis SA-0080
510 Arapahoe St., #6, Golden CO 80403, (303) 232-8308

New Associate
CO-Abbott, Susan F. AS-0001
624 S. Vine St., Denver CO 80209

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Web site: http://www.nbmg.unr.edu/aipg

IN MEMORY

Roger J. Berger, CPG-4635, September 25, 1997, Corpus Christi, Texas

Robert E. Lauth, CPG-1366, August 23, 1997, Durango, Colorado

Suzanne Takken, CPG-0568, Charter Member, member since February 28, 1965, Oklahoma City, Oklahoma
Convention Headquarters: Baton Rouge Hilton

Professional Geology, Mineral Resources and Our Environment

Baton Rouge, LA
October 3 - 5, 1998

Hosted by the Louisiana Section-APG and the
35th Annual APG National Meeting

For more information contact:

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David E. Pope
(504) 388-3452

General Chairman
Baton Rouge, LA 70893
P.O. Box 19151
Maddumudru, M.E. Kumar

For more information contact: