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The Professional  
**GEOLOGIST**

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## Partnerships



Partners Wanted! Is this a business proposition? In one sense it is. Our profession is under pressure, a lot of pressure. Other disciplines seem to want to do our work, and restructuring and mergers have taken a toll. Whole businesses that used to hire geoscientists are now primarily located overseas. Some industries are even being put out of business in the U.S.

Our response to these changes, as a profession, has not been traditionally united. In fact, many organizations have responded, for the most part, by individual responses that have not been coordinated. These responses often reflect the self-interest of the institution or professional association, and many address only part of the problem. These organizations can not be blamed for this. They are looking out for their interests. Worse yet, for many organizations different opinions within the association or institution can result in no position being taken. I can't help but think of Aesop's Fable, "United we stand, divided we fall." One key group that is tackling the disorganized approach to the issues facing the geosciences is the AGI/Geosciences Associates Conference that was recently attended by Bill Siok and myself (officially) with many other AIPG Members present.

The Geosciences Associates Conference (March, 2000), hosted by the USGS in Reston, Virginia, brought together

academia, private industry, and governmental agencies to coordinate common goals. We felt so strongly about the need for coordination and partnering that AIPG together with GSA will co-sponsor the AGI/Geosciences Associate Conference next year in the Denver area. Our next *TPG* issue will have an article about this conference.

Back to partnerships: there are many types of partnerships that can be developed to increase the impact of AIPG, help facilitate the mission and goals of AIPG, decrease our costs, and reallocate our limited resources to focus on what we think we do best.

AIPG can accomplish much for our membership by developing relationships with other professional societies and encouraging the networking of partnerships within AIPG. We are already working closer with AGI, GSA, and AEG. I am confident that book publishing with others such as GSA and AGI and joint meetings with AEG will ultimately serve our members better and reduce operating costs.

You are familiar with personal partnerships between friends or partnerships between businesses. The goal is usually a stronger working team and/or

combined resources to increase influence. Well, why not partnerships between Sections of AIPG, or AIPG Sections and National AIPG, or between AIPG Members and through Members companies/institutions. AIPG can and should facilitate networking within AIPG and with other organizations outside of AIPG to benefit Members. Perhaps Member benefits could be introduced when, in the past, we could not offer cost-effective programs. Helping sections and their goals should be an important work effort of National AIPG. But we need to understand that in all partnerships, both parties need to contribute time as well as resources. National AIPG can, I think, help become a force in employment issues by helping members find jobs and advertising job openings. We already provide free listings for jobs on our website. AIPG can also promote matching capabilities of Members with other Members or member organizations to obtain projects on grants. All we need is desire and time and some resources. Please think about partnerships and how we can develop AIPG better to increase our services. We have great potential! Let's try to use it now.

## JUST A NOTE

Did many people notice how far off weather predictions were on many recent weather events like the unexpected snow this spring? It seems we haven't perfected our computer models on complex weather predictions, yet some are certain that global warming models, which analyze much more complex issues that we know less about, are perfect.

Do geologists sit around and try to figure out how to design spaceships or think that because we are familiar with drilling, geologists should be allowed to practice dentistry? I know that in some states radon work can be performed only by pest control experts but not necessarily by geologists or soil scientists.

Have you noticed that in many museums the space allocated for geosciences is shrinking, even eliminated? Can you imagine that when environmental issues require more input from the geosciences, some museums are decreasing the dissemination of data on earth processes—except for some impressive dinosaur exhibits?

Although the fall is many months off, now is the time for us to think about Earth Science Week and reaching out to our local communities.

The National Executive Committee has agreed in principle to strengthen our certification program. The following proposal from the Task Force for Continuing Professional Development, prepared by Chair Tom Fails, is published in its entirety here. Please review the proposal carefully and send any comments to National Headquarters.

## CONTINUING PROFESSIONAL DEVELOPMENT PROGRAM: Proposal for discussion/consideration by the Membership

by Tom Fails, CPG-03174, Chair, Task Force for Continuing Professional Development

Dear Fellow CPGs:

Published here, as a follow-up to my article in the May 2000 *TPG* introducing the subject, are the

PROPOSAL  
AIPG CONTINUING PROFESSIONAL DEVELOPMENT  
PROGRAM FOR A CERTIFICATION ADVANCEMENT AND  
MAINTENANCE PROGRAM (CAMP)

and an example of the proposed ANNUAL LOGBOOK to be used by CAMP participants, for your review and consideration. At the January 2000 Executive Committee meeting, the Executive Committee voted to approve this proposal subject to modification.

The Proposal covers the same materials discussed in the May article, but in greater detail and a less-readable form. If the May article satisfied your interest and curiosity, reading the Proposal may not be necessary, as parts, in particular Implementation, where the boring organizational details are described, can be pretty heavy going for many, **ESPECIALLY AS THE PROPOSED CAMP WILL NOT AFFECT CURRENT CPGS UNLESS THEY CHOOSE TO PARTICIPATE VOLUNTARILY**. The Annual Logbook portion may be of more interest, as you will be able to determine the points you would be actually earning now, as a voluntary CAMP participant, if the program was already in effect.

THIS IS AN IMPORTANT ISSUE AFFECTING THE FUTURE OF AIPG. PLEASE GIVE IT YOUR CONSIDERATION AND SUPPORT.

---

**PROPOSAL**  
**AIPG CONTINUING PROFESSIONAL DEVELOPMENT PROGRAM FOR A**  
**CERTIFICATION ADVANCEMENT AND MAINTENANCE PROGRAM**  
**“A RETURN TO EXCELLENCE”**

AIPG's present Certification requirements, a product of 1964, seriously lag contemporary standards. In a recent survey, 188 US certifying organizations supplied data for 1998. About 60% now offer more than one category of certification, 82% have certification renewal programs usually requiring continuing education, and about 80% require an evaluation test, usually a written exam (President's Message, *TPG* May 1999). So far, two states require continuing education of registered geologists and others are considering adoption of similar rules. NSPE, AIPG's engineering equivalent, reported in 1998 that 29 states required (by mandated or enabling statute), and 12 more were considering, demonstration of "the satisfactory completion of specified activities as a condition for renewal of the individual's professional license." Specified activities invariably include continuing education and sometimes professional development activities. AIPG's professional geologist equivalents in Australia and Canada require continuing education and periodic renewal. Both are voluntary in the UK. Like it or not, continuing education and certification/license renewal are coming for larger numbers of geologists, especially those whose work affects the public's health, safety, and welfare.

How far can AIPG go in tightening and strengthening our Certification without alienating part of the present membership? Most CPGs realize that efforts to keep up with changes and advances in their geologic specialty are necessary, but their personal efforts may fall short. Some may ask "is continuing my AIPG Certification worth the effort?" or "why, if I was Certified under the original standards, should my Certification now be arbitrarily revoked under a newly established standard?" Progress in the areas of continuing education, professional development, and certification renewal is necessary for the long-term benefit of both individual CPGs and the Institute. But in the short term, existing CPGs may fear and resist new requirements that are arbitrarily imposed unless they can be viewed as being reasonable, non-threatening, and helpful in enhancing their professional lives, opportunities, and incomes.

IT IS NOT THE INTENT OF THIS PROPOSAL TO DE-CERTIFY ANY CURRENTLY EXISTING CPG IN GOOD STANDING BY ARBITRARY IMPOSITION OF NEW REQUIREMENTS FOR EXAMINATIONS, CONTINUING EDUCATION, OR CERTIFICATION RENEWAL. Results of the recent Task Force for Continuing Professional Development survey indicate that while a mandatory continuing education requirement would be resisted by about one-third of existing CPGs, a voluntary continuing education program might attract the participation of over 80%. Nearly the same percentage agree that "some form of continuing education is required of yourself" and that CPG "should indicate a higher level of competence, integrity, and credibility than state registration." Considerably less enthusiasm was shown for examinations for new CPGs. AN EXAMINATION FOR NEW CPGs IS NOT BEING PROPOSED.

Strong support for a voluntary continuing education program for existing CPGs has been indicated. In response, a Task Force for CPD proposal for a voluntary continuing education program in support of periodic (6-year) certification renewal at a higher level—CERTIFIED MASTER PROFESSIONAL GEOLOGIST (CMPG)—is described below. Voluntary professional development activities would be required for certification renewal as well. EXISTING CPGS WOULD NOT BE REQUIRED TO PARTICIPATE IN CONTINUING EDUCATION, PROFESSIONAL DEVELOPMENT, OR THE CERTIFICATION RENEWAL PROGRAM PROPOSED HERE, TO BE CALLED THE CERTIFICATION ADVANCEMENT AND MAINTENANCE PROGRAM, OR CAMP. The CPG status of non-participants will not change or be subject to CAMP requirements. Their present Certification would continue for as long

as they remained in good standing. However, participation in the CAMP would be mandatory for new CPGs certified after the date of adoption of the relevant Bylaws.

CPG attests to the public that the holders had attained a relevant education in the geosciences, five or more years of post-graduate experience and competence in applied geoscience work, and reputations for integrity and ethical behavior at the time of Certification. Certified Master Professional Geologist (CMPG), to be awarded to CPGs who complete the CAMP successfully, will indicate to the public that these individuals have pursued a continuing program of education and professional development to maintain their skills at contemporary levels for six or more years since being Certified. (See AIPG Titles in Appendix for a more complete discussion).

Outline of Certification Advancement and Maintenance Program (CAMP)

- CPGs participating in the CAMP for recertification at the Certified Master Professional Geologist level would maintain a Certification Advancement and Maintenance Program Logbook. Qualified Continuing Education and Professional Participation activities would be recorded as completed in an annual CAMP Logbook for each year during the CAMP period of six years. Headquarters would supply a new annual CAMP Logbook to participating CPGs or CMPGs each year during the 6-year CAMP period. (Refer to "Implementation," an appendix to this proposal, for a detailed description of subdivision of CAMP participants into "CAMP Year Groups and Subgroups," start-up of the CAMP, and the application/review process). Each qualifying Continuing Education and/or Professional Participation activity would be recorded and receive an appropriate point value as defined in the CAMP Logbook. Point values would be based upon the type, significance, content, and time spent for each recorded activity. Participants would be able to receive points for qualified Continuing Education activities undertaken to fulfill the requirements of the States and of other geotechnical and/or certifying organizations. Annual point value goals would be ten points each for Continuing Education and Professional Participation activities. Points earned annually could be averaged during the six-year CAMP period. However, a minimum of 15 points in Continuing Education and Professional Participation combined should be earned each year, except under extraordinary circumstances. The cumulative six-year point value totals required for certification renewal as a CMPG would be:

Continuing Education Activities:        60 points (50% of total)  
Professional Participation Activities:    60 points (50% of total)

Up to 10 excess points in each of these categories could be transferred to the following new CAMP Period of six years.

- Participation in the CAMP would be voluntary for all CPGs Certified prior to the date of adoption of the relevant Bylaws. AIPG cannot legally require a mandatory CAMP for currently existing CPGs.
- Participation in the CAMP would be mandatory for all new CPGs Certified after the date of adoption of the relevant Bylaws.
- Candidates seeking recertification based upon CAMP and the associated upgrade to Certified Master Professional Geologist (CMPG) status would be required to complete an Application for Advancement to CMPG and submit it to the Certification Renewal Director (CRD) at Headquarters, together with the original signed and notarized annual copies of the applicant's CAMP Logbook and a required fee in an amount representing the



cost to AIPG of the Application administration and review process within 30 days of their final, sixth program year CAMP Year Sub-group End-Date. (At present, it is estimated that the Application Fee would be in the \$40 to \$50 range.) Copies of each applicant's Application and CAMP Logbooks would be submitted by Headquarters at the same time to the applicant's Section or Regional CAMP Screening Committee, as the case might be, for initial review and verification of the Application and Logbook. Two or more adjacent Sections could form a joint Regional CAMP Screening Committee, providing authorization was granted by the National CAMP Screening Committee (NCSC). The Section or Regional Screening Committee would supply a confidential recommendation for Advancement, Maintenance, or Further Investigation of each Advancement to CMPG Application to the National CAMP Screening Committee, where all Advancement Applications would be subject to review and approval. Applications recommended for Advancement by the Section Committees could be subject to selective review of an undisclosed percentage of those received by the National CAMP Screening Committee. All Section Committee recommendations for Further Investigation would be thoroughly reviewed by the NCSC before a decision was made. As with CPG applications, final decisions by the NCSC could be appealed to the National Executive Committee.

- National CAMP Screening Committee decisions would affect voluntary and mandatory CAMP participants in different ways:
  - Voluntary CAMP participants would be limited to existing CPGs. They would be advanced to CMPG for the following 6-year period providing 120 acceptable points or more had been accumulated and advancement was recommended. Participation in the following 6-year period would be voluntary as well, BUT NECESSARY if maintenance of CMPG after 6 years was desired. Voluntary CAMP participants who did not accumulate 120 acceptable points would remain as CPGs in good standing. They could voluntarily participate in the CAMP for a new 6-year period or leave the CAMP, as they desired.
  - New CPGs subject to mandatory CAMP participation would be subject to several different situations at the end of each individual's 6-year CAMP period.

#### End, First 6-year CAMP Period

120 acceptable points or more – Advancement to CMPG for 6 years \*  
 less than 120 acceptable points – Maintain CPG for 6 years \*

#### End, Second and Subsequent 6-year CAMP Periods

120 acceptable points or more – Maintenance of or Advancement to CMPG for 6 years \*

less than 120 but more than 80 acceptable points

– CMPGs reclassified to CPG for 6 years \*

– CPGs maintain CPG for 6 years \*

less than 80 acceptable points – CMPG and CPG reclassified to Member \*\*

\* Subject to mandatory CAMP participation during new 6-year CAMP Period

\*\* Members subject to reclassification from CMPG/CPG would be eligible to reapply for CPG subject to mandatory CAMP after 3 years as Member

National CAMP Screening Committee decisions relative to acceptability of points, refusals of Advancement or Maintenance, and/or Reclassifications shall be subject to rights of initial appeal to the Certification Renewal Director and, if necessary, final appeal to the National Executive Committee.

- In the following, please note that a Technical Contribution in any one CAMP Year may be claimed under EITHER Continuing Education Activities or Professional Participation Activities, BUT NOT UNDER BOTH.

**CONTINUING EDUCATION ACTIVITIES**– requirement: 10 points annually, for a cumulative total of 60 or more for the 6-year CAMP period. A minimum of 6 CE points must be earned and recorded for each CAMP year; a combined minimum of 15 CE, TC, and PP points must be earned and recorded for each CAMP year. Written confirmation of successful completion or attendance at all CE courses, talks and/or conventions/conferences/field seminars, etc., reported to earn points will ordinarily be required.

**Active Participation in College-level Formal Education**(problem-solving, interaction with instructors, homework and exams)

- Formal classroom courses, ordinarily for college credits, **successfully completed**:
  - Geosciences, other physical sciences, engineering, math or computer science
  - 16 points/semester hour \*
  - 12 points/quarter hour \*

- Other relevant disciplines (business, management, law, accounting, etc.):
  - 8 points/semester hour \*
  - 6 points/quarter hour \*
- Formal classroom geoscience courses, ordinarily for CEUs, **successfully completed** one contact hour = 1 point
- Formal in-house company geoscience coursework **successfully completed** one contact hour = 1 point
- \* In these categories, no more than 50 points may be claimed for CE in any CAMP Period; 10 additional points may be carried forward into the first year only of the following CAMP Period.

**Passive Participation in Supplemental or Continuing Education** (problem-solving, interaction, homework and exams not involved). In this section, 1 contact hour (CH) = 0.66 point. Fractional points at 0.33 point per half contact hour can be claimed.

- Geoscience short courses/field seminars sponsored by technical or professional geoscience organizations, not for credit: 0.66 point/contact hour
- Auditing of technical talks/papers at geotechnical society convention or conference: 0.66 point/active contact hour
- Auditing of single technical talk at part-day geotechnical society or Section meeting: 0.33 point/0.5 contact hour
- Auditing of formal classroom courses, **not for credit**:  
 Geosciences, other physical sciences, engineering, math or computer science: 0.66 point/contact hour  
 Other relevant disciplines: 0.33 point/contact hour
- Auditing of formal classroom geoscience courses for CEUs, not for credit: 0.66 point/contact hour
- In-house company geoscience training courses: 0.66 point/contact hour

#### **Distance Learning, including Online**

- Active: BS or post-BS formal courses **completed for credit**:  
 Geosciences, other physical sciences, engineering, math or computer science  
 = 16 points/semester hour \*  
 = 12 points/quarter hour \*  
 Other relevant disciplines  
 = 8 points/semester hour \*  
 = 6 points/quarter hour \*
- Passive, **not for credit**:  
 Audited formal geoscience, other physical science, engineering, math or computer science course, **not for credit**:  
 0.66 point/contact hour  
 Audited geoscience short course: 0.66 point/contact hour  
 Audited formal other relevant disciplines course: 0.33 point/contact hour
- \* In these categories, no more than 50 points may be claimed for CE in any CAMP Period; 10 additional points may be carried forward into the first year only of the following CAMP Period.

**CONTINUING EDUCATION OR PROFESSIONAL PARTICIPATION ACTIVITIES**– Technical Contributions points in any one CAMP Year may be claimed under either Continuing Education Activities or Professional Participation Activities but not under both.

#### **Technical Contributions**

- Research, authorship, and verbal presentation of non-peer-reviewed geotechnical paper or talk, or peer-reviewed poster:  
 First Presentation: Sole Author 10 points OR Lead Author 8 points, Co-authors 2 points each.  
 Subsequent Presentations: Sole Author 4 points OR Lead Author 3 points, Co-authors 1 point each.  
 Published peer-reviewed paper Abstract: Sole Author 4 points OR Lead Author 3 points, Co-authors 1 point each.
- Research, authorship, and publication of peer-reviewed geotechnical paper, article, monograph, or booklet (less than 60 pages):  
 Sole Author 25 points OR Lead Author 20 points; Co-authors 5 points each.
- Research, authorship, and publication of peer-reviewed geotechnical book (60 pages or more):  
 Sole Author 30 points OR Lead Author 25 points, Co-authors 5 points each.
- Research, preparation, and presentation of each geotechnical course **by non-academics only**:  
 First Presentation of Course: 1 contact hour = 3 points  
 Subsequent Presentations, each: 1 contact hour = 1 point

With multiple lecturers, points are to be shared in proportion to individual participation in research, preparation, and presentation.

- Point allocations between Lead and Co-authors different from those suggested above may be applied for from the CRD or National CAMP Screening Committee.

**PROFESSIONAL PARTICIPATION ACTIVITIES** – requirement: 10 points annually, for a cumulative total of 60 or more for the 6-year CAMP Period. A minimum of 6 PP points must be earned and recorded for each CAMP year; a combined minimum of 15 CE, TC, and PP points must be earned and recorded for each CAMP year. Written confirmations may be required. Please obtain if possible.

#### **Professional Practice, Annual**

- Full-time (30-plus hours per week, minimum 40 weeks per year) employment or personal practice in a geoscience discipline or work associated with, or dependent upon, a geoscience discipline = 2.5 points

#### **Technical Society Participation, Annual**

- Participation in national geoscience technical organization (up to 3) = 1 point each
- Active service as local, state, regional, or national Officer, geoscience technical organization = 4 points
- Active service as local, state, regional, or national Committee Chair, geoscience technical organization = 2 points
- Attendance at state, regional, or national geoscience technical organization convention or field trip = 2 points each
- Organizing a convention technical session or field trip or leading a field trip = 3 points
- Chairing a technical session = 1 point

#### **State Board Participation, Annual**

- Service on a State Board of Geology or equivalent = 4 points
- Service on ASBOG Executive Committee = 4 points
- Service as ASBOG Subject Matter Expert = 2 points per meeting attended

#### **AIPG Participation, Annual**

- Attendance at Section or National meetings, Annual Meeting and/or field trips:
- Annual Meetings, National, or Section = 3 points each
- Other Section meetings/field trips (each)
  - = 2 points for first meeting/field trip per year
  - = 1 point for each additional meeting/field trip for remainder of year
- Active service as National or Section Officer = 5 points
- Active service as Advisory Board member of National Executive Committee or as Section Executive Committee non-Officer Director or Advisory Board Representative = 4 points
- Active service as National or Section Committee Chair = 3 points
- Active service as National or Section Committee member = 1 point
- Active volunteer work in geology-related outreach activities involving:
  - public,
  - K-12/collegiate,
  - mentoring,
  - service on state/local government boards, commissions, or committees involving geology
  - any or all of above = 3 points each
- Active volunteer citizen lobbyist activities for geology = 2 points each contact. DC Fly-In and State Drive-In participation = 3 points per day.

#### **Participation in Community Service Activities, Annual**

- Active volunteer work on a continuing basis with non-technical community service activities including:
  - K-12/collegiate,
  - mentoring
  - neighborhood or community activities or service
  - service in state/local government or their governmental boards, commissions, committees, etc.
  - for similar but unlisted activities, consult with CRD/NCSC
- any or all of above = 3 points each
- Registered voter = 1 point

#### **SUBSTITUTE CONTINUING EDUCATION/PROFESSIONAL PARTICIPATION ACTIVITIES**

– Special consideration by NCSC will be available to CAMP Participants unable to maintain the required balance between CE and PP requirements because of:

- residence in isolated locations 100 minutes or more one-way driving time from regular Section functions (PP) and/or sources of CE at geotechnical society-sponsored short courses, talks, field trips, etc. (but excluding attendance at national technical geoscience conventions/conferences or AIPG Annual Meetings).
- CPGs subject to frequent travel involving absences of more than 17 consecutive days, thus adversely affecting CE and PP activities.
- full-time graduate students unable to participate in PP activities
- and others, similar in nature, but not described above.

Any CAMP Participant who has been unable to fulfill a basic 6-year CAMP period due to one or more of the above, or similar, factors may provide a statement describing the applicant's specific situation and request special consideration by the local and National CAMP Screening Committees, to be attached to the Application for Advancement to CMPG. The Screening Committees may favorably consider, in a generally supportive manner, substitution by the applicant of additional non-technical community service activities for PP, publication of book reviews of geoscience-oriented books and monographs in *TPG*; enhanced CE contact-hour point values for audited formal classroom courses, CEU courses, short courses, and Distance Learning, active and passive, independent research in the applicant's geoscience specialty not undertaken for employment purposes, etc.

### **APPENDIX TO PROPOSAL FOR AIPG CONTINUING PROFESSIONAL DEVELOPMENT PROGRAM FOR A CERTIFICATION ADVANCEMENT AND MAINTENANCE PROGRAM**

#### **IMPLEMENTATION**

**The Continuing Professional Development Committee**– Providing this proposal is accepted by a majority of those voting in 2000, the current Task Force for Continuing Professional Development, a temporary, special purpose task force, will "morph" into a new National Standing Committee. The Charge to this new Committee will differ from that of the Task Force, the latter being concerned with studying, reporting and making recommendations on CE requirements for renewal of CPG and a periodic recertification requirement, to:

- supervision of the CAMP, with periodic reviews and reports provided to the National Executive Committee.
- supervision of the Certification Renewal Director and CRD staff at Headquarters and the Section/Regional and National CAMP Screening Committees and their work. A firm but flexible hand may be required during the early CAMP years.
- make quarterly recommendations to the National Executive Committee of those CPGs to be maintained at that rank or to be reclassified to the CPG rank, those CPGs to be advanced to CMPG rank, those to be maintained at CPG rank and those to be reclassified to Member status, as determined by the National CAMP Screening Committee. The National Executive Committee will be the final appeal level for applicants protesting National Camp Screening Committee recommendations for maintenance and reclassification decisions.
- the currently existing Examination Sub-Committee of the Task Force for CPD will continue in existence as a part of the Continuing Professional Development Committee, with the Charge: "to study and report on the feasibility and desirability of introducing requirements for Examinations for granting of Certification." The 1999 National Executive Committee tabled an examination recommendation by this Sub-Committee pending further review and study in the period after the CAMP is accepted by a membership vote and established.
- provide an archive for all CAMP application and CAMP Logbook materials submitted with applications for advancement; compile statistical data concerning the CAMP especially regarding the success or failure of the CAMP participants to advance to CMPG and report bi-annually (at least) to the National Executive Committee in this regard, with recommendations for adjustment of the CAMP, if necessary, and on the appropriateness and relevancy of the CAMP for individual members of AIPG.

**Certification Renewal Director** – It is anticipated that one additional FTE employee at Headquarters, the Certification Renewal Director, will be required to screen applications, maintain records, and oversee the CAMP Program. A CAMP Application fee would be set at a level sufficient to underwrite employee and administration requirements.

**Initial Application to Participate in CAMP** – Existing CPGs who wish to voluntarily participate in the CAMP would make application to the Certification Renewal Director (CRD) at AIPG Headquarters. "New" CPGs subject to mandatory CAMP participation would be registered automatically. In either case, the CRD would issue a CAMP Logbook annually to each CAMP Participant.

**Logbook Issue** – Headquarters will issue a new CAMP Logbook to all declared or mandatory CAMP participants each year. It could be hard-copy paper, a

Website download, or both. Use of standardized paper copies would probably make application checking easier but involve additional cost. Regardless of issue mode, Headquarters will provide the "CAMP Year End-Date Sub-Group" designation to all participants receiving a Logbook.

**Subdivision into CAMP Year Groups and Sub-groups** – In order to avoid administrative and Certification Advancement application review congestion, participants in the CAMP initially would be subdivided into six separate CAMP Year Groups, one per calendar year. Each of the CAMP Year Groups would be further subdivided into 4 CAMP End-Date Sub-Groups for that year. For example, the first CAMP Year Group of about 500(?) participating CPGs and CMPGs would be subdivided into 4 CAMP Year End-Date Sub-Groups of about 125 each. (It is assumed that about 3000 participants eventually will participate in the CAMP.) By way of example, Start Dates and End Dates for the CAMP Year 2011 Sub-Groups are shown in the Figure below for each of the six CAMP Program Years. Except for CAMP Years 2005, 2006, and 2007, as explained in the following Start-up of CAMP section, starting with CAMP Year 2008, the schedule shown in the Figure can be used for any future CAMP Year by adjustment of the Start-Dates and End-Dates of the 6 Program years. Under this Sub-Group schedule, all four Sub-Groups of the same CAMP Year Group will complete their 6-year CAMP period during the same calendar year. The 6-year Sub-Group completion year can be used to identify each "CAMP Year xxxx Group," similarly to identification of the "Class of xxxx" in high school or college. Thus CAMP Year Group 2011 identifies the CAMP Year 2011 Group and Sub-Groups that started their 6-year CAMP period in 2005. By use of 4 sub-groups within every CAMP Year, a steady flow of about 125 Applications for Advancement to CMPG per quarter could be anticipated and provided for by the CRD, the National CAMP Screening Committee, and the local CAMP Screening Committees.

EXAMPLE - FIGURE

CAMP Year 2011 Sub-Group (S-G) Start-Dates and End-Dates, all 6 Program Years

	S-G	S-G	S-G	S-G
1st Program Year – Start Dates	1 Feb.	1 May	1 Aug.	or 1 Nov. 2005
End Dates	31 Jan.	30 April	31 July	or 31 Oct. 2006
2nd Program Year – Start Dates	1 Feb.	1 May	1 Aug.	or 1 Nov. 2006
End Dates	31 Jan.	30 April	31 July	or 31 Oct. 2007
3rd Program Year – Start Dates	1 Feb.	1 May	1 Aug.	or 1 Nov. 2007
End Dates	31 Jan.	30 April	31 July	or 31 Oct. 2008
4th Program Year – Start Dates	1 Feb.	1 May	1 Aug.	or 1 Nov. 2008
End Dates	31 Jan.	30 April	31 July	or 31 Oct. 2009
5th Program Year – Start Dates	1 Feb.	1 May	1 Aug.	or 1 Nov. 2009
End Dates	31 Jan.	30 April	31 July	or 31 Oct. 2010
6th Program Year – Start Dates	1 Feb.	1 May	1 Aug.	or 1 Nov. 2010
End Dates*	31 Jan.	30 April	31 July	or 31 Oct. 2011

\* File CAMP Application for Advancement Within One Month of Your Sub-Group's End Date in the 6th CRP Year

**Start-up of CAMP Program** – It is anticipated that probably two years or more for Bylaws writing/organizational fine-tuning and preparation will be required after the proposed Certification Advancement and Maintenance Program (CAMP) has been approved by a majority of CPGs voting thereon. The National Officers ballot in 2000 will be used for this purpose. This implies that the CAMP may go into effect during 2002 or 2003. It is proposed that the CAMP period during the first three years of program operation be shortened to 3, 4, and 5 years respectively, with all following CAMP periods being for 6 years. In this way, the design and viability of the application, screening, review and recertification process can be tested relatively early and the necessary adjustments made early after the CAMP has started. As a result the four Sub-Groups for CAMP Years 2005, 2006, 2007, and 2008 might all have the same Start Dates in 2002 for 3-year, 4-year, 5-year and one 6-year CAMP periods. CAMP Year 2009 Sub-Groups would start during 2003, CAMP Year 2010 Sub-Groups would start during 2004, and so on once all CAMP periods were for the standard length of 6 years.

**Assignment to CAMP Year Groups and Sub-Groups** – Providing the Certification Advancement and Maintenance Program is approved by a majority of the membership in 2000, voluntary participants in the CAMP Program would identify themselves to Headquarters no later than June 30, 2002. Mandatory participants would be automatically enrolled after the required new bylaws for the CAMP are approved and adopted by the National Executive Committee. Headquarters might assign participants to their CAMP Groups and Sub-Groups in alphabetical order or by CPG number or possibly by some other method, taking care that the potential CAMP workload for each Section

CAMP Screening Committee is evenly distributed over each 6-year CAMP period.

**Participation in CAMP Activities** – The CAMP and the annually-issued CAMP Logbook will provide for two types of professional activities, equally balanced between CONTINUING EDUCATION (CE) and PROFESSIONAL PARTICIPATION (PP). Points would be assigned to these activities, to be recorded in that year's CAMP Logbook as approved activities were completed. (See the previous detailed discussion of CAMP activities on pages 3, 4, and 5 of this TPG issue.) Each participant's goal is to obtain 10 points or more each year in both CA and PP, or a total of 20 points or more for the CAMP year. Up to 5 points (CE and PP in any combination) in excess of 20 could be carried forward into the following CAMP year, except in the 6th year of a CAMP period, when up to 10 excess points in both CE and PP could be carried forward into the first year only of the new 6-year Camp period.

Flexibility to accommodate individual schedules during the 6-year CAMP period will exist in the ways points in CE and PP are obtained and accumulated during the 6-year CAMP period. However, a minimum of 6 CE and 6 PP points each, and a combined minimum total of 15 points (including TC points) will be required for each CAMP year of the 6-year CAMP period. Required annual combined point minimums will be required mainly to ensure that CAMP participants do not lag too far behind in reaching the 120-point goal in six years. Trying to erase a 50-point deficiency in the 6th CAMP year would be very difficult for most participants. Actually, the required annual cumulative point minimum of 15 may prove to be too small after the CAMP has been in operation for a period of years, and may have to be adjusted upward. Variation from the annual point minimums could be applied-for to the CRD, as necessary. Additional flexibility is provided by Technical Contributions (TC), as described previously, with TC points being used for either CE or PP requirements in given year. A total of 60 points or more in both CE and PP (including TC points) at the end of the 6-year CAMP period would be required for advancement of participating CPGs to the higher CMPG rank for the following 6-year period.

**Applications for Advancement to CMPG at End of 6-Year CAMP Period**

– Similar applications for advancement would be filed with Headquarters within 30 days of the applicant's CAMP Sub-Group End-Date by both voluntary and mandatory CAMP participants. The application shall be in resume form, commencing at the applicant's initial CPG or CMPG date and continuing through the applicant's most recent CAMP period. Confirmation of employment will not ordinarily be required. The applicant will be expected to supply a brief history of employment, experience, education, professional activities with AIPG and the technical geoscience organizations, and special georelated activities (ASBOG, state boards, commissions and committees, state registration, and similar data) that will provide the Section or Regional and the National CAMP Screening Committees with information supplemental to that described in the applicant's CAMP Logbooks for the immediate past 6-year CAMP period.

Copies of the application and the 6 Logbooks, including an original copy plus two copies of all 6, would be forwarded by each applicant to Headquarters. Copies would be provided by Headquarters to the Section or Regional and National CAMP Screening Committees. A check for an amount that will cover the cost of administering the CAMP should accompany the application. The CAMP is to be administered on a strictly break-even basis, for the benefit of the CAMP and participants, and not for AIPG's regular revenue stream.

**Screening Committees** – CAMP Screening Committees will be organized and operate at the National and Section levels. The CAMP screening process will operate similarly to the long-established CPG screening process. A National CAMP Screening Committee will be organized separately from the National CPG Screening Committee, although membership of the two committees could overlap to some degree. Sections would have the option to either form a new CAMP Screening Committee to handle CAMP Applications, or to use the existing Section CPG Screening Committee for this additional function. The Section CAMP Screening Committee would review all applications for advancement and Logbooks in copy form, verify participation where possible, and make recommendations for Advancement, Maintenance, or Further Investigation of each application to the National CAMP Screening Committee. The Section CAMP Screening Committee must forward its recommendations to National within 60 days of receiving the application and Logbooks. The Certification Renewal Director would exercise administrative oversight and maintain records for the CAMP. In addition, the Certification Renewal Director would preliminarily screen and prioritize applications and Section CAMP Screening recommendations for each CAMP applicant prior to referral to the National CAMP Screening Committee, and would contact and advise all applicants and the Continuing Professional Development Committee after the National CAMP Screening Committee had acted. All Section recommendations for Maintenance and/or Further Investigation would be thoroughly reviewed by the National CAMP Screening Committee before a decision for Advancement, Maintenance, or Reclassification was made. National CAMP Screening Committee rejections for advancement to CMPG could be appealed to the National Executive Committee.



After the CAMP has been in effect for a number of years, persistent problems may continue to exist with the Section CAMP Screening Committees. Expansion of the Certification Renewal Director's duties at Headquarters may become necessary, probably requiring employment of another FTE to handle the work of some or all of the Section/Regional CAMP Screening Committees. A higher CAMP Application Fee would be required if this becomes necessary.

#### Post CAMP Status of Applicants

##### Voluntary CAMP Participants (limited to existing CPGs).

Voluntary CAMP participants would be advanced to CMPG rank for the following 6-year period if 120 points or more were obtained and accepted. Participation in the following 6-year CAMP period would be voluntary, but necessary if continuation in the CMPG rank was desired. Voluntary CAMP participants who did not obtain 120 points or more would maintain their CPG rank in good standing. They would be able to voluntarily participate in the CAMP during the new 6-year period or to leave the Program.

##### Mandatory CAMP Participants (all "new" CPGs)

New CPGs subject to mandatory CAMP participation would be subject to several different situations at the end of each individual's 6-year CAMP period.

##### End, First 6-year CAMP Period

120 acceptable points or more – Advancement to CMPG for 6 years \*

less than 120 acceptable points – Maintain CPG for 6 years\*

##### End, Second and Subsequent 6-year CAMP Periods

120 acceptable points or more – Maintenance of or Advancement to CMPG for 6 years \*

less than 120 but more than 80 acceptable points – CMPGs reclassified to CPG for 6 years \*

CPGs maintain CPG for 6 years\*

less than 80 acceptable points - CMPGs and CPGs reclassified to Member\*\*

\* Subject to mandatory CAMP participation during new 6-year CAMP Period

\*\*Members subject to reclassification from CMPG/CPG would be eligible to reapply for CPG subject to a mandatory CAMP requirement after 3 years as a Member

National CAMP Screening Committee decisions relative to acceptability of points, refusals of Advancement or Maintenance, and/or Reclassifications shall be subject to rights of initial appeal to the Certification Renewal Director and, if necessary, final appeal to the National Executive Committee.

**AIPG Titles** - By grant of the Certified Professional Geologist title, AIPG attests to the public that each geological scientist who has been so certified had met the Institute's standards of education, experience, competence, and integrity, as defined in the Bylaws, on the original date of Certification.

By grant of the Certified Master Professional Geologist title, AIPG attests to the public that each Certified Professional Geologist who has been so recertified has met the Institute's standards and requirements, as defined in the Bylaws, for advancement to the CMPG title by demonstrated personal involvement in continuing professional development, professional practice, and relevant education in order to maintain high personal standards of competence and integrity.

## END OF PROPOSAL

### AIPG CERTIFICATION ADVANCEMENT AND MAINTENANCE PROGRAM ANNUAL LOGBOOK

Name \* \_\_\_\_\_

Section \* \_\_\_\_\_

CPG or CMPG Number \* \_\_\_\_\_

Program Year \* \_\_\_\_\_

Your CAMP Year Start and End Dates \* \_\_\_\_\_

Your CAMP Year End-Date Subgroup \* \_\_\_\_\_

\* To be provided individually by Headquarters when the Annual Logbook is issued.

Certified Professional Geologists interested in being advanced to CMPG rank and Certified Master Professional Geologists interested in maintaining their rank and who were certified prior to Bylaws adoption may participate voluntarily in Continuing Professional Education and Professional Participation activities and shall record these activities in an annually-issued Logbook through a six-year Certification Advancement and Maintenance Program (CAMP) period. Educational activities might include attendance at geotechnical society conventions, the completion of relevant BS or post-BS formal education for academic credits, completion of formal or informal courses conducted by educational, professional, or geotechnical societies or employers, and completion of distance learning courses, among others. Professional Participation activities might include active participation in the administration of national geotechnical organizations, attendance at their conventions, conferences, or field seminars, attendance at AIPG National and/or Section meetings, Annual Meetings, and field trips; service as an AIPG National or Section officer, Advisory Board Representative, Committee Chair or Member, and/or active volunteer work in outreach activities involving geology and/or community service.

Certified Professional Geologists certified after Bylaws adoption are required to participate in Continuing Professional Education and Professional Participation activities through a six-year Certification Renewal Period. These activities shall be similar to those described above.

Certified Professional Geologists who are subject to frequent travel, are full-time or near full-time graduate students, or who live in isolated locations

requiring 100 driving minutes or more one-way from regular Section functions and/or from continuing education opportunities such as formal academic training or technical society-sponsored short courses or talks, may utilize Substitute CE and/or PP and, subject to these conditions, shall provide a statement describing the applicant's specific situation and requesting special consideration by the local and National Screening Committees, to be attached to the application for Advancement to CMPG as Supplemental Logbook(s) for the CAMP years affected.

#### Continuing Education Activities

Points and fractions or multiples of points may be obtained by successful completion for credits of relevant geotechnical or associated discipline continuing education courses in a variety of formal, structured educational settings including distance learning. The number of points to be earned in a formal setting depends upon subject relevancy, the number of contact hours involved, and the degree of required student interaction. Lesser numbers of points may be obtained for the same relevant formal, structured courses if audited on a non-credit basis, for informal in-house company training, and for short courses and field trips conducted by professional or technical geoscience organizations.

#### Professional Participation Activities

Points and fractions or multiples of points may be obtained through professional practice, active membership and participation in the activities of AIPG at the Section or National levels, as well as membership in national geoscience technical organizations and participation in their activities, and through volunteer work in geology-related outreach, citizen lobbyist, and/or community activities.

#### Technical Contributions Activities

Points and fractions or multiples of points may be obtained through publication of peer-reviewed technical papers or articles on relevant subjects, presentation of similar papers or talks, or preparation and presentation of geotechnical courses by non-academics only. TC points may be used for either CE or PP purposes in any given year, but not for both

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**CONTINUING EDUCATION ACTIVITIES**

(Written confirmation of successful credit course completion, short course/field seminar attendance, convention/ conference attendance, auditing of not-for-credit courses, company training, or distance learning is required. If confirming materials are not available from company, institution, or sponsoring organization, please supply signed Continuing Education Verification Form.)

Annual Requirement: 10 points, for a cumulative total of 60 points for the 6-year Certification Renewal Period. A minimum of 6 CE points must be earned and recorded for each CAMP year and a required combined minimum of 15 CE, PP, and TC points must be earned and recorded for each CAMP year.

ACTIVE PARTICIPATION IN FORMAL OR CONTINUING EDUCATION (courses that include problem-solving, interaction with instructors, homework and examinations). In the following, Geoscience, *et al.* = Geosciences, other Physical Sciences, Engineering, Math, and Computer Sciences courses. Other Relevant Disciplines = Management, Administration, Accounting, Law, etc. courses.

Formal Classroom BS or post-BS Courses completed successfully for Credit.

- Geosciences, *et al.* (16 points per Sem. hr, 12 points per Qtr. hr)\*

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Semester Hours</u>	<u>Quarter Hours</u>	<u>Multiplier</u>	<u>Points</u>
						12 or 16	

- Other Relevant Disciplines (8 points per Semester Hour, 6 points per Quarter Hour) \*

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Semester Hours</u>	<u>Quarter Hours</u>	<u>Multiplier</u>	<u>Points</u>
						6 or 8	

Formal Classroom Geoscience Courses completed successfully for CEUs - one contact hour = 1 point

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					1/CH	

Formal Classroom In-House Company Geoscience Course completed successfully - one contact hour = 1 point

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					1/CH	

- \* In these categories, no more than 50 points may be claimed for CE in any 6-year CAMP period. 10 additional points may be carried forward into the first year only of the following CAMP period.

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**DISTANCE LEARNING, including ONLINE EDUCATION**

Active Participation in BS or post-BS formal courses completed successfully for Credit:

- Geosciences, *et al.* (16 points per Semester hour, 12 points per Quarter hour) \*

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Semester Hours</u>	<u>Quarter Hours</u>	<u>Multiplier</u>	<u>Points</u>
						12 or 16	

- Other Relevant Disciplines (8 points per Semester hour, 6 points per Quarter hour) \*

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Semester Hours</u>	<u>Quarter Hours</u>	<u>Multiplier</u>	<u>Points</u>
						6 or 8	

Passive Participation, not for Credit:

- Audited Formal Geoscience, *et al.* Course (.66 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					.66/CH	

- Audited Geoscience Short-Course (.66 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Sponsor</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					.66/CH	

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PASSIVE PARTICIPATION IN SUPPLEMENTAL OR CONTINUING EDUCATION COURSES (which do not include problem-solving, interaction with instructors, homework, or examinations). In the following, 1 contact hour (CH) = .66 point. Fractional points at .33 per half contact hour can be claimed.

Geoscience short courses/field seminars sponsored by technical or professional geoscience organizations (.66 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Sponsor</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					.66/CH	

Auditing of technical talks/papers at geotechnical society convention or conference (.66 point per active contact hour)

<u>Dates</u>	<u>Convention/Conference Title</u>	<u>Sponsors</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
				.66/CH	

Auditing of single technical talk at part-day Section or technical society meeting (.33 point per .5 contact hour)

<u>Dates</u>	<u>Subject</u>	<u>Speaker</u>	<u>Sponsor</u>	<u>Multiplier</u>	<u>Points</u>
				.33 each	

Auditing of Formal Classroom Geoscience, et al. Courses, not for Credit (.66 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					.66/CH	

Auditing of Formal Classroom Courses in Other Relevant Disciplines, not for Credit (.33 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Discipline</u>	<u>Institution</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
						.33/CH	

In-House Company Geoscience Training Course (.66 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Company</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					.66/CH	

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- Audited Formal Other Related Discipline Course (.33 point per contact hour)

<u>Dates</u>	<u>Course Title</u>	<u>Subject</u>	<u>Institution</u>	<u>Contact Hours</u>	<u>Multiplier</u>	<u>Points</u>
					.33/CH	

- \* see note at bottom of page 2 – applies here as well.

CONTINUING EDUCATION ACTIVITIES – SUMMARY

POINTS \_\_\_\_\_

TECHNICAL CONTRIBUTIONS – IF CLAIMED AS CE

POINTS \_\_\_\_\_

FOR \_\_\_\_\_ PERIOD (12 mos.)

TOTAL POINTS \_\_\_\_\_

TEN POINTS ANNUALLY, FOR A CUMULATIVE TOTAL OF 60 CONTINUING EDUCATION POINTS FOR A PERIOD OF SIX CONSECUTIVE YEARS, ARE REQUIRED FOR CERTIFICATION RENEWAL AT THE CERTIFIED MASTER PROFESSIONAL GEOLOGIST LEVEL. A MINIMUM OF 6 CE POINTS ARE REQUIRED FOR EACH CAMP YEAR, AND A COMBINED ANNUAL MINIMUM OF 15 CE, PP AND TC POINTS ARE REQUIRED FOR EACH CAMP YEAR. SPECIAL CONSIDERATION WILL BE GIVEN TO DISADVANTAGED APPLICANTS WITH SPECIFIC SITUATIONS, IF REQUESTED IN THE APPLICATION FOR ADVANCEMENT TO CMPG AND ACCOMPANIED BY A SUPPLEMENTAL LOGBOOK FOR THE CAMP YEAR AFFECTED.

CHECK BOX IF SPECIAL CONSIDERATION IS REQUESTED **9**



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**TECHNICAL CONTRIBUTIONS ACTIVITIES**

(Research, authorship or co-authorship resulting in either verbal or poster presentations OR peer-reviewed publications of a geotechnical paper/article/book/etc.) PLEASE NOTE THAT POINTS EARNED FOR A TECHNICAL CONTRIBUTION IN ANY YEAR MAY BE CLAIMED AGAINST EITHER THE CONTINUING EDUCATION REQUIREMENT OR THE PROFESSIONAL PARTICIPATION REQUIREMENT BUT MAY NOT BE CLAIMED AGAINST BOTH IN THE SAME CAMP YEAR. Lead Authors and their Co-Authors may petition the National CAMP Screening Committee for a different allocation of Multiples from what is specified below.

Verbal or Poster Geotechnical Presentations, each annually:

MULTIPLIERS:

First Presentation: Sole Author 10 points OR Lead Author 8 points,

Co-authors 2 points each

Subsequent Presentations: Sole Author 4 points OR Lead Author 3 points,

Co-authors 1 point each

Published peer-reviewed Abstracts of Paper: Sole Author 4 points OR Lead Author 3 points, Co-authors 1 point each

	<u>Please Check One</u>		
<u>Dates</u>	<u>Title or Subject</u>	<u>Sponsor/Venue</u>	<u>Verbal</u> <u>Poster</u> <u>Abstract</u>

	<u>Please Check One</u>			
<u>Sole Author</u>	<u>Lead Author</u>	<u>Co-Author</u>	<u>Times Presented</u>	<u>Points</u>

Peer-reviewed Geotechnical Publications, each annually for paper/article/booklet with published text of less than 61 pages. MULTIPLIERS: Sole Author 25 points OR Lead Author 20 points, Co-authors 5 points each

	<u>Please Check One</u>			
<u>Dates</u>	<u>Title</u>	<u>Publication</u>	<u>Sole Author</u> <u>Lead Author</u> <u>Co-Author</u>	<u>Points</u>

Peer-reviewed Geotechnical Publications, each annually for a book with published text of 61 pages or more. MULTIPLIERS: Sole Author 30 points OR Lead Author 25 points, Co-authors 5 points each

	<u>Please Check One</u>			
<u>Dates</u>	<u>Title</u>	<u>Publisher</u>	<u>Sole Author</u> <u>Lead Author</u> <u>Co-Author</u>	<u>Points</u>

Course Presentation by Non-academicians ONLY, each annually for research, preparation, and presentation of each geotechnical course.

	<u>Title or</u>	<u>Contact</u>	<u>Times</u>	
<u>Dates</u>	<u>Subject</u>	<u>Sponsor/Venue</u>	<u>Hours</u> <u>Presented</u>	<u>Points</u>

MULTIPLIERS: First Presentation of Course: 1 contact hour = 3 points. Subsequent Presentations of Course, each: 1 contact hour = 1 point. Sole presenter/researcher: add 10 points. Lead presenter/researcher: add 8 points. Each co-presenter/researcher: add 2 points each.

(Providing course research, preparation, and presentation involves more than one CAMP participant, the National CAMP Screening Committee may be petitioned for a different allocation of points than is specified above).

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**AIPG PARTICIPATION**

Attendance at Section or National meetings, Annual Meetings, and/or field trips

- Annual Meetings, National and/or Section = 3 points each

<u>Dates</u>	<u>National AM-Venue</u>	<u>Section AM-Venue</u>	<u>Multipplier 3</u>	<u>Points</u>
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- Ordinary Section meetings/field trips - first meeting or field trip of year = 2 points - for subsequent meetings or field trips = 1 point each

<u>Dates</u>	<u>Meetings</u>	<u>Field Trips</u>	<u>Multipplier 1 or 2</u>	<u>Points</u>
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Active Service as:

- National or Section Officer = 5 points
- Advisory Board representative to National Executive Committee or Section Executive Committee non-Officer Director = 4 points
- National or Section Committee Chair = 3 points \*
- National or Section Committee Member = 1 point \*
- \* 3 points and 1 point maximum, no additional points for multiple Committee posts

(-----check as appropriate-----)

<u>Dates</u>	<u>Nat'l</u>	<u>Sect. Off.</u>	<u>NABM</u>	<u>SExCom</u>	<u>ComC</u>	<u>ComM</u>	<u>Multipplier</u>	<u>Points</u>
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Active Volunteer Work in geology-related AIPG Outreach Activities involving:

- public and/or people in government
- K-12 and/or collegiate (including career days)
- mentoring
- service on local/state governmental boards, commissions or

**Page 6 of Logbook**  
**PROFESSIONAL PARTICIPATION ACTIVITIES**

(Written confirmation of activities may be required.  
Please obtain if possible.)

PROFESSIONAL PRACTICE – Full-time (30-plus hours per week on average, minimum 40 weeks per year) employment or personal practice in a geoscience discipline or in work associated with or dependent upon a geoscience discipline = 2.5 points.

<u>Dates</u>	<u>Employer or</u>	<u>Geoscience Discipline</u>	<u>Multipplier 2.5</u>	<u>Points</u>
	<u>Personal Practice</u>	<u>or Work Association</u>		

**TECHNICAL SOCIETY PARTICIPATION**

Membership in regional or national geoscience technical organization (up to 3) = 1 point Each

<u>Dates</u>	<u>Organization(s)</u>	<u>Multipplier 1</u>	<u>Points</u>
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Active Service, Officer of local, state, regional or national geoscience technical organization (each) = 4 points

Active Service, Committee Chair of same (each) = 1 point

<u>Dates</u>	<u>Organization(s)</u>	<u>Office</u>	<u>Multipplier 1 or 4</u>	<u>Points</u>
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Attendance at state, regional or national geoscience technical organization conference, convention or field trip (minimum one full day), each annually = 2 points

<u>Dates</u>	<u>Organization and Venue</u>	<u>Activity</u>	<u>Multipplier 2</u>	<u>Points</u>
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Organizing a Technical Session or Field Trip or Leading a Field Trip for a state, regional, or national geoscience technical organization = 3 points; Chairing a Technical Session, state, regional, or national geoscience technical organization = 1 point

<u>Dates</u>	<u>Organization and Venue</u>	<u>Activity</u>	<u>Multipplier 1 or 3</u>	<u>Points</u>
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**STATE BOARD PARTICIPATION**

Active service on a State Board for Geology or equivalent body = 4 points

Active service as Officer of ASBOG = 4 points

Active service as ASBOG Subject Matter Expert = 2 points per meeting attended

<u>Dates</u>	<u>Type of Service</u>	<u>Multipplier 2 or 4</u>	<u>Points</u>
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**Page 7 of Logbook (continued)**

committees involving geology

- minimum of 6 contact hours in any or all above = 3 points each

<u>Dates</u>	<u>Activity (describe)</u>	<u>For Whom?</u>	<u>Contact Hours</u>	<u>Multipplier 3</u>	<u>Points</u>
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Active AIPG Volunteer Citizen Lobbyist Activities for Geology, each Legislative, Administration or Bureaucratic Contact = 2 points; DC Fly-In and State Drive-In participation = 3 points per day

<u>Dates</u>	<u>AIPG Volunteer Lobbyist</u>	<u>Activity (describe each)</u>	<u>Contacts</u>	<u>Multipplier 2 or 3</u>	<u>Points</u>
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**COMMUNITY SERVICE ACTIVITIES**

Active Volunteer Work on Non-technical Community Service Activities, including:

- K-12 and/or collegiate
- mentoring, any level
- youth activities (including scouting, athletic team coach, etc.)
- other community service activities
- service in National Guard or other Active Reserve units
- service on state/local governmental boards, commissions or committees, any subject
- elected service in state/local government
- check with NCAMPSC regarding similar activities not specified above
- minimum 6 contact hours, any or all of above = 3 points each activity
- registered voter = 1 point

<u>Dates</u>	<u>Activity (describe)</u>	<u>For Whom?</u>	<u>Contact Hours</u>	<u>Multipplier 3</u>	<u>Points</u>
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PROFESSIONAL PARTICIPATION ACTIVITIES  
FOR \_\_\_\_\_ PERIOD (12 months) POINTS \_\_\_\_\_  
TECHNICAL CONTRIBUTIONS – IF CLAIMED AS PP POINTS  
POINTS \_\_\_\_\_

PROFESSIONAL PARTICIPATION POINT DEDUCTIONS  
FOR \_\_\_\_\_ PERIOD (12 months) POINTS (\_\_\_\_)

- NOT A MEMBER OF ANY REGIONAL OR NATIONAL GEOSCIENCE TECHNICAL ORGANIZATION. POINTS DEDUCTED - 2.

NET PROFESSIONAL PARTICIPATION ACTIVITIES  
POINTS FOR \_\_\_\_\_ PERIOD (12 months) TOTAL POINTS \_\_\_\_\_

10 POINTS ANNUALLY, FOR A TOTAL OF 60 PROFESSIONAL PARTICIPATION POINTS FOR A PERIOD OF SIX CONSECUTIVE YEARS, IS REQUIRED FOR CERTIFICATION RENEWAL AT THE CERTIFIED MASTER PROFESSIONAL GEOLOGIST LEVEL. A MINIMUM OF 6 CE POINTS ARE REQUIRED FOR EACH CAMP YEAR, AND A COMBINED ANNUAL MINIMUM OF 15 CE, PP, AND TC POINTS ARE REQUIRED FOR EACH CAMP YEAR. SPECIAL CONSIDERATION WILL BE GIVEN TO DISADVANTAGED APPLICANTS WITH SPECIFIC SITUATIONS, IF REQUESTED IN THE APPLICATION FOR ADVANCEMENT TO CMPG AND ACCOMPANIED BY A SUPPLEMENTAL LOGBOOK FOR THE CAMP YEAR AFFECTED. PLEASE CHECK BOX ON RIGHT IF SPECIAL CONSIDERATION IS REQUESTED FOR THIS CAMP YEAR BY THE APPLICANT FOR ADVANCEMENT TO CMPG: **9**

**ANNUAL SUMMARY, CE AND PP**

WITHIN THIRTY DAYS OF THE END OF EACH CAMP YEAR, PLEASE:  
1) SUPPLY YOUR POINTS EARNED AND RECORDED IN THIS LOGBOOK FOR YOUR CURRENT

(\_\_\_\_\_) CAMP YEAR SUB-GROUP:  
CONTINUING EDUCATION – TOTAL POINTS \_\_\_\_\_  
PROFESSIONAL PARTICIPATION – TOTAL POINTS \_\_\_\_\_  
TECHNICAL CONTRIBUTIONS – INDICATE WHETHER FOR CE OR PP – TOTAL POINTS \_\_\_\_\_

2) CPGS WHO ARE QUALIFIED TO EARN SUBSTITUTE POINTS FOR YOUR CURRENT CRP YEAR SHOULD SUPPLY YOUR SUBSTITUTE POINTS EARNED AND RECORDED IN YOUR SUPPLEMENTAL LOGBOOK FOR YOUR CURRENT (\_\_\_\_\_) CAMP YEAR SUBGROUP.  
CONTINUING EDUCATION – TOTAL POINTS \_\_\_\_\_  
PROFESSIONAL PARTICIPATION – TOTAL POINTS \_\_\_\_\_

3) **TOTAL POINTS** EARNED AND RECORDED FOR YOUR CURRENT (\_\_\_\_\_) CRP YEAR – **TOTAL POINTS** \_\_\_\_\_

4) SIGN THE DECLARATION BELOW IN THE PRESENCE OF A NOTARY WHO MUST ATTEST TO YOUR ACTION.

5) RETAIN THIS LOGBOOK AND THOSE FOR OTHER CRP YEARS UNTIL YOU MAKE APPLICATION FOR ADVANCEMENT TO CMPG IN \_\_\_\_\_.

I, \_\_\_\_\_, CPG #/CMPG# \_\_\_\_\_, do hereby declare that I have maintained my AIPG CAMP LOGBOOK and have performed and completed the CONTINUING EDUCATION and PROFESSIONAL PARTICIPATION activities described herein for the Point Totals shown above during my Current CAMP Program Year (\_\_\_\_\_).

Name: \_\_\_\_\_ Place: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Notary Attestation in Appropriate Language

**AIPG CERTIFICATION ADVANCEMENT AND MAINTENANCE PROGRAM  
ANNUAL SUPPLEMENTAL LOGBOOK FOR DISADVANTAGED APPLICANTS**

Name \* \_\_\_\_\_

Your CAMP Year Start & End Dates \* \_\_\_\_\_

CPG or CMPG Number \* \_\_\_\_\_

Your CAMP Year End-Date Subgroup \* \_\_\_\_\_

Section \* \_\_\_\_\_

\* To be provided individually by Headquarters when the Annual Logbook is issued on request to those who consider themselves Disadvantaged by Situation for their CAMP Year Subgroup

Residence Location? \*\* \_\_\_\_\_

Minutes One-way Driving Time to Section Meeting Site or Organized Continuing Education Site? \*\* \_\_\_\_\_

Full-time or Near-full-time Graduate Student? \*\* \_\_\_\_\_

Number of 17-day or more travel absences during this CAMP Year Subgroup? \*\* \_\_\_\_\_

\*\* To be provided by Applicant

Section Attestation to Disadvantaged Status for Applicant's CAMP Year \_\_\_\_\_

Qualified or Unqualified? \_\_\_\_\_

Special Consideration will be available to CAMP participants who are unable to maintain the required even balance between CE and PP requirements because of one or more disadvantages such as:

- residence in isolated locations 100 minutes or more one-way driving time from regular Section functions (PP) and/or sources of CE at geotechnical society-sponsored short courses, talks, field trips. Attendance at a national technical geoscience convention/conference or an AIPG Annual Meeting is considered to be possibly more feasible for these participants than at part-day or one-day meetings or courses, but still of greater difficulty than for most CAMP participants;
- participants subject to frequent travel involving absences of more than 17 consecutive days, which adversely affect CE and PP activities;
- full-time or near-full-time graduate students unable to participate in PP;
- and others in similar situations to those described above. Any CAMP participant unable to fulfill a basic 6-year CAMP period, probably with an imbalance between CE and PP points due to one or more of the above or similar factors, may request special consideration by the participant's local and National CAMP Screening Committees. A statement describing the applicant's specific situation, requesting special consideration and suggesting substitution by the applicant of additional CAMP-type activities shall be made on this Supplemental Logbook form annually. Supplemental Logbooks shall be attached to the Application for Advancement to CMPG at the end of the 6-year CAMP period. A Supplemental Logbook shall not necessarily be prepared every year, but shall be submitted for any year or years during which the applicant has been disadvantaged for all or part of the CAMP year.

1) Please describe your disadvantaged situation for this CAMP Year Subgroup:

2) How many CE, PP, and TC points are being submitted for this CAMP Year?

Continuing Education	Points _____
Professional Participation	Points _____
Technical Contribution	Points _____
	Total Points _____

3) Proposed Substitute Activities in CE, if necessary. Might include slightly-enhanced CE points (.75 vs .66 per contact hour) for audited formal classroom courses, CEU courses, short courses, and Distance Learning, active or passive, or substitution of locally available courses relative to applicant's geologic specialty area of practice (i.e. courses in computer science, political science, geography, economics, etc.)

**Page 2 of Supplemental Logbook**

- 4) Proposed Substitute Activities in PP, if necessary. Might include substitution by the applicant of additional and expanded geoscience and/or non-technical community service activities as essentially fulfilling the entire 10-point PP requirement per CAMP year.
- 5) Proposed Substitute Activities in TC, if necessary. The points could be used to supplement either CE or PP deficiencies in any given CAMP Year. Might include preparation of book reviews for publication in *TPG* or elsewhere of geoscience-oriented books or monographs for 6 points OR independent research in the applicant's geoscience specialty not undertaken for employment purposes, but in preparation of:
- non-peer-reviewed geotechnical paper or talk .1 point per hour, up to 2 points
  - peer-reviewed poster .2 point per hour, up to 4 points
  - peer-reviewed geotechnical paper, article, monograph, or book .25 point per hour, up to 5 points
- as a part of a successful outcome.

**AMERICAN INSTITUTE OF  
PROFESSIONAL GEOLOGISTS  
CERTIFICATION ADVANCEMENT AND MAINTENANCE  
PROGRAM**

**CONTINUING EDUCATION AND ACTIVITIES  
VERIFICATION FORM**

(to be used only if confirming materials are not available from company, institution, or sponsor of Continuing Education or Activity)

**TO WHOM IT MAY CONCERN**

The bearer is a participant in the Certification Advancement and Maintenance Program of the American Institute of Professional Geologists and must be able to document successful course completion, attendance, auditing, company training, or distance learning course completion or other organization or community activities, as the case may be, under Program requirements. Please cooperate with the bearer and the Program by signing this Verification Form.

Thank You

Continuing Professional Development Committee, AIPG

**SUBSTITUTE ACTIVITIES - SUMMARY**

CONTINUING EDUCATION SUBSTITUTE POINTS  
FOR \_\_\_\_\_ PERIOD (12 mos.)  
SUBS. POINTS \_\_\_\_\_

PROFESSIONAL PARTICIPATION SUBSTITUTE POINTS  
FOR \_\_\_\_\_ PERIOD (12 mos.)  
SUBS. POINTS \_\_\_\_\_

TECHNICAL CONTRIBUTION SUBSTITUTE POINTS  
FOR \_\_\_\_\_ PERIOD (12 mos.)  
SUBS. POINTS \_\_\_\_\_

PLEASE ENTER THE SUBSTITUTE POINTS CLAIMED FOR  
\_\_\_\_\_ PERIOD IN SPACE (2) ON PAGE 8 OF YOUR  
CAMP LOGBOOK FOR THIS PERIOD AND ATTACH FIRMLY TO THE  
LOGBOOK. NOTE SPACE 4) AND 5) - IMPORTANT!

I, \_\_\_\_\_, CPG/CMPG # \_\_\_\_\_,  
do hereby declare that I have maintained my AIPG CERTIFICATION  
ADVANCEMENT AND MAINTENANCE PROGRAM LOGBOOK and this  
SUBSTITUTE ACTIVITIES LOGBOOK and have performed and completed  
the CONTINUING EDUCATION, PROFESSIONAL PARTICIPATION, and  
TECHNICAL CONTRIBUTION Substitute Activities described in this SUP  
PLEMENTAL LOGBOOK for the Substitute Point Totals shown above dur  
ing my Current Certification Renewal Program Year (\_\_\_\_\_).

Name: \_\_\_\_\_

Place: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Notary Attestation in Appropriate Language

Continuing Education

Institution, Sponsor,  
or Company:

Course Title:

Subject:

Dates of Attendance/Participation:

Semester Hours:

or Quarter Hours:

or Contact Hours if Not-For-Credit:

Other Activities

Institution, Sponsor,  
or Company:

Dates:

Types of Activities:

Contact Hours During Year:

Verification by: \_\_\_\_\_  
NAME, PRINTED

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

POSITION: \_\_\_\_\_

The entire logbook, in full size format, can be found in pdf format on the AIPG National Website. If you're unable to retrieve the logbook, please contact Headquarters and a copy will be provided.



# CANDIDATE FOR AIPG NATIONAL PRESIDENT-ELECT

## CAREERS IN THE TWENTY-FIRST CENTURY

**Kelvin J. Buchanan, CPG-06058, Reno, Nevada**

The most remembered political statement of this country's past half century is probably John Kennedy's "Ask not what your country can do for you, but what you can do for your country." It was the clarion call of the 1960s and, because of the statement's appeal, a generation of young idealists filled organizations such as the Peace Corps in an effort to better the world. Such idealism seems a distant dream now. That generation either dropped out or more likely became what they despised at the time: hard-working people just like their parents. Not so coincidentally, the age of an average AIPG member falls right into the 60s generation. I sincerely believe those AIPG members have worked hard to bring to fruition Kennedy's words. You members have "hung in" and remained in your profession when many have fallen by the wayside. You are the survivors. So now I believe it is appropriate to re-phrase that statement as it applies to AIPG membership; "Ask what your organization can do for you in return for all your years of support."

There are numerous factors that are important in determining an individual's career satisfaction. Many of you will have slightly different opinions on this, but I have picked the following three:

- Respect and recognition for your profession in general and yourself in particular.
- Sufficient and appropriate remuneration commensurate with the effort expended in doing your job.
- A high degree of networking accessibility, with an equally high degree of networking success.

These are the themes, rather than the present needs of the Institute, that I wish to discuss with you. Indeed, while the fiscal problems of the Institute are not yet solved, we have come light-years from where we were three years ago. I anticipate continued fiscal improvement.

I do not believe in outlining a huge agenda of what I will accomplish if you elect me as your President. The Executive Committee only meets face to face three times a year, and it takes a focused person to get one or two items of importance adopted by the commit-

tee. Important ideas require considerable debate, and the time factor is not favorable to considerable debate. If Executive Committee members were to meet more often, they would have to personally foot the bill for both time and expenses since the Institute is not able to. We already ask a lot of these volunteers and to ask for more would not be reasonable. Still, if meeting agendas are previewed and presented in depth prior to committee meetings, we can still accomplish a great deal.

The most important factor in what I want considered as defining a successful professional career is respect – both for our profession as well as for ourselves. The Institute has begun steps to achieve this respect. Thanks to a Herculean effort by Tom Fails and members of his committee, we now have a template for continuing education. This proposal has been forwarded to the Executive Committee for mark-up. These proposals will be submitted to the members for voting and if approved, will become part of the bylaws. Even a proposal for voluntary continuing education is not without its critics, but if our profession is to continue to attract quality people, we need to have appropriate standards. Will continuing education help AIPG in reaching its professional goals? Probably. Do we need to add other professional requirements, to mirror societies for engineers, lawyers, and accountants? Only our members can answer this. Even lawyers, the butt of more jokes than used car salesmen, are respected as individuals when we need them.

Rarely are compensation issues for geologists mentioned by AIPG members. I do believe that strong standards, or the lack of them, can affect compensation packages for geologists. Using examples from the mining industry to illustrate this point, when times got tough over a decade ago, companies had to cut costs. In most cases the cost-cutting was directed at labor. Many geologists were hired on a "temporary-permanent" basis. They would work eleven months of the year with no benefits and take a "vacation", i.e. laid off, for the balance of the year. They then would be hired again the following year. This charade was supposed to continue the fiction that these employees were actual-

ly independent contractors. Funny, mining companies rarely convinced engineers or accountants to work for them on the same basis. So does respect for the profession hit the bottom line?

You be the judge.

Our organization is owned by the members. Ross Perot used a similar phrase when he was using his TV charts to illustrate the premise that "We citizens own Corporation U.S.A." Since the members do own this Institute, why do we seem unable to utilize the Institute to further the goals of respect and adequate remuneration? I believe we are finally starting to move in that direction. Our Executive Director has many ideas for improving communications between members, our website is up and running, and the Institute Vice President is contacting all the state sections for their input and ideas. These efforts are working, but they are also just scratching the surface. We are an organization of 5,000 professionals. Many of our members have political clout, are principals of successful corporations, and are highly respected in this profession. Why, then, is the membership so reticent to attend the Institute's annual meetings? These meetings should be where networking with peers and colleagues is an opportunity for all members. The meetings are not perceived in this way. If annual meetings do not serve the needs of the membership, then we need to change the format so they do. Much as I believe in local autonomy, it is clear that the Institute needs to be more involved in these meetings. State sections work very hard to put these events on, but it seems that each year the learning curve starts all over. Because the Institute represents all segments of the geologic community, the Institute should spearhead the program for every annual meeting.

There is no sea change being offered with these suggestions. I am committed to working to achieve a consensus in what is the best direction of the Institute, to make the Institute responsive to the membership, and to continue the successful work and ideas of past Executive Committees. We can be a dynamic organization and we should be. Remember: we are the survivors.

## ARE WE OR ARE WE NOT?

Lawrence A. Cerrillo, CPG-02763, Evergreen, Colorado

Every year at this time, those of us who have been nominated for a position on AIPG's national slate of officers, are asked to prepare an article along the lines of a campaign speech. First, who am I, and where am I coming from? I am a second-generation Italian, born and raised in upstate NY, sent to the bean fields at eight and the onion fields at thirteen (where working on hands and knees brought me close to the wonders of earth science), schooled at Syracuse University and Colorado State University, educated at USGS-WRD and nationally and internationally in third-world countries with various consulting firms. Enough?

We have all read these, and may have come away feeling nothing has changed within our organization. Perennial issues are always the same: *increasing membership to get more dues to provide existing services; member apathy; services to members; registration/licensing issues; and strengthening of our status as professionals.*

**All are and will continue to be important.** One of the big reasons the perception persists that nothing has changed is the big "A" word—**Apathy**. It is the age-old rub of "you get out what you put in." This applies to a marriage, a profession, a golf game, or whatever it is you are doing.

Are we or are we not professionals? If we believe we are, then we must start performing like professionals. Not only in our workday activities, but in all aspects of what we do and stand for as professionals.

Our world is sustained on the strength of its natural resources. We as geologists know that not all resources are sustainable, but as the world population continues to grow we must be ever more ingenious to maximize and utilize those resources we do have. So what does this have to do with AIPG as a professional geologic organization? Everything. Most importantly AIPG must get the word out that we can and must co-exist with an ever-increasingly green world. Indeed, we as geologists are the vital link to providing the eco-

nomics and life sustaining materials of this earth. There would be no life without water, no computers, cars, appliances, machinery, or white teeth without the involvement of a minerals and energy industry. Sure, we all know this and I am preaching to the choir, but what about all those who do not know or are unwilling to acknowledge the facts?

Are we or are we not professionals? My objectives for the future of AIPG as a professional geologic organization, and more importantly for the future of our world as we know it, are: education, outreach, political action, and community involvement.

**EDUCATION** As in any profession, we need to keep abreast of new developments in our respective fields of practice. Currently most get this from our specialty organizations, such as AGWS&E, AAPG, AEG, etc. AIPG must on a section, regional, and national level provide ever more opportunities for our membership not only to maintain their edge in a particular discipline, but to gain those skills needed to present the results of their knowledge. This means topics and courses on report writing, marketing, presentations, expert testimony, and other survival skills.

**OUTREACH** A popular and over-used word these days, but nonetheless important. Two of the primary goals of AIPG are to strengthen the geological sciences as a profession, and to communicate to the public and to its representatives the importance to society of the profession of geology. We must revisit these goals and get our message out. **THINK ABOUT IT!**

**POLITICAL ACTION** Are we (each and every one of us) sufficiently involved in our state and national legislatures to make a difference with respect to laws and policies that affect not only our personal livelihood, but that of our country and our world? During the years I have been absent from the activities of AIPG National, I have been working within the Section to keep the importance and issues of geologists before members of our legis-

lature. By serving as a member of our Sections' legislative committees, we can all become more knowledgeable with respect to the issues related to geology in our state. Get involved! It is essential if AIPG is to make a difference, and it is FUN!

**COMMUNITY INVOLVEMENT** In a local level in our schools, business clubs, planning commissions, and health departments, are we providing the input they need to make informed decisions? Here in Colorado I have found a number of opportunities to be involved. These have included membership on a number of boards and committees, such as a steering committee for a county studying water availability; a committee with the state health department to prepare wellhead protection guidelines; an advisory board to the state geological survey; a minerals, energy, and geology advisory board created in the governor's office, and the board of the water well contractors' association. **WE ARE PROFESSIONALS!** There is much we can and must do. Your involvement as a member of AIPG, the only geologic organization that represents all geological disciplines, is critical now and for the future.

Ideas and programs that I would like to build on are the work of those that came before us: annual regional meetings, development of a speakers forum in each of the sections if not now existing, fund-raising projects that can benefit the sections and national, increased interaction with related science organizations, increased continuing education opportunities for our members, and continued effort to strengthen our image in the public sector. Let us act now to axe **APATHY. Get involved!**

# STRENGTHENING THE PROFESSION—EACH OF US CAN HELP

**Robert G. Corbett, CPG-4502, Normal, Illinois**

Effort and dedication from AIPG members is necessary to maintain our organization's primary purpose—that of strengthening the geological sciences as a profession. As we find opportunities or are asked to serve, each of us needs to bring our talents and strengths to bear on this continuing purpose. AIPG members will have many opportunities over the course of a career.

We were shocked in 1995 when Congress took a serious look at cutting back the U.S. Geological Survey and the National Science Foundation. Why? Because too many of us had been silent on the importance of federal research and funding to the well-being of society and to entrepreneurial successes, including our own. Can we blame a legislator for asking the question “Just when will the survey be completed?” when very few geologists had invested effort in educating the citizenry and the lawmakers on how geology serves society?

I sent letters, as did many other members of AIPG, to legislators stressing the importance of the work of the Survey. That effort could have been too little, too late. Since that time, efforts have been more successful in getting the story told. Our Fly-ins help. Better communication about societal importance of programs in budget requests (for example “community security” to describe earthquake studies) reflects a new awareness by agencies that they need to justify their efforts in understandable terms.

Better communication is also needed at the local level, in the city councils, at school boards, and in classrooms. Have you followed the suggestion made to us several years ago of buying several copies of *Citizens' Guide to Geologic Hazards* and putting a copy into the hands of the mayor and chair of your city council or similar local legislators and agency heads? Have you written or spoken about the distinctions between

science and faith and why they must not be in the same classroom?

Geologists are not the only ones to have learned the lesson. Disciplinary groups, such as the American Institute of Biological Sciences, and cross-disciplinary groups, such as Sigma Xi, the Science Society, make similar educational efforts.

In a recent article in *Geotimes*, former Speaker Newt Gingrich states that “Our economic future depends directly on our ability to take new scientific research and translate it into entrepreneurial development.” He exhorts every scientist to spend an hour or two each month being a citizen. “After all, our health, our prosperity and our survival as a country are at stake.” Now we need to convince other legislators of the societal importance of programs such as field mapping, derivative maps for planners, and wellhead protection programs.

Perhaps we are sufficiently aware of the need to be good citizens. Let us note other areas where we need to spread the word, such as in the education of future geologists. AIPG has established curricular guidelines in *Education for Professional Practice* and has for many years offered a cooperative evaluation program for academic departments. However, only a small number of universities ever request a program review by AIPG. Many Geology Departments rely on an advisory board or on academics from other universities for periodic program review. Nonetheless, faculties of these programs could benefit from the collective efforts of the three AIPG Committees that have crafted a list of the expected skills, attributes, and abilities in a geology graduate, and a model curriculum in *Education for Professional Practice*. To facilitate examination of the curriculum at any given university, I prepared for *TPG* an article entitled *Undergraduate Geology*

*Curricula—What we expect, what graduate schools expect, and what exists.*

Many AIPG members have genuine concerns about the state of geology curricula at some universities. The concern heightens when one interviews a graduate seeking employment who simply has not taken some courses that we feel are essential to the basic understanding of geology. Many students know little of professional ethics nor have they been encouraged to join professional societies. Even more discouraging is learning that it is possible to earn a degree in geology some places with almost no knowledge of how to map in the field. Students graduating from such departments are being misled about having any chance for a career in geology.

Accreditation has been suggested by many as a solution to eliminate or strengthen substandard degree programs purporting to prepare students for a career. In the April 2000 *TPG*, I reported to what extent disciplinary accreditation would be well received by Departments of Geology. Only a small percentage of respondents to my survey would welcome accreditation, and generally for the wrong reason (as a lever to get more resources from the dean). Faculty members insist on retaining the right to determine the curriculum, and outside bodies are generally unwelcome, unless invited.

What can be done? For those AIPG members who remain close to their alma maters, or have close ties with other geology departments, perhaps providing the Department Chair with a copy of *Education for Professional Practice* and/or my article would be helpful. Better yet, volunteer to serve on an advisory board.

Other opportunities to strengthen the profession will come your way. Please respond to the call.



# CANDIDATE FOR AIPG NATIONAL VICE PRESIDENT

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## TO STRENGTHEN AIPG

**Barbara H. Murphy, CPG-06203, Phoenix, Arizona**

For AIPG to gain strength as an organization, it must increase membership. For AIPG to grow in membership, it must gain more local and national recognition. I think AIPG National must encourage and assist the various Sections to work with other professional geological (and related sciences) organizations. The Sections could invite members of these other organizations to its meetings. Joint professional activities may also encourage interest in and an understanding of what AIPG is and demonstrate what membership in AIPG means. Another important focus for potential members should be geologists/hydrogeologists with federal, state, and local agencies. These agencies are where policies, rules, and regulations often directly affect the geologic professions. Professionals at these agencies should be encouraged to attend AIPG functions. With a broader base of membership (consultants; state, federal, and local geological professionals; academicians), the geologic profession will be strengthened by a better understanding of each other's professional concerns. Sharing of current research and technology in support of the geologic profession among all these groups also leads to strengthening of the geologic profession.

By working with a wide range of geological professionals, lobbying efforts for geologists and the geologic profession at the federal, state, and local levels may be enhanced. We may be able to be supportive of our profession by keeping our members aware of the wide range of federal, state, and local issues. For several years, AIPG has organized and supported the Washington DC Fly-In. Section members should also consider meeting with their Congressmen in their home state. It's also important to meet with the state legislators and offer to provide assistance to them and their staff in developing and understanding legislation that affects geolo-

gy or geologists and other related scientific issues.

AIPG has made great improvements in services to its members via its Internet website. The website includes news of the various Sections, job postings, products and information from headquarters. Links with the American Geological Institute's (AGI) website provides updates on Congressional considerations and recent legislation. AGI's website also includes information on its Government Affairs Program and other related organizations. The AIPG Sections may obtain ideas from other Sections by reading the various newsletters or other website postings. Sections should be encouraged to keep current newsletters or announcements on the individual Section link to the main AIPG website. Because of the Internet, AIPG headquarters is able to respond quickly by e-mail for various requests from Section officers and members. The Internet offers such a broad range of information and networking possibilities. The Internet can become an even more effective resource by implementing suggestions from members.

Revenues for AIPG have been a concern for many years. Membership dues cannot continue to be such a large percentage of the operating expenses. AIPG headquarters recently analyzed operating expenses and made adjustments to reduce office costs. The Executive Committee and the Section members need to look for other viable sources of outside income so AIPG is not so dependent on annual dues.

There have been many improvements in *The Professional Geologist* in the past few years. Information on a wide variety of geologic issues (technical or political) or notices of upcoming meetings and conferences should continue in the magazine. Again, it is important that our members contribute articles on information. *TPG* must con-

tinue to be an important link to our members and those in other organizations. Our members could be encouraged to send a subscription of the *TPG* to a potential member.

Another critical factor in the AIPG organization is volunteerism. Unfortunately, it is typically often a few people who do a lot of the work for the Sections. AIPG needs to help Sections develop ways to stimulate more volunteers. Needless to say, with more members truly active in the Section or at the National level, AIPG will be able to do more for its members. Again, successful Sections may make suggestions to other Sections on ways to get more volunteers. As Sections get more people to help with functions, the Sections will probably be able to do more activities and provide more to their members. With more activities, there should be more name recognition. This is another way to increase membership and strengthen the AIPG organization.

I realize many of these issues have been ongoing for years. As long as we, the members of AIPG, continue to work at building a stronger organization, AIPG will grow, not just survive. It is very important to encourage the active participation of more of our members. This should, in turn, lead to increased Section activity and a greater local and national awareness of AIPG. With greater recognition, increasing membership should be easier. All of these should lead to a stronger AIPG organization.

# CANDIDATE FOR AIPG NATIONAL TREASURER

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## ON TRACK

**K. V. Duke Clem, CPG-10343, Lakeland, Florida**

Thanks to the hard work and diligence of the AIPG officer corps, membership numbers have remained fairly steady and a negative financial trend has been stabilized. AIPG has made much progress with regard to educational outreach, political advocacy, membership, communication, and assistance to State and Regional Sections, not to mention elevating the value of our certification. We are on the right track, but as in the words of the late Will Rogers, "Even if you are on the right track, if you don't move you can still get run over." It is imperative that we stay on track and gain momentum.

All parts of a complex system have to be congruent; they have to work together for that system to operate at peak output. Clear and concise guidance and communication between the State and Regional Sections and National is critical for all parts of this system to operate together. The biggest component in the AIPG machine is, quite naturally, membership. Changes in the requirements and categories have made it possible to draw from a much larger pool of potential members. The new categories have met with favorable results in the Florida Section, as many professionals from other disciplines are eager to associate with and learn from our initiatives and members. But it is important to realize, however, that we are still geologists first and foremost and that our requirements for membership as certified members should in no way be diluted. It is certainly up to the membership of the respective Sections, however, to become proactive and involved in order to place AIPG in a larger arena and present a larger profile. This can be accomplished by associating with the many other professional and technical associations, as well as the formation of student chapters. Students represent significant membership potential, and it should be the goal of every Section to take the necessary action. Geology majors need to

realize the valuable resources that AIPG can provide in terms of networking, resume preparation, interviewing tips, scholarships, and employment.

"Campaign 2001" membership drive will be launched late this year and continue through 2001. It seems appropriate that all Sections should jump on board and launch each of their own "Bring a Prospect" campaigns. Recognition should be given to those members that actively recruit. It should be a goal of National to provide duplicatable success strategies for membership development to the Sections: a proven cookie cutter approach to develop and retain members. We're on track; let's keep movin'.

With a necessary and justifiable dues increase last year, a potential financial disaster was narrowly averted. It couldn't have come at a worse time, however, as industry downturns and company mergers left many geologists contemplating their future in the profession. But membership renewals remained essentially unchanged and I feel that is a testament of the membership to their commitment and belief in the Institute. However, dues increases are short-term fixes and not solutions. Obviously, non-dues revenue sources have to be investigated and evaluated. Many good ideas have been brought forth, including continuing education, public education, and sales. Although it was determined that our publications program was far from supporting itself financially, I truly believe that we can re-evaluate the program and turn it around by offering a wider array of publications aimed at broader audiences. The Institute has to come up to speed on marketing itself and soliciting advertisements. National should evaluate the more financially successful Sections and other professional/technical societies for ideas and information to make available to the Sections. It is up to us; no other organization is going to jump in and help us, and we have to help our-

selves by taking care of our own...again, a duplicatable success strategy

Paramount in the Institute's efforts to promote itself as a political advocate for the profession is lobbying at the local, State, and Federal levels. We're on track but we need to keep moving and not let outside organizations attempt to take the political initiative that we should rightly be taking in keeping with our mission. Again, much has been done by the dedicated and diligent few, but consistently consistent efforts need to be made to advance policy that recognizes the value of our certification and quality of our membership. National must aid the Sections in their political pursuits, goals, and obligations. The Sections have to take the lead, however, in becoming the political voice for the membership. Political activity and involvement is critical to the survival and advancement of any organization.

The challenges and issues that now confront the Institute aren't necessarily new, nor will they necessarily go away. We just deal with them at different levels and at different times. As Treasurer, I will do all that I can to bring fresh ideas to the table, and to actively participate in the advancement of the Institute and its mission.

# CANDIDATE FOR AIPG NATIONAL TREASURER

## DIVERSIFY OUR RESOURCES NOW!

**Madhurendu B. Kumar, CPG-03106, Baton Rouge, Louisiana**

Fiscal soundness is critical to the survival and effective functioning of AIPG. I appreciated this fact and its implications particularly while serving on the National Executive Committee for two consecutive terms in the past. In order for the Institute to accomplish its mission, it must be financially solvent with continually maintained, steady, and strong revenue streams. To increase revenues was one of the recommendations made by the 1991 Long-Range Planning Committee. New projects now on the horizon require new sources of funds. President-Elect Robert Fakundiny (*TPG*, June 1999) has prudently proposed several actions of crucial importance for the Executive Committee. Evidently, the implementation of those projects will entail a great deal of funding. For instance, an increase in membership services simply means an increase in expenditure for the Institute. Increased visibility cannot be achieved without additional funds being made available. The conduct of an aggressive advocacy role warrants the mobilization of some new monetary resources, as highlighted by Bill Siok (*TPG*, February 2000). We must admit that the future of the Institute depends on its financial health. Last year, the National Executive Committee managed to steer clear of a major financial crisis by increasing membership dues. Then-President Tom Fails (*TPG*, April 1999) astutely observed that it had come to "fight or die." Now the increased membership dues are the highest among the current scientific and engineering peer organizations. At this stage, each of us wonders, "What am I getting from AIPG for my money?" There are some convincing answers. Nonetheless, the fact remains that we are still not out of the woods financially (Tom Fails, April 1999). The Institute has to utilize membership dues to defray more than 85% of its expenses. Such excessive dependence upon membership dues must be reduced to a significantly lower level.

As I served my term as President of Louisiana Section, I came to understand quite a few of the many interests

expressed by the members. With them I share the view that membership dues at such a high level is not a long-term panacea for the financial problems of the Institute. In order to alleviate the exigency temporarily, the expenditures of Headquarters and the Executive Committee can be and have been curtailed to the ultimate limit. As Tom Fails (*TPG*, April 1999) reported, economic austerity is being practiced. But, in my personal opinion, the financial strength of the Institute must not be compromised. In light of the preceding, it cannot be overemphasized that the Institute is in dire need of increased revenues that are sustainable on a long-term basis. As a remedy for the financial predicament, Tom Fails (*TPG*, April 1999) suggested the following measures: an increased membership, new publications aimed at broader markets, and new sources of non-due revenues.

In my view, the most effective strategy to tackle our financial problems is to develop and utilize diverse and multiple sources of revenue. Some such potential sources are briefly reviewed as follows:

- **Membership:** It must be expanded by offering better benefits to the members.
- **Publications:** Appropriate publications promoted effectively have great potential for profits and visibility of AIPG.
- **Continuing Education Services:** It is financially promising to offer such services to non-geologists.
- **AIPG Website:** The AIPG website is now established and operating. Certain new services offered on a fee basis could obtain some revenues for the Institute. But these services have to be identified and promoted effectively.
- **Advertisements:** A strong drive for attracting advertisements (*TPG* and AIPG website) must be undertaken.
- **Sponsorships:** Sponsorship campaigns for various projects of the Institute should be continued with a greater vigor.

- **Annual Meetings:** As the National Chairman of the 1998 Annual Meeting of AIPG, I strongly maintain that the annual meetings can be effectively managed to generate considerable profits.
- **Endowments:** Concerted efforts are in order for long-term benefits of the Institute.
- **Grants from Private and Non-Profit Foundations and Organizations:** They may be available to fund certain programs of the Institute.
- **Federal Funds:** They merit cautious evaluation.

AIPG must adopt new approaches to confront the revenue generation issues. I propose an action plan for the National Executive Committee's consideration:

- A. Establish a Financial Resources Committee.
- B. Charge the Committee with the following responsibilities:
  - Monitor our fiscal situation closely at frequent intervals.
  - Objectively review all currently utilized sources of revenue and their future viability.
  - Identify other possible sources of revenues.
  - Prioritize all viable sources of revenue, current and possible, relative to our needs on a time-frame basis.
  - Make recommendations on the ways and means to develop, utilize, or expand these viable sources to both the Executive Committee and the membership.
  - Assist in implementation of the final decisions taken by the Executive Committee on their recommendations.

I pledge to dedicate my talents and time to the task of helping organize such efforts if I am elected Treasurer. I would welcome the opportunity to participate in the leadership challenge ahead and help guide the course of AIPG toward a promising future.



# CANIDDATE FOR AIPG NATIONAL PRESIDENT ELECT



## KELVIN J. BUCHANAN

CPG-06058

Reno, Nevada

**Statement of purpose or goals you have for AIPG:**  
Consider bringing sister organizations under the AIPG umbrella, thereby solving the fiscal and membership problems.

**Universities Attended:**  
University of British Columbia  
Pepperdine University

**Degrees Granted:**  
B.S., Geology  
MBA, Management

**Dates:**  
1971  
1981

**Employment History:**  
Hecla Mining Co.  
Alled Exploration  
Bethlehem Copper Corp.  
Watts, Griffis & McQuat, Inc.  
CF&B, Inc.  
Viking Minerals, Inc.  
Henkle-Buchanan Group  
HB Engineering Group

**Title:**  
Geologist  
Geologist  
Exploration Manager  
Vice President  
Vice President  
President  
President  
President

**Dates:**  
1971-72  
1973  
1974-80  
1980-83  
1983-88  
1989-90  
1991-92  
1992-present

**AIPG Activities:**

Nevada Section  
Nevada Section  
Nevada Section  
Nevada Section  
AIPG Foundation, Inc.  
Nevada Section  
AIPG Foundation, Inc.  
Nevada Section  
Nevada Section  
AIPG National

Screening Board Chr.  
Vice President  
President  
National Meeting Treasurer  
Board Member  
Vice President  
Treasurer  
Secretary  
Treasurer  
Treasurer

1984-89  
1990  
1991  
1992  
1993  
1994-96  
1994-Present  
1996-97  
1998  
1999-00



## LAWRENCE A. CERRILLO

CPG-02763

Evergreen, Colorado

**Statement of purpose or goals you have for AIPG:**  
Remove member apathy and return to basic objectives of strengthening the geological sciences as a profession and communicating to the public and to its representatives the importance of geology.

**Universities Attended:**  
Syracuse University  
SUNY at Buffalo  
Colorado State University

**Degrees Granted:**  
B.S., Geology  
—  
M.S., Geology (Hydrogeology)

**Dates:**  
1960-64  
1964-65  
1965-67

**Company:**  
USGS/Geraghty & Miller/Griener  
Science Applications  
Engineering Science  
Louis Berger Int'l. Inc.  
Parsons Brinkerhoff Quade & Douglas  
Hunter Environmental Services  
Geraghty & Miller Int'l., Inc.  
Consultant - Self Employed  
Louis Berger and Associates, Inc.  
Ingenuity Enterprises Int'l. Inc.

**Title:**  
Hydrogeologist  
Senior Hydrogeologist  
Project Hydrogeologist  
Project Manager  
Managing Hydrogeologist  
Manager, Colorado Branch Office  
Marketer, European Operations  
Hydrogeologist  
Senior Associate  
President

**Dates:**  
1962-80  
1980-82  
1982-84  
1984-86  
1986-87  
1987-89  
1989-90  
1990-91  
1991-95  
1996-present

**AIPG Activities:**

Colorado Section  
Colorado Section  
Colorado Section  
Colorado Section  
Colorado Section  
AIPG National

Legislative Committee  
Vice President  
President-Elect  
Advisory Board Member  
President  
Advisory Board Representative

1980  
1980  
1987  
1987-88  
1988  
1988

# CANIDDATE FOR AIPG NATIONAL TREASURER



## K. V. DUKE CLEM

CPG-10343

Lakeland, Florida

**Statement of purpose or goals you have for AIPG:**  
Continue to focus on the tools and duplicatable strategies that National can provide to the Ssections for membership and organizational development; to strengthen and support political advocacy programs; to further evaluate and consider all potential sources of non-dues income.

**Universities Attended:**  
Bowling Green State University  
Bowling Green State University  
Wright State University

**Degrees Granted:**  
B.S., Geology  
Grad. Studies Paleontology  
Grad. Studies Water Resources

**Dates:**  
1983  
1983  
1993-94

**Employment History:**  
W.R. Grace and Co.  
Agrico Chemical Co.  
IMC-Agrico  
Omega Environmental  
Coastal Engineering, Inc.  
Clem and Associates, Inc.  
Hardee County, Florida

**Title:**  
Geologist  
Geologist  
Geologist  
Hydrogeologist  
Hydrogeologist/Branch Manager  
President  
Mining Coordinator

**Dates:**  
1984-86  
1986-88  
1988-92  
1992-96  
1996-99  
1999-present  
1999-present

**AIPG Activities:**

Florida Section  
Florida Section  
Florida Section  
Florida Section

Program Chair  
Advisory Board Delegate  
President-Elect  
President

1999  
1999  
1999  
2000



## MADHURENDU B. KUMAR

CPG-03106

Baton Rouge, Louisiana

**Statement of purpose or goals you have for AIPG:**  
To maintain a strong drive to increase AIPG membership, to expand its advocacy role for the profession, and to diversify its sources of revenue.

**Universities Attended:**  
Ranchi University, India  
Louisiana State University

**Degrees Granted:**  
M.S., Applied Geology  
Ph.D., Geology

**Dates:**  
1962  
1972

**Employment History:**  
Indian School of Mines, India  
Oil India Limited, India  
Louisiana State University  
R.A. Campbell Oil Co., Louisiana  
City University of New York  
Institute for Enviro. Studies, L.S.U.  
Louisiana Office of Conservation

**Title:**  
Instructor  
Senior Geologist  
Graduate Assistant  
Exploration Geologist  
Instructor  
Senior Associate  
Geologist Supervisor

**Dates:**  
1962-63  
1963-69  
1969-72  
1973-74  
1974-77  
1977-82  
1982-present

**AIPG Activities:**

Louisiana Section  
Louisiana Section  
Louisiana Section  
Louisiana Section  
Louisiana Section  
AIPG National  
AIPG National  
AIPG National  
AIPG National  
AIPG National  
AIPG National  
AIPG National

Vice President/President-Elect  
President  
Program Chairman  
Newsletter Editor  
Screening Board Chairman  
Advisory Board Delegate  
Presidential Certificate of Merit  
Advisory Board Representative  
Bylaws & Policies Review Comm.  
Author, Petroleum: Issues & Answers  
Honors & Awards Committee  
AIPG Annual Meeting, General Chr.  
Presidential Certificate of Merit  
Prepared *AIPG Annual Meeting Manual*  
AIPG Annual Meeting Comm., Chr.

1991  
1992  
1992  
1992  
1992-96  
1992-94  
1993  
1995-96  
1995-96  
1997  
1998-00  
1998  
1998  
1999  
1999-00

# CANIDDATE FOR AIPG NATIONAL VICE PRESIDENT



## ROBERT G. CORBETT

CPG-04502

Normal, Illinois

**Statement of purpose or goals you have for AIPG:**  
AIPG must stay focused on the primary purpose of strengthening geological science as a profession. My goals include greater member involvement at the local levels in the role of informed citizen, and in working with local universities as advisory board members.

**Universities Attended:**

University of Michigan  
University of Michigan  
University of Michigan

**Employment History:**

West Virginia University  
  
University of Akron  
  
Independent Consultant  
Illinois State University

**AIPG Activities:**

AIPG National  
  
AIPG National  
  
AIPG National  
  
AIPG National  
AIPG National

**Degees Grated:**

B.S.  
M.S.  
Ph.D.

**Dates:**

1954-58  
1958-59  
1960-64

**Title:**

Assistant, Associate Professor  
Principal Investigator  
Associate Professor, Prof. , Dept.  
Chair, Coordinator of Research  
  
Professor, Dept. Chair  
  
Reviewer for the 1985 College  
Geology Depts. Survey  
Chair, Committee for Cooperative  
Evaluation Comm.  
Served on two of the three  
committees that developed  
*Education for Professional Practice*  
Committee of Examiners  
Four articles published in *TPG*  
and two ethics situations in  
Professional Ethics & Practices Column

**Dates:**

1962-69  
1969-89  
1970-present  
1989-present



## BARBARA H. MURPHY

CPG-06203

Phoenix, Arizona

**Statement of purpose or goals you have for AIPG:**  
Continue to strengthen AIPG as an advocate for the profession at the state and national level. Encourage communication and participation with other geological organizations, particularly at the state level, to promote membership in AIPG and networking with other professionals.

**Universities Attended:**  
Mount Holyoke College

**Employment History:**

Los Alamos Scientific Laboratory  
U.S. Bureau of Land Management  
Dames & Moore  
  
Clear Creek Associates

**AIPG Activities:**

Arizona Section  
Arizona Section  
AIPG National  
AIPG National  
Arizona Section  
Arizona Section

**Degrees Grated:**  
B.A., Geology

**Title:**

Research Assistant  
Geologist  
Assistant Geologist to  
Project Geoscientist  
Project Geoscientist  
  
Vice President  
President  
Advisory Board Representative  
Membership Services Comm. Chr.  
Presidential Certificate of Merit  
Membership Screening Comm.  
President

**Dates:**  
1975

**Dates:**

1975  
1976  
1977-99  
1999-present  
  
1985  
1995  
1996  
1997-00  
1997  
1998-00  
1999

# CONGRATULATIONS!

## The American Institute of Professional Geologists Announces the Award Recipients for 2000

The American Institute of Professional Geologists is pleased to announce that the following individuals have been named the recipients of this year's Honors and Awards.

**BEN H. PARKER MEMORIAL MEDAL**  
**Russell G. Slayback, CPG-02305**

**MARTIN VAN COVERING MEMORIAL AWARD**  
**Robert A. Levich, CPG-06477**

**JOHN T. GALEY, SR. MEMORIAL PUBLIC SERVICE AWARD**  
**James H. Williams, CPG-00374**

**AWARD OF HONORARY MEMBERSHIP**  
**Travis H. Hughes, 03529**

Awards will be given to recipients at the AIPG Annual Meeting in Milwaukee, Wisconsin.  
The Awards Banquet will be held on October 13, 2000.

# EXECUTIVE DIRECTOR'S COLUMN

## AIPG is its Members

William J. Siok, CPG-04773



In an ideal world, AIPG would have unlimited resources and be able instantaneously to mobilize lobbyists and legal experts to redress all real and perceived indiscretions perpetrated against practicing geologists. It happens frequently that a call comes in from a member experiencing a particularly nettlesome professional problem and the member wants to know what AIPG can do to remedy whatever grievance has just been described.

It would be disingenuous to say that AIPG is able, in all cases, to do something. In most cases though, AIPG is able to provide guidance, contacts with other practitioners, a solution, and sometimes intervention. Although we are not a large enough entity to be ubiquitous, AIPG is striving to increase visibility, credibility, and overall effectiveness as a professional association dedicated to the practicing geologist.

Perhaps it's incumbent upon all AIPG members to occasionally review what AIPG is and what AIPG does for each of us. I recognize that in times of professional challenge, particularly with respect to one's credentials or a troublesome statutory/regulatory issue, some have a tendency to expect someone else to resolve the issue. Of course, experience informs us that this expectation is not realistic (unless one happens to have the financial resources to hire experts). AIPG does reasonably well balancing the sometimes conflicting interests and expectations of its members, but can always do better.

In consciously striving to improve AIPG's effectiveness, AIPG with our dedicated volunteers across the US accomplishes more than many larger organizations. AIPG was founded for two fundamental reasons: to Certify professional geologists and to advocate for the profession.

These two priorities are predicated on the conviction that:

- The science of geology is vital to the interests of the nation, domestically and internationally, in times of peace and when the national security is at risk, and
- The practice of geology should be by qualified geoscientists in order to protect the public health, safety and welfare; to provide strategic resources; and to assist in the effective administration of government programs in which geology plays a prominent role.

AIPG represents the professional interests of all practicing geoscientists in every discipline. Its advocacy efforts are focused on the promotion of the role of geology and geologists in society. Sometimes the work of AIPG may appear to be wasted on one or another activity. The problem is that while some of our non-active members may hold that opinion, the decision to participate in an advocacy effort is made by those members who DO participate in AIPG. The active members participate and lead AIPG by volunteering to fill National and Section offices.

These volunteer members, as Chairmen of numerous issue-oriented committees, as Section Executive Committee Officers, and as National Executive Committee Officers, make all the fundamental decisions about what AIPG does and how AIPG does it. In support of its charter, AIPG leaders for the 37 years of its existence have struggled to lead AIPG into an ever more successful advocacy role for promoting the geosciences.

Some of the efforts put forth are successful, and some are not so. But as many AIPG Officers have emphasized on numerous prior occasions, AIPG is the membership. You have the ability

and the prerogative to effect change. The only catch is that you must do more than throw occasional darts—you must devote some time and talent to influence what AIPG does.

For the time being, consider these points which demonstrate how much is accomplished largely by AIPG member volunteers:

- AIPG, as a professional association, is dedicated to certification and advocacy.
- The AIPG title Certified Professional Geologist (CPG) is the standard that defines minimum educational, experience, and ethical standards by which a practitioner is recognized as a professional geologist by peers.
- AIPG's advocacy efforts include participation in the annual National Conference of State Legislatures.
- AIPG organizes and conducts a yearly Washington DC Fly-In to speak with legislators and federal agency officials about issues of importance to the geologic profession.
- AIPG offers a certification that is a credential complementary to registration.
- AIPG focuses upon statutory and regulatory issues that affect all practicing geologists.
- AIPG advocates on behalf of all geologists.
- AIPG is a network of professional geologists dedicated to promoting the profession on local, state, regional, and national levels.
- AIPG is a proponent of and supports efforts to enact state-level registration statutes.
- AIPG is an organization comprised of practicing geologists from all disciplines.
- AIPG is engaged with overseas geologic organizations to minimize barriers to global opportunities.

AIPG is, in reality, what you wish it to be. Can AIPG do more and be more? Of course, but not unless you do it. If you're not satisfied, help change it.

# AGI GOVERNMENT AFFAIRS MONTHLY REVIEW

Monthly review prepared by Margaret Baker and David Applegate, MEM-0002, AGI Government Affairs Program, and AGI/AAPG Geoscience Policy Intern Alison Alcott.

## MARCH 2000

- High Oil Prices Drive Legislation in Congress
- Congressional Natural Hazards Caucus Growing
- House Passes Budget Resolution, Boosts Science
- Controversial Asbestos Legislation Passes House Judiciary Committee
- House Passes Nuclear Waste Bill, Falls Short of Veto-Proof Majority
- Senate Moves Ahead on Education Bill
- New Poll Shows Americans Favor Teaching Evolution in Science Class
- Norwegian Government Falls Over Climate Change Issue
- AASG Awards Pick and Gavel Awards to Gibbons, Colwell
- AGI Participates in USGS Customer Listening Session
- New Material on Website

### High Oil Prices Drive Legislation in Congress

What a difference a year makes! Last March, Congress was considering measures to help the domestic oil industry survive record low prices. Talk has again turned to the importance of domestic production but now the reason is high prices due to OPEC cutbacks. While most members of Congress agree that something must be done about the recent rise in oil prices, they cannot seem to agree on an appropriate solution. Legislation has been introduced to tap the Strategic Petroleum Reserve, repeal a portion or all of the federal gasoline tax, increase investment in renewable energy and alternative fuels, and open the Arctic National Wildlife Refuge (ANWR) in Alaska and other federal lands for petroleum exploration. All of the proposals have met with opposition and face uncertain futures. On March 27th, OPEC ministers did agree to increase production, but analysts say that gasoline prices will stay high through the peak summer driving months. More at [http://www.agiweb.org/gap/legis106/oil\\_price.html](http://www.agiweb.org/gap/legis106/oil_price.html)

### Congressional Natural Hazards Caucus Growing

Early this month, AGI sent out an alert encouraging member society members to contact their senators and ask them to become charter members of the Congressional Natural Hazards Caucus. The alert included a letter sent by Senators Ted Stevens (R-AK) and John Edwards (D-NC), who co-chair this informal organization of members of Congress focused on finding ways to better prepare for and help mitigate the costs of natural disasters. For over a year, AGI has been working with member societies AGU, the Geo-Institute of ASCE, and the Seismological Society of America, along with many other organizations, to establish such a caucus in order to build lasting support for hazard mitigation as a public value. In order to make this caucus a success, geoscientists should contact their senators and encourage them to join. Five senators have already signed up, but many more are needed. Organizers also are looking for co-chairs in the House to make the caucus bicameral. The AGI alert can be found at [http://www.agiweb.org/gap/legis106/caucus\\_alert0300.html](http://www.agiweb.org/gap/legis106/caucus_alert0300.html).

### House Passes Budget Resolution, Boosts Science

In 1997, Congress and the White House enacted strict caps on future discretionary spending (all non-mandatory spending that includes nearly all funding for science-related programs) in order to balance the government's books. Last year, the final numbers for discretionary spending overshot the caps by nearly \$55 billion due to "emergency" spending for items such as the highly unexpected 2000 census. The caps are even tighter for FY 2001—in order to meet them, Congress and the Administration would have to make deep

cuts. As a result, most are declaring the budget caps a moot issue given that the continuing economic boom has already balanced the budget. As part of his budget request, President Clinton proposed new spending caps that would add nearly \$70 billion over the 1997 agreement level.

Now it is Congress' turn, and both houses are currently working on their own budget resolutions, which will determine the amount of money that the Appropriations Committees will have to divvy up. On March 24th, the House passed its budget resolution on a party-line 211-207 vote. The final version included an amendment that boosted the budget for basic research by \$1 billion over FY 2000 level, which bodes well for agencies such as the National Science Foundation. Rep. Vernon Ehlers (R-MI) sought to rally support in the House for increased spending on science and technology by circulating a "Dear Colleague Letter." AGU released an alert on the budget resolution and Ehlers's letter at <http://www.agu.org/cgi-bin/asla/asla-list?read=2000-08.msg>. The Senate budget resolution is still bottled up in committee as dissension within the majority party over priorities has slowed progress to a crawl.

### Controversial Asbestos Legislation Passes House Judiciary Committee

The Fairness in Asbestos Compensation Act of 1999, H.R. 1283, narrowly made it past the House Judiciary Committee on March 16th. The bill, which was introduced by Committee Chairman Henry Hyde (R-IL), is designed to ease the burden that the massive amount of asbestos lawsuits puts on the court system by creating a new federal agency that would try to resolve the claims before they reach the courtroom. Supporters claim that the legislation would streamline a process that threatens to overwhelm the federal courts. Opponents of the bill argue that it would make things worse for everyone except those being sued, because it would make it easier for the companies to limit their liabilities by limiting the amount that individual victims could receive. Many also feel that the medical standards that the bill sets are too restrictive. The Senate version of the bill, S. 758, is pending in the Senate Judiciary Committee.

### House Passes Nuclear Waste Bill, Falls Short of Veto-Proof Majority

On March 22nd, the House of Representatives voted 253-167 in favor of the Nuclear Waste Policy Amendments Act of 2000 (S. 1287), Senate-passed legislation to overhaul the nation's high-level nuclear waste disposal efforts. The bill is now cleared for the President, who has indicated that he will veto it. As with the Senate vote of 64-34, the tally was well short of the two-thirds majority needed to override a veto. Although Congress could try to recraft the bill, further action in the 106th Congress appears unlikely. EENews reported that aides to bill sponsor Sen. Frank Murkowski (R-AK) said they "were done trying" with the Clinton Administration. Nevada's delegation and environmental groups hailed the vote as a victory. The vote margin was considerably closer than in the 105th Congress when the House voted 307-120 in favor of an earlier nuclear waste program overhaul bill, H.R. 1020. More at <http://www.agiweb.org/gap/legis106/yucca106.html>.

### Senate Moves Ahead on Education Bill

As reported in February, AGI joined forces with other science, engineering, and math societies to request that Congress maintain federal support for science and math educator's professional development. On March 9th, the Senate Health, Education, Labor and Pensions Committee passed the Education Opportunities Act, S. 2, without including language specifically for math and science educators. Committee Chairman James Jeffords (R-VT) introduced S. 2 as the majority's version of the Elementary and Secondary



Education Act (ESEA) reauthorization legislation. During the three days of meetings, amendments supported by the committee minority were quickly voted down along party lines, including an amendment proposed by Ranking Member Edward Kennedy (D-MA) that would reinstate language aimed at professional development for math and science educators. More information on ESEA is available on AGI's Update on Science Education at <http://www.agiweb.org/gap/legis106/ike106.html>.

### **New Poll Shows Americans Favor Teaching Evolution in Science Class**

A recent poll commissioned by the People For the American Way Foundation (PFAWF) reports that 83% of Americans think that evolution should be taught in public school science classes. About 70% of Americans feel that the Bible and evolutionary theory go hand in hand, which contrasts with the contention of biblical literalists who argue that the two are in conflict. This poll differs from previously conducted polls because it focuses solely on the evolution/creation issue. The poll shows that 60% of Americans reject the Kansas State Board of Education's 1999 decision to take evolution out of state science standards. The results of the poll also indicated that there is broad agreement that creationist beliefs should be acknowledged, but not taught as a science, and that the presentation of evolution and creationism in the classroom should follow national standards. A PDF version of the poll is available at: <http://www.pfaw.org/issues/education/creationism-poll.pdf>.

### **Norwegian Government Falls Over Climate Change Issue**

On March 9th, Kjell Magne Bondevik, the Prime Minister of Norway, resigned in protest of a parliamentary vote to build several new gas-fired power plants. According to Environment News Service, the resignation marks the first government breakup that has ever resulted from issues related to global warming. Although most of Norway's electricity is currently produced from hydro-electric dams, there has been recent resistance to the construction of more dams because of their effect on the landscape. While Bondevik's government wanted to put off building power plants until cleaner gas-burning technology was developed, his opposition felt that they must come up with a way to meet the growing demand for electricity. More on climate change issues at <http://www.agiweb.org/gap/legis106/climate.html>.

### **AASG Awards Pick and Gavel Awards to Rep. Gibbons, NSF Director Colwell**

On March 14th, the Association of American State Geologists presented its second annual Pick and Gavel awards to Rep. Jim Gibbons (R-NV), the only geoscientist in Congress, and NSF Director Rita Colwell. The award was established last year to recognize leaders who have made major contributions to the advancement of the geosciences. Both recipients were on hand at the reception and dinner at the Cosmos Club in Washington, DC to receive their awards—a plaque bearing a large orpiment specimen from a Nevada gold mine on its base.

### **AGI Participates in USGS Customer Listening Session**

On March 22nd and 23rd, the U.S. Geological Survey held a "Conversation with Customers" during which stakeholders could provide input on the agency's Fiscal Year (FY) 2002 budget request. The stated purpose was "looking at opportunities for growing our programs in new or enhanced ways...build[ing] on the strengths of what has been successful and what we do well, while at the same time seeking out the science challenges of tomorrow." AGI's government affairs staff spoke on the importance of developing initiatives that conform to the congressional mandate that the agency focus on its core capabilities. With congressional interest in natural hazards running high, USGS has a great opportunity to expand its efforts in that sector. AGI staff also spoke on the value of the geologic mapping program, resource assessments, and the need to improve aware-

ness in the land management agencies of the valuable information that USGS geoscientists can provide to support decision-making.

### **New Material on Website**

The following updates and reports were added to the Government Affairs portion of AGI's website <<http://www.agiweb.org>> since the last monthly update:

- Energy Policy & Conservation Act Reauthorization and Strategic Petroleum Reserve Update (3-31-00)
- Climate Change Policy Update (3-28-00)
- Congressional Response to Rising Oil Price (3-28-00)
- Arctic National Wildlife Refuge (ANWR) Update (3-23-00)
- High-Level Nuclear Waste Update (3-22-00)
- Federal Ocean and Coastal Zone Policy Update (3-22-00)
- Update on the Kansas School Board Decision and Related Challenges to the Teaching of Evolution (3-21-00)
- Climate Change Policy Update (3-21-00)
- Asbestos Legislation Update (3-17-00)
- Land Sovereignty and National Monument Acts Update (3-17-00)
- Science Education Policy Update (3-15-00)
- Summary of the Educational Opportunities Act, S. 2 (3-15-00)
- Congressional Response to Rising Oil Price (3-8-00)
- AGI Action Alert: Senators Needed for Newly Created Natural Hazards Caucus (Posted: 3-7-00)
- Geotimes Political Scene: Gone Fishing (by AGI 1999-2000 Congressional Science Fellow Eileen McLellan; 3/00)

Sources: EENews, Environment News Service, Library of Congress, People for the American Way, USGS

This monthly review goes out to members of the AGI Government Affairs Program (GAP) Advisory Committee, 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 website under "Government Affairs" <<http://www.agiweb.org>>. For additional information on specific policy issues, please visit the website or contact us at <[govt@agiweb.org](mailto:govt@agiweb.org)> or (703) 379-2480, ext. 212.

## **IMPORTANT!**

### **NOTICE TO MEMBERS**

AIPG does not condone the use of the membership database—addresses, telephone numbers, or e-mail addresses—for solicitation or circularization. AIPG does not authorize any member or non-member to use the AIPG membership database for such purposes. The use of the AIPG membership database for such purposes is strictly prohibited. If you have any concerns regarding the unauthorized use of the AIPG database, please contact headquarters.

# PROFESSIONAL ETHICS & PRACTICES - Column 55

Compiled by David M. Abbott, Jr., CPG-04570, Ethics Committee Chairman, 2266 Forest Street, Denver, CO 80207-3831, 303-394-0321, fax 303-394-0543, DMAgeol@aol.com

## Misuse of AIPG Membership Directory Information

(see column 7, June 1996; column 10, September 1996; and column 28, March 1998)

Once again discussion of the misuse of information in the AIPG Membership Directory for the purposes of unauthorized commercial solicitation is warranted in this column. The issue is prompted specifically by a recent incident where a member decided to extract e-mail addresses from the Membership Directory to promote a product his firm is selling, which he believes other geoscientists should know about. But the issue of privacy and commercial speech is also part of the political news in Colorado and elsewhere as legislative bodies debate restrictions on spam, the mass distribution of commercial e-mail messages.

The problem arises because periodically a member or someone in a member's household believes that he or she has a product, service, or idea that rest of us will surely want to know about. When facing the question, "How do I tell other geoscientists about my great product, service, or idea?", the answer, using the membership directories sitting on one's shelf, comes to mind. Please resist the temptation. You are likely to mildly to strongly annoy as many or more people as you attract. And you may well be violating a law, regulation, and/or organizational rule as well.

Most membership directories specifically state that commercial use of the contained information is prohibited. Page 1 of the April 2000 AIPG Membership Directory states, "Entire contents copyright © AIPG 2000 by *The Professional Geologist*. This directory is published for the exclusive use of the AIPG membership. Its use for solicitation or for circularization purposes is strictly prohibited." A similar statement appeared in previous years' editions of the Directory.

For those of you with a product or service you would like to inform AIPG members about, the *TPG* and many Section newsletters sell advertising, generally with reduced rates for AIPG members. If your announcement is of a non-commercial nature, letters to the editor, articles, and other forms of communication can be arranged through AIPG Headquarters or your Section officers as appropriate.

1. **Lee C. Gerhard** CPG-03461, and B.M. "Bruno" Hansen point out in their recent report to the AAPG on global climate change that "politics are considerably out in front of the supporting science. Although political action has already been proposed and an international treaty has been signed, the science is just now initiating the studies to understand what directs climate changes in magnitude, direction, and rate. Geologists have started developing time and temperature data through recent geologic history to provide other scientists with an accurate assessment of natural variability" (Gerhard, L.C., and Hanson, B.M., 2000, Ad hoc committee on global climate issues: annual report: AAPG Bulletin, v. 84, no.4, p. 466-471 at p. 467).

## Former Members Are No Longer CPGs

Periodically AIPG Headquarters learns that a former CPG continues to claim certification. On learning of this, a letter is sent to the former member informing him or her to cease and desist from continuing to claim CPG status, and a copy of the letter is routinely sent to me.

An argument sometimes advanced by former members continuing to claim CPG status is that certification is something that once granted cannot be lost, that certification is something like an academic degree. This is not true. "Certified Professional Geologist" is a title granted by AIPG to those meeting and continuing to meet the requirements set out in Section 2 of AIPG's Bylaws. Failure to maintain membership results in loss of the right to use the title. Continuing to claim membership and CPG status after membership no longer exists is dishonest.

While this discussion has focused specifically on those who falsely claim CPG status, the same argument applies to any membership or association. It is also true that most of us change memberships and associations periodically throughout our careers. Because papers given while in a former association list that former association, and because old résumés can re-emerge like the phoenix, former associations and memberships can be assumed to be current ones. When this happens, you are obliged to correct the misunderstanding.

## Advocating Science Versus Advocating Policy: A Conflict of Interest

During a discussion with a colleague regarding global warming, the colleague remarked that anything that contributed to cleaning the earth's atmosphere was a good thing. My colleague was in essence supporting a view that any scientific studies that supported her policy goal of cleaning up the atmosphere was a good thing. To me, the statement also included the implicit reverse, namely that any scientific studies that support the view that man has little impact on global warming were not good. I found my colleague's view troubling because of its

apparent support only for scientific studies supporting a particular viewpoint.

This discussion is not about one's views of global warming. The global warming debate is merely a current and, for many, highly charged example of preference for scientific studies supporting a particular policy along with the dismissal of scientific studies that do not support the particular policy.<sup>1</sup> The discussion is not about whether the preferred policy is good or bad. The discussion is about selecting only the science supporting a particular point of view. This is bias in science, and bias is one of the things we are taught to avoid in practicing science.


We are ethically encouraged to participate in public affairs, particularly where our knowledge of geology affects the policy being considered. Standards 2.3 and 2.4 of the AIPG Code of Ethics state, "Members should participate as citizens and as professionals in public affairs" and "Members should promote public awareness of the effects of geology and geological processes on the quality of life." Global warming is merely one such debate. And global warming can be considered but one part of a larger debate over envi-

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ronmental policies. Clearly these are issues in which geoscience has much to offer. However, in offering our professional knowledge and expertise to such debates, we must be careful not to allow bias into our selection of the scientific basis for our conclusions.

Column 52 (March '00) addressed "Honesty in Science: Acknowledging Uncertainty," among other things. That discussion contained Richard P. Feynman's admonition to bend over backwards in being scientifically honest. Feynman states, "Details that could throw doubt on your interpretation must be given, if you know them. You must do the best you can—if you know anything at all wrong, or possibly wrong—to explain it. .... In summary, the idea is to try to give *all* of the information to help others to judge the value of your contribution; not just the information that leads to judgment in one particular direction or another."<sup>2</sup> We must also recognize and acknowledge the limits of our studies' results.

A consequence of advocating a particular policy is that you will be viewed as biased by those favoring an alternative policy. Failure to fully disclose and discuss all limitations to the studies done and all alternative conclusions that can be supported by those studies will support claims that you are biased. Where scientific studies clearly support a particular alternative or related set of alternatives, defending against the bias charge made by those opposed to the policy may be difficult. The evolution versus "creation science" debate is an example.

Another problem in debates over policy involves disputes over the ranking of relevant factors. This aspect of the debate over any issue must be recognized before communication between the stakeholders can occur. For example, a radiometric survey showing that a particular area's radiation is less than the average radiation level found over the US is irrelevant to someone who believes that any level of radiation is too much.

As Gerhard and Hanson pointed out (footnote 1), the problems become particularly acute when politicization of an issue occurs prior to appropriate scientific data collection and study. When a solution is demanded now, the time (and money) for study may not be available. What can or should we, in our capacities as geoscientists, do in such situations?

This discussion has touched on the conflict of interest between our obligations as citizens and our obligations as geoscientists. Conflict of interest can be alleged even when a conclusion supported by appropriate scientific study conflicts with someone else's view. Even where there is general scientific

consensus, as in the evolution-creation science debate, the conflict of interest charge can and is made by the opposing side. In cases where a scientific consensus has not been achieved, as in the climate change debate, the problem becomes more acute. Are we obligated to separate our dual roles as citizen advocates and geoscientists in some cases? Please contribute your thoughts and experiences on how to resolve or deal with these conflicts or charges of conflict.

### **Morality: Its Nature and Justification: A Review**

Bernard Gert's *Morality: Its Nature and Justification* (1998, Oxford University Press, 408 p.) should be required reading for anyone seriously interested in practical ethics such as those explored in the *Professional Ethics & Practices* column. Gert does not develop a moral or ethical theory of what ought to be, like Plato or Kant or other philosophers whose works are commonly found in introductory courses on ethics. Instead Gert explores common morality, the kind we all understand and more or less follow. He notes in his Preface that "Common morality is a complex and subtle system. It is far more complex and subtle than the systems of conduct that most philosophers generate from their moral theories and that they offer as improvements on common morality." Gert explores common morality as it is and works towards its elucidation as a real and practical system for determining moral or ethical conduct, bringing to bear the logic required of formal moral systems. The resulting book is not a page-turner, but is fascinating and worth contemplative reading.

*Morality Defined:* Gert states, "*Morality is an informal public system applying to all rational persons, governing behavior that affects others, and includes what are commonly known as the moral rules, ideals, and virtues and has the lessening of evil or harm as its goal.*" Gert explores what is meant by each phrase of that definition with precision. I shall attempt a brief and therefore inadequate summary. My intent is to encourage reading of Gert's book as well as to provide a brief basis for later examination of the differences between common morality and professional ethics.

Gert begins his definition with *informal public system* Common morality is something we all know. It is public in that all societies, present and past, generally agree on the basic concepts and rules even though they are informal in that they have never been, and in one sense, need not be written down. We learned their rudimentary forms in kindergarten and similar venues, on the playground as much, if not more than from

classroom rules imposed by the teachers, from observing our parents far more than listening to them.

Although we began learning the moral system quite young, children and other irrational people are not held to the same moral standards as rational persons. By "rational persons" Gert means "persons insofar as they have neither irrational beliefs, desires, nor motives, and not acting irrationally." He goes on to state that "*an action is irrational in the basic sense if and only if it is an intentional action of a person with sufficient knowledge and intelligence to be fully informed about that action, and who, if fully informed, (1) would believe that the action involves significantly increased risk of his suffering death, pain, loss of ability, loss of freedom, or loss of pleasure, and (2) would not have an adequate reason for the action. All other intentional actions are rational.*" Gert devotes an entire chapter to parsing and explaining the parts of this definition. This is followed by a detailed discussion of reasons, goods and evils (benefits and harms), the general character of moral rules, and impartiality.

**Gert's Ten Moral Rules:** Gert notes that moral rules are concerned with actions that are morally required or prohibited. They tend to be stated in the negative because far more actions are morally allowed (are morally encouraged or are morally neutral) than are morally prohibited. Equally important is the general recognition that there are exceptions to the moral rules, indeed, in some cases the exceptions are morally encouraged.

Gert continues, "Toward each of these rules the following attitude would be taken by all impartial rational persons who use only rationally required beliefs. *Everyone (including myself) is always to obey the rule 'Do not...,' except when a fully informed, impartial rational person can publicly allow violating it. Anyone (including myself) who violates the rule when not all fully informed, impartial rational person would publicly allow such a violation may be punished.* This same moral attitude would be taken by all rational persons when they consider these rules as moral rules, that is, as public rules that apply to all rational persons.

"The proper accounts of rationality, impartiality, and of morality as a public system, are essential for justifying the general moral rules." Again, these few quoted sentences summarize lengthy discussions explicitly defining the critical terms and demonstrating their justification.

The number of general moral rules is small. Gert identifies ten but notes that in other languages, there may be more than ten moral rules due to the way different concepts may be expressed. Gert's ten moral rules are:

1. Do not kill.

2. Feynman, R.P., 1974, Cargo "Cult Science: Some Remarks on Science, Pseudoscience, and Learning How Not to Fool Yourself" in Robbins, Jeffery, ed., 1999, *The Pleasure of Finding Things Out: the best short works of Richard P. Feynman*: Helix Books, Perseus Books, Cambridge, MA. Gerhard and Hanson's report (footnote 1) lists what is and is not scientifically known about global climate change, an effort to provide the type of honesty Feynman advocated.



2. Do not cause pain.
3. Do not disable.
4. Do not deprive of freedom.
5. Do not deprive of pleasure. ("Pleasure" as used in this rule is not an excuse for hedonism but rather attempts to capture the same concept that Thomas Jefferson called "the pursuit of happiness.")
6. Do not deceive.
7. Keep your promises.
8. Do not cheat.
9. Obey the law. (Stealing involves a notion of the law of possession and so is part of obeying the law.)
10. Do your duty.

As noted above, there are generally recognized exceptions to these rules. Some examples illustrate the point. Self-defense is a recognized exception to the rule, do not kill. Medical personnel regularly cause pain, even major pain in major surgery, in order to relieve or avoid even greater pain or death. Likewise amputation causes a disability that is generally preferred to death.

The rule do not deceive is more general than the rule do not lie, which requires making an untrue statement. Nevertheless we pay magicians to deceive us because their deceptions bring us pleasure. We may even deceive a loved one for a while in order to bring them the joy of a surprise party. When faced with a knife-wielding thug asking us the whereabouts of an intended victim, we are morally expected to deceive the thug. Obeying the general rule against deception will clearly potentially lead to great harm or death to the intended victim. This is a far greater harm or evil than that resulting from deceiving the thug. Indeed, society has such a strong view on this particular situation that telling the thug the truth may subject one to a criminal charge of aiding and abetting the intended assault or murder.

Three of the moral rules are stated in the positive, "keep your promises," "obey the law," and "do your duty." Promise-keeping requires the affirmative making of the promise before it can be broken. Obeying the law, whatever laws we may be subject to, recognizes that we have an obligation to live by the rules of the society in which we live or find ourselves. If we disagree with those laws, there are various means of changing them. Even where we find a particular law morally objectionable, we are not relieved of our obligation to it. The non-violent protests of Ghandi or Martin Luther King, Jr. achieved their moral strength from the fact that they and their supporters who broke laws to which they objected were willing to suffer the sanctions for their violation of the law.

As noted in the parenthetical to the rule, *Do not deceive*, stealing requires a societal concept of private property before it can occur and is therefore incorporated within the general rule to obey society's laws. Although most of us live in areas where the moderate consumption of alcohol is legal and alcohol

is available for sale, there are places that we may visit where the sale and/or consumption of alcohol is prohibited. When in those areas, we are expected to obey the relevant laws.

Doing one's duty involves more than just obeying the law. As Gert notes, our jobs, positions, offices, associations, etc. may obligate us to certain actions. Although many of these actions are voluntary, some may be compulsory. The AIPG Code of Ethics imposes certain duties upon us, for example, the duty to strive to improve our professional knowledge and skills (Standard 5.1).

**Moral Judgments:** Gert states that "Moral rules are part of a system that explains moral judgments. They are a convenient way of talking about the kinds of actions that need an adequate justification or excuse in order not to be immoral."

"Justifying the moral rules does not eliminate all moral disagreement, but it does set limits to such disagreement. ... [S]ince morality is an informal public system, that there is a universal morality does not mean that fully informed, impartial rational persons never disagree about moral matters, only that there is a universally agreed upon framework for discussing them. This universal framework will yield some universally accepted judgments, but will not settle almost any controversial moral issue such as abortion or environmental issues. However, disagreement among impartial rational persons about what morally ought to be done always occurs within a larger framework about which there is no controversy. This lack of controversy may explain why the overwhelming agreement on most moral matters is so often overlooked."

"[R]arely is there a dispute about what counts as a moral rule...but there is sometimes a dispute about the interpretation of a moral rule, that is whether a particular act counts as a violation of the rule. There are also some serious disputes about the scope of moral rules, such as whether fetuses are in the impartially protected group [protected by the moral rules]. Most actual moral disputes are about what counts as a justified violation of a moral rule. However, everyone agrees that if one exception to a moral rule is justified, all exceptions of the same kind are justified."

For example, there are those who believe that animals should fall within the group covered by the rule against killing and they are vegetarians for that reason. The omnivores among us do not include animals within the covered group. Nevertheless, members of both groups agree on the general rule, do not kill. And most of the omnivores would also agree that cruelty or abuse of animals raised for meat is inappropriate although they do not count the eventual slaughter of the animals for food as cruelty or abuse.

Gert continues, "Justifying violations of the moral rules...consists in showing that all suitably qualified impartial rational persons can or would publicly allow this kind of violation of the moral rules. ... All suitably qual-

ified impartial rational persons agree on the moral rules, that is on what actions need to be justified, but they do not always agree on what kinds of violations should be allowed. Nonetheless, all rational persons agree on the procedure by which a violation can be justified."

In deciding whether a particular act is a justified exception to a moral rule, one must consider the morally relevant features. "A morally relevant feature of a moral rule violation is a feature that if changed could change whether some impartial rational person would publicly allow that violation. If all these features are the same for two [different] violations, then they are the same kind of violation, and if an impartial rational person would publicly allow one of them, then she must also publicly allow the other." Gert proposes ten questions whose answers illuminate morally relevant features. Although Gert would like to believe the list of questions is complete, he recognizes that it may not be and he welcomes additional suggestions.

Gert's ten questions are:

1. What moral rule is being violated?
2. A. What harms are being caused by the violation?  
B. What harms are being avoided (not being caused) by violating the rule?  
C. What harms are being prevented by the violation?
3. What are the relevant desires and beliefs of the person toward whom the rule is being violated?  
A. What are the relevant desires of the person toward whom the rule is being violated?  
B. What are the relevant beliefs of the person toward whom the rule is being violated?
4. Is the relationship between the person violating the rule and the persons toward whom the rule is being violated such that the former has a duty to violate moral rules with regard to the latter independent of their consent?
5. What goods (including kind, degree, probability, duration, and distribution) are being promoted by the violation?
6. Is the rule being violated toward a person in order to prevent her from violating a moral rule when the violation would be (1) unjustified or (2) weakly justified?
7. Is the rule being violated toward a person because he has violated a moral rule (1) unjustifiably, or (2) with weak justification?
8. Are there any alternative actions or policies that would be preferable?
9. Is the violation being done intentionally or only knowingly?
10. Is the situation an emergency such that no person is likely to plan to be in that kind of situation?



"The point of the list of questions is to help guide the search for morally relevant facts. Everyone admits that the solution to most moral problems depends on discovering all of the relevant facts... This list of questions is not a check list that one must explicitly go through when considering any violation of a moral rule, for it will often be obvious what the answer to some of these questions are. For example, question 7 never arises in making moral decisions in medicine."

"The crucial first step in moral reasoning about particular violations is determining what kind of violation a particular violation is. After the morally relevant facts have been described, using the list of questions to determine which facts are morally relevant, the next step is determining whether or not an impartial rational person can publicly allow this kind of violation. This determination can be made by answering the *morally decisive question* 'What effects would this kind of violation being publicly allowed have?' The answer to this question is morally decisive in determining whether the violation of the rule is justified or unjustified, and, if justified, whether it is strongly or weakly justified."

"A disagreement about whether to publicly allow a particular kind of violation that is based on a disagreement about the consequences of publicly allowing the violation versus the consequences of not publicly allowing it is almost always an ideological disagreement, for there is no way of settling the seemingly factual differences on which such disagreement depends. Ideologic disputes always have a significant political dimension..."

"In the real world, it is the vulnerability and fallibility of persons that make impartiality with regard to the rules so important. ... That no one is infallible and everyone knows that no one is infallible is why the moral rules, especially the second five, are needed and why all impartial rational persons favor obedience to these rules unless an impartial rational person can publicly allow

such a violation. ... Just as the first five rules are more fundamental than the second five, so vulnerability is more fundamental than fallibility. ... Common morality is designed for beings who are not only vulnerable but also fallible."

"The diversity of rational rankings of evils and ideological differences explain why morality is an informal public system that has no experts whose decisions must be accepted. ... That morality is an informal public system explains why, although there is agreement on most moral matters, some moral disagreements are unresolvable. ... Recognizing that morality is an informal public system that applies to rational, vulnerable, and fallible moral agents is thus useful not only in resolving moral disputes but also in resolving philosophical disputes about morality."

**Moral Ideals:** Moral virtues or ideals are the final part of the common moral system included within Gert's definition of morality. Moral ideals can be viewed as the positive reverse of the generally negative moral rules. The moral ideal "preserve life" is thus related to the moral rule "do not kill." Other moral ideals like "Relieve pain," "Lessen suffering," and "Increase freedom" have the same character. Gert notes that "Moral ideals seem to embody the nature of morality more than the moral rules. ... A person can act in accordance with moral rules, that is, not violate any of them, without contact with other people, but following moral ideals involves helping other people. ... The moral ideals account for those decisions and judgments about what is morally encouraged..." "Since general moral judgments are part of common morality and common morality is a public system that applies to all moral agents, the ideal must be stated in a way that is understandable to all rational persons."

Although moral ideals are positive statements and encourage us to act in morally desirable ways, we cannot act in accord with a moral ideal impartially with respect to all persons all of the time. We can only preserve

life or relieve pain by one act at a time. Generally this also means that we are interacting with only one person at a time. Feeding someone who is hungry is acting in accord with a moral ideal, but we cannot individually feed all of the hungry people in the world, or even in our communities at the same time. We are limited. We are not therefore morally condemned for not acting on moral ideals at all times or towards all similarly afflicted persons. We are encouraged to act in accord with the moral ideals but are not obligated to do so at all times and with all people.

**Summary:** Gert's study of common morality reveals a complete, comprehensible, and consistent system of behavior affecting others. The rules are few and simple. Exceptions to the general rules are recognized. There is a method of judging the morality of any action. And there are ideals for promoting the amount of evil or harm in the world. Unlike so many moral systems advocated by noted philosophers, the common moral system is for common people. It is a system developed by and suitable for fallible human beings. The system also recognizes that it cannot resolve all disputes over moral issues. Different rational people rank harms and benefits, evils and goods differently. Nevertheless, the system successfully deals with most disputes and even allows for delineation of those issues that the system cannot solve.

Although a professional code of ethics differs in various respects from common morality, the two are not incompatible. Indeed the common moral system provides a basis for evaluating a professional ethics code and for evaluating disputes arising from such a code. Those who would fully understand a professional ethics code cannot do so without understanding common morality. Fortunately, the universality of common morality means that we all basically understand it. Nevertheless, Gert's explicit exploration of common morality allows us to approach professional ethics more confidently and explicitly as well.

## Washington State Introduces Geologist Licensing Bills

At the time this report is written, geologist licensing bills are pending in the Washington state legislature (SB 6455 and HB 3053). The bills would make it unlawful to practice geology for others in Washington without a license. Geology is defined in the bill to mean "the science that includes: treatment of the earth and its origin and history, in general; the investigation of the earth's constituent rocks, minerals, solids, fluids, including surface and underground waters, gases, and other materials; and the study of the natural agents, forces, and processes that cause changes in the earth." Hydrogeology is also defined in the bill as well as the practice of hydrogeology.

The bill would establish a geologist licensing board and give the board authority to designate specialties of geology to be licensed in Washington. The pending bills also require that an individual must first be licensed as a geologist in order for licensing in any geological specialty to be recognized. Exclusions from the licensing requirement are provided. A copy of the bills may be obtained on the Internet through <[www.leg.wa.gov/wsladm/bills.htm](http://www.leg.wa.gov/wsladm/bills.htm)>.

## New Hampshire Registration Status

New Hampshire is two big steps closer on a bill to license professional geologists in New Hampshire. It has been quite a trip getting there, however. In summary, though, on Thursday, April 6, 2000, the House subcommittee on licensing voted 5-0 to report the bill as "ought to pass as amended" to the full House Executive Departments and Administration Committee. April 11, 2000, the House ED&A Committee voted 11-2 to recommend the bill as "ought to pass as amended" to the full House of Representatives! The bill now moves to the floor of the House for a vote. Before the bill reaches the Governor's desk, the bill must be considered by the House Finance Committee, voted in committee, then re-voted on the House floor by mid-May. Then, because the House made minor administrative changes in an amendment to the bill, the Senate must reconsider the bill, possibly in a joint Senate-House committee, and then be re-voted on the Senate floor(?). If all continues to go well, the bill could be ready for the Governor by about the end of May.

Dorothy Richter, CPG-07033  
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**Jul. 31-Aug. 3.** *Pacific Rocks 2000, Fourth North American Rock Mechanics Symposium* Seattle, WA. Contact: Mark Cramer, Ph.: (303) 771-2000.

**Aug. 3-5.** *Conference on the History of Geologic Pioneers*, Troy, NY. **Call for papers.** Contact: Northeastern Science Foundation, Inc., affiliated with Brooklyn College of the City University of New York, P.O. Box 746, Troy, NY 12181, Ph.: (518) 273-3247, e-mail: gmfriedman@juno.com, <http://www2.netcom.com/~gmfstf/>

**Aug. 5-8.** *GeoDenver 2000*, Denver, CO. Contact: American Society of Civil Engineers, Ph.: (703) 295-6300, <http://www.asce.org/conferences/geo2000>.

**Sep. 6-8.** *1st World Conference on Explosives and Blasting Technique*, Munich, Bavaria, Germany. Sponsored by: International Society of Explosives Engineers and by German Society of Explosives Engineers, Ph.: +46 8 679 1700 or fax +46 8 611 1091.

**Sep. 8-10.** *National Association of Geoscience Teachers Far-Western Section*, Blairsden, California. Contact: Elwood

Brooks, Dept. of Geological Sciences, California State University, Hayward, CA 94542, Ph.: (530) 862-0415.

**Sep. 17-20.** *The Society for Organic Petrology, 17th Annual Meeting*, Bloomington, IN. Contact: Maria Mastalerz, Indiana Geological Survey, 611 N. Walnut Grove, Bloomington, IN 47405, Ph.: (812) 855-9416, e-mail: mmastale@indiana.edu, <http://adamite.igs.indiana.edu/tsop>

**Oct. 10-14.** *AIPG 37th Annual Meeting, Learning from the Past - Directions for the Future*, Milwaukee, WI. Contact: Jack Travis at (920) 854-7869, e-mail: travisj@itol.com, <http://www.aipgwis.org>.

**Nov. 12-15.** *Managing Earthquake Risk in the 21st Century, Sixth International Conference on Seismic Zonation*, Palm Springs, CA. Contact: Earthquake Engineering Research Institute, 499 14th St., #320, Oakland, CA 94612, Ph.: (510) 451-0905, e-mail: eeri@eeri.org, <http://www.eeri.org>.

**Dec. 3.** *RMAG Annual Meeting, A New Exploration Strategy for Unconventional Basin Center Hydrocarbon Accumulations*, Denver, CO. Contact: The Rocky Mountain Association of Geologists, 820 16th St., #505, Denver, CO 80202, (303) 623-5396 or (303) 573-8621.

Send notices of meetings of general interest, in format above, to Editor, *TPG* 8703 Yates Drive, Suite 200, Westminster, CO 80031-3681 or e-mail: [aipg@aipg.org](mailto:aipg@aipg.org).

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<b>TOTALS</b>	<b>4,869</b>	<b>4,706</b>

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<b>FIELD TRIPS</b>		<b>Unit Cost</b>	<b>Number of Persons</b>	<b>Amount</b>	
Extractive Industries/Suburban Growth		\$25.00			
Slope Stability and Shoreline Processes		\$40.00			
Geology of the Badger Army Ammunition Plant		\$55.00			
<b>SPECIAL EVENTS</b> (Registrant listed above)		<b>Unit Cost</b>	<b>Number of Persons</b>	<b>Amount</b>	
Icebreaker and Kickoff Dinner		Included with Registration			
Brewery Tour and Brat/Cheese Dinner		\$ 20.00			
Edelweiss Boat Trip and Dinner		\$ 60.00			
AIPG National Business Meeting and Luncheon		Included with Registration			
Annual Awards Banquet		Included with Registration			
Microbrewery Dinner for Field Trip Participants		Cash Bar/Dinner			
<b>SPOUSE/GUEST ACTIVITIES</b>		<b>Unit Cost</b>	<b>Number of Persons</b>	<b>Amount</b>	
Spouse/Guest Registration Fee		\$ 35.00			
Milwaukee in a Nutshell (Tuesday)		\$ 40.00			
Historic Cedarburg Visit (Wednesday)		\$ 40.00			
Arts and Artists Tour		\$ 40.00			
Milwaukee in a Nutshell (Thursday)		\$ 40.00			
Holy Hill Tour (Friday)		\$ 40.00			
Icebreaker and Kickoff Dinner		\$ 35.00			
AIPG Business Meeting and Luncheon		\$ 24.00			
Annual Awards Banquet		\$ 35.00			
NAME OF SPOUSE/GUEST	NAME FOR BADGE		TOTAL AMOUNT ENCLOSED		
SPECIAL NEEDS:	Emergency Contact/Phone				

RETURN FORM WITH PAYMENT TO:

MS. JAYNE A. ENGLEBERT, 501 10<sup>TH</sup> STREET, BARABOO, WI 53913  
 FAX: (608) 356-2770; TEL: (608) 356-2771

VISA/MASTER CARD ACCEPTED

CARD TYPE: \_\_\_\_\_ CARD NO. \_\_\_\_\_ EXP. DATE \_\_\_\_\_

Please Charge My Credit Card: \$ \_\_\_\_\_ Signature \_\_\_\_\_

MAKE CHECKS OR MONEY ORDERS PAYABLE TO WISCONSIN SECTION AIPG

**REFUND POLICY**

Refunds of 100% of registration fees will be given upon written request if received by 5:00 PM, September 11, 2000. Notification and full refund for field trips or social activity fees will be given in cases of cancellations due to insufficient registration by September 26, 2000. Refunds of 50% will be given up to October 3, 2000.