

AIPG ad-Hoc Committee on Support of State Sections

Final Report

Submitted – May 5, 2011

Introduction

Anyone who has served as an officer of the American Institute of Professional Geologists (AIPG), either at national) or state level, knows the problems involved in stimulating members to become active within the organization. This is especially evident when we try to expand our membership rolls or involve our members in activities which we feel are necessary to meet our professional goals within society.

In recognition of the need for supporting the activities and enhancing growth of the individual state sections (Sections), President Sam Gowan established an Ad Hoc Committee (Committee) to identify areas in which the National AIPG (National) can provide meaningful support to the Sections and the mechanisms which would be most appropriate to implement the activities identified. After discussion, the following goals were established by the Committee:

1. *Assess the health of the Sections.*
2. *Identify Section problems and assess the reasons they exist.*
3. *Identify dormant or inactive Sections with the greatest potential for reactivation.*
4. *Develop potential solutions for the identified problems.*
5. *Prepare a report and recommendations for the Executive Committee and the membership-at-large.*

The following information sources were used to accomplish the goals defined:

1. *Data and information from files of national AIPG headquarters.*
2. *Reports on Section activity levels from previous officers and staff of AIPG.*
3. *Information derived by committee members during previous interaction and discussions with members and non-members of AIPG.*
4. *Information derived from survey responses from 14 of the 31 active Sections of AIPG.*
5. *Information from reports of sister organizations in the United States and Canada.*

Assessment of Status of AIPG Member Sections

A first task necessary to accomplish the charge of the committee is assessment of the overall status of the organization and the health of the individual sections. Information used in this assessment was derived from the following data sources:

1. *Data from the membership and Section files of national AIPG.*
2. *Information from previous AIPG staff reports on active/inactive status of the 38 state sections (See appendices 1, 2, 3 and 4).*
3. *Experience of committee members derived from their interactions with members in other state Sections (see appendices 3 and 5).*
4. *Information on attendance and participation in AIPG events and activities (See appendix 2).*

Summaries of information provided by AIPG headquarters staff are included in the Appendices to this report. Interpretation of this data is solely the responsibility of the Committee.

Data available indicate that the activity level of many state Sections is very low. Of the 38 Sections in AIPG, 7 are now officially inactive (no officers or tax reports submitted), and 13 sections have not reported Section officers for 2011 as of this report. Representation at the Section delegates meetings at the national convention has been very low (20 Sections in 2009 and only 16 Sections in 2010). In 2009, only 17 Sections submitted any information on their Section activities to the TPG, a location where free publicity and information dissemination is available to all Sections and members. Annual reports were submitted by only 20 Sections in 2009 and by 16 Sections in 2010.

At National level, the number of applications for AIPG Certified Professional Geologist (CPG) certification has declined since 1998 (see table and graph in appendix 4). This time frame seems to coincide reasonably well with the general expansion of geologic licensing/registration by 29 states in the U.S. Assessment of the data available indicates a general trend, at least in the last ten years, of slow but steady decline in Section activity, involvement and membership growth at the National level.

Reasons for Section Problems

Discussions by Committee members involving both members and non-members of AIPG over the past decade indicate that the major problems facing the Sections are related to those that face our National organization. The most common questions/comments encountered during conversations are listed below.

1. *“What is AIPG?”* (This is the most common comment from those non-members who don't immediately answer “Oh, I already belong to AAPG!” or “I’m not a petroleum geologist and AGWSE more fits my needs”. AIPG has very low name recognition and credibility within the younger members of the profession, and some older ones as well.

2. *"I don't need to join AIPG. I'm already registered in (1, 2, or 3+ states)."* (This suggests there is no perceived need for our CPG designation or our designated role by younger professionals and some of the older members as well.)

3. *"I don't have time for anything that doesn't help my career".* (This is the most common comment from existing members, and implies that AIPG involvement doesn't help their career!).

4. *"I've been/was a member and I still don't know what my dues went for. I send/sent in my money and I never see/saw any real return. The TPG isn't even a "real" journal like the ones the (AAPG, GSA, etc.) produce. They at least give me information I can use!"* (This is the second most common comment from members).

Most of these comments suggest that AIPG, at both National and Section levels, is apparently doing a poor job of promoting our organization. The unique role of AIPG as an advocate of the profession and its emphasis on Ethics and Professional Competence in practitioners of the Geosciences is apparently not recognized among the vast majority of our profession. Among those who do recognize that unique character, most are of older generations who are often viewed as "out of touch with modern practice" by younger professionals.

A second major problem is an apparent perception that members receive minimal value for the dues submitted to AIPG. Most of the events sponsored by AIPG are cost-plus and becoming involved requires significant expenditures over and above the dues themselves. Whether through conventions or special conferences/workshops, the perception of many members is that a major purpose of the organization is to make profit rather than to serve the profession and the members. This perception further indicates that our message of service and value is not reaching the membership or the profession as a whole.

A perhaps more troubling element is the apparent lack of motivation to become involved and to support AIPG by senior members of the profession, as indicated in President Gowan's message in the July-August TPG (See Appendix 5). This suggests that our lack of credibility and visibility is not restricted to the younger generation but extends to our graying peers as well. If so, then we as an organization potentially face a long decline into oblivion.

Identify State Sections for Potential Revitalization

Reviewing the information from the files and reports provided by National headquarters indicates that there are three distinct categories of sections with respect to activity levels; Active, Quiet and Inactive. As shown in Appendix 1, the inactive sections all have total membership levels (CPGs and members), of less than 50 except for Texas (400 members). That

does not mean that all Sections containing less than 50 members are Inactive or Quiet (as is illustrated by the South Dakota section (24 members), however, special conditions are necessary to maintain the Sections that fall below that level. Above that critical number, the activity level appears to depend on the presence of one or more dynamic leaders with support from 10 to 20% of the rest of the membership. Without the dynamic leader, the section becomes quiescent and, although apparently numerically viable, begins to decline as graying and gradual erosion of energy depletes the support group. On the basis of that information, inactive Sections with at least the approximate 50 member base would have the potential for reactivation.

Data from AIPG staff indicates that several members have volunteered to help reactivate Sections in Kansas, Iowa-Nebraska, Wyoming, Washington, Utah and Texas (See Appendix 2). On the basis of membership totals and the availability of potential volunteers, the Sections which have potential for reactivation are as follows:

Kansas – 43 members and a volunteer already available.

Iowa-Nebraska – 40 members and a volunteer already available.

Wyoming - 36 members and a volunteer already available.

The following Sections are less viable as solo units but would have higher potential if merged with other states to form regional sections:

Idaho- 20 members (Possible merger with Utah (29 members))

Mississippi- 13 members (Possible merger with Louisiana (50) and Arkansas (15))

Arkansas- 15 members (See Mississippi, above)

Although only 7 of our 38 Sections are presently classified as inactive, the data provided concerning participation in AIPG events and overall general activity indicates that at least 7 additional Sections may be in the early stages of becoming inactive (see appendix 2). After reviewing a combination of data on annual report submission, attendance at delegates meeting, lack of notification of Section officers, comments by Committee members and general indications of low Section activity, the following Sections could be considered in stasis or in decline (see appendix 2):

Alabama (39 members)

Carolinas (70 members)

Hawaii (12 members)

Louisiana (50 members)

New Mexico (110 members)

Oklahoma (83 members)

Washington (81 members)

Five of these seven Sections presently have membership totals substantially greater than the minimum discussed above, but exhibit very low recent involvement in AIPG activities and events. They should be considered prime targets for support from AIPG National resources in rejuvenating their participation in the organization.

Survey Questions and Summary of Responses

Information from files at National indicates there are significant differences in both the activity and the level of member involvement in the various state Sections. An important task of this Committee is the identification of reasons why some Sections have high activity levels and membership while others, with equivalent numbers of members, have low activity and participation in both Section and National events.

The Committee elected to obtain information on the modes of operation of the various Sections to identify more successful and less successful formats in stimulating members to become involved in AIPG activities. To obtain the data desired, a Survey form was developed by the Committee and sent by National to the President and the Secretary of each Section for which we have officers or contacts identified, with the request that one or both officers provide the best answers they could to the questions on the survey.

This portion of the Committee's report summarizes the results of 14 Survey responses received from 31 active Sections (a 45% response) and provides basic information contained therein. The discussion on Survey responses refers ONLY to information contained in the responses to the Survey and does not include information obtained from other sources.

Question 1

Sections differ in the timing and format for their Executive Committee meetings and the meetings which involve their members. These differences include meeting frequency; meeting participants; meals/reception activities; speakers; and many other variations. Please tell us how your section handles your meetings and decision-making activities in as much detail as you think appropriate.

Meeting formats reported in the Survey responses are highly diversified, ranging from no scheduled meetings per year to monthly with speakers and meals. The most common form of meetings involves Excom meetings on monthly or bi-monthly basis, normally without meals or other activities. Several sections conduct most business electronically, even using Skype in Sections where some Excom members are located at significant distances from the meeting site. There is an increasing trend toward use of e-mail and websites as the primary mechanisms for discussion and decision-making within the Sections. This is especially common among the Sections which have significant numbers of younger members.

Question 2

Does your membership include all fields of the geosciences or are you primarily concentrated in a given field,(e.g. Energy exploration/production; Environmental Consulting; Non-energy resources; Regulatory Oversight; or other fields?)

The Survey responses indicate that the majority of overall membership in the Sections is concentrated in the Environmental and Hydrogeological areas of the profession. Sections located in the Rocky Mountain and Southwestern geographic regions include significant practitioners in mining and energy-related segments of the profession although the younger membership is heavily oriented toward environmental problem-solving.

Question 3

What types of outreach events does your section sponsor and what is the frequency of the events? (e. g. field trips; outside speakers; technical upgrade conferences; university visits and counseling; public service/group lectures; etc.) How would you rate their value in enhancing the image of AIPG and the profession?

Outreach activities vary widely between Sections. The most commonly utilized elements are field trips, awarding scholarships to college (and sometimes K-12 students) and personal interaction. A growing trend involves sponsoring Professional Development Programs and short courses designed to improve proficiency and capabilities in the geologic profession. Many of these also satisfy Continuing Education Unit (CEU) requirements of various State Registration and Licensing Boards. Three Sections (Georgia, Kentucky and Northeast) have developed and implemented such programs and at least three additional Sections (California, Michigan and Carolinas) are in the process of developing similar efforts.

Four Sections engage to some degree in legislative visits and sessions, although three say they are of limited value. Two Sections use open meetings with speakers to expose potential members to the organization. Acting as Science Fair Judges, speaking engagements and involvement on Advisory Boards for state and local agencies are relatively rare outreach activities, but moderately successful in favorably exposing the profession to the general public. Exhibits at meetings of sister organizations and sponsorship of joint conferences, field trips, Distinguished Speakers and other cooperative activities with university science departments and State Geological Surveys are reasonably effective in favorably showcasing the geologic profession and AIPG to both the general public as well as other science and engineering venues.

Question 4

What methods of communication do you use to interact with your members? (e.g. E-mail; Facebook; Twitter; Land mail; other). Which do you find the most effective in interaction with your members? Least effective?

The most widely used communication methods reported by the Sections is E-mail and Facebook, with land mail backup for older members not readily conversant with web-based communication systems. Blogs in some Sections are used to supplement communications, particularly when rapid reaction to items such as legislation or notification of sudden changes in planned events is appropriate. Several Sections have now implemented Twitter for communicating with the younger members who are more involved in electronic communication venues.

Question 5

What methods do you use to recruit new members? Personal contact; lectures to outside groups (e.g. universities; other professional meetings; booths; etc.)

The most common recruitment method reported is personal contact, with booths and attendance at meetings of sister organizations a close second. Mentorship and involvement with university departments and students is a strong element in two sections while holding meetings open to non-AIPG members with speakers and meals is a very productive approach for two sections, who report attendances of 60+ at most meetings. Their meetings are held monthly in one case and quarterly in the second.

Question 6

What is the general character of your membership with respect to age? Circle the most probable answer.

Under 50 years old

Over 50 years old

Of the 14 Sections responding, 7 indicate the majority of their members are less than 50 years old while 7 report the majority of their membership is over 50 years old. The majority of the low activity sections responding in the survey were in the over 50 category.

Question 7

In what areas do you think the staff at National Headquarters could be of value to you in enhancing your members' activity and participation level in section events? (e.g. visits by Executive Committee members; help in obtaining outside speakers; publicity for events; contact

with inactive members, skills upgrade conferences/symposia; support in regulatory/governmental affairs problems affecting section members; etc.) Please give some specifics to define your answer, if possible, to help us refine our recommendations.

The most common suggestion (8 of 14 responses) involves increased visitation by ExCom members to Section meetings. The next most common request (5 responses) indicated that National should become more involved in local problems and affairs, particularly where legislation, pay inequalities and professional standing/licensure of geologists is involved. Development and support of a speaker's bureau was suggested in 4 responses and increasing visibility and improving perception of AIPG on a National basis was suggested by 4 Sections, as was modification of the National website to increase the ease of use by members.

A general theme of the responses appears to be a desire that AIPG become more visible and involved in local affairs, particularly as a support element where Sections request help in improving the perception of the profession to legislators and the general public. One area specifically identified by several responses is Professional Development for both our own members and younger non-members of the professional community.

Expansion of AIPG National's efforts in disseminating information to the Sections and general membership on issues of importance to the profession is typified by the following quote, "Coordinate with all state Sections on important issues that affect geologist's daily work, like their licenses being discontinued and parts of their skill set being claimed by other licensed disciplines".

Question 8

Comments from some of our members suggest that the organization should become more involved in questions that strongly impact our profession, but are perceived as controversial in nature, to enhance our visibility and credibility to the profession (e.g. regulatory control of power plant emissions or Cap and Trade; off-shore drilling and development; oil shale/tar sands development; gas shale development; biofuels; climate change; ocean mining and development; etc.) Should AIPG develop a public position as a spokesman on these areas to provide accurate information on the subjects to both our members and the general public? Would it help or harm AIPG's potential for growth and accomplishment of our professional goals? Expand as you wish.

Of the 14 Survey responses received, 13 responses support the concept of greater involvement of AIPG as a public spokesman for the industry. The level of recommended involvement varied but the primary theme was that AIPG should provide an unbiased platform on selected controversial topics with the goal of providing information to both the professional and legislative communities as well as the general public. Emphasis should be placed on our primary role of Professional Competence and Ethics within the geosciences community to differentiate AIPG from the other major professional geosciences organizations. Greater effort

should be placed on obtaining increased visibility and credibility for AIPG with both professional organizations and the public/legislative arenas.

Comparison of the level of activity from records at National and data from the Survey suggest several elements appear to be common in Sections that are active and productive members of AIPG:

1. Active Sections have a core of interested and involved individuals that serve as leadership for the Section. This usually involves about 15 to 20% of the actual membership, about normal for most social groups.
2. Active Sections sponsor events that are commonly oriented outwardly and include non-members of AIPG, e.g. South Dakota and Ohio with open lectures and meetings, Georgia and Kentucky with open Professional Development Programs, numerous Sections who offer field trips of wide interest to all ages and sub-disciplines of the Geosciences, State Academy of Science events and Science Fair judging, lectures to service clubs and academic institutions, involvement on advisory boards, mentorships for undergraduates and young professional geologists, etc.
3. Active Sections also utilize modern communications technology (E-mail, Facebook, Twitter, Blog sites, etc.) to provide rapid dissemination of information and discussions of concern over developments which potentially affect the profession. e.g. Licensure, pay scale and equivalency discussions, job openings, special events of interest to members and non-members, etc.
4. Active Sections also often expand their communications nets to include adjoining Sections who may share common interests and to ensure optimum coverage of activities which provide favorable images of AIPG and the profession as a whole.

In summary, active Sections appear to be heavily oriented toward interaction with the both members and non-members of AIPG. They apparently view their role to serve as representatives of the Total Profession and therefore involve themselves with outreach to academia, regulatory and consulting professionals, and with developing programs to enhance the overall image and capabilities of professionals in the Geosciences.

Discussion

Reviews of the data in Appendix 4 indicate significant fluctuations in CPG certification applications through time. Four time frames, in particular, appear to be characterized by abrupt increases in CPG growth and overall expansion of the organization. If we can identify the stimuli for these resurgences in interest in AIPG, they may provide some insight into mechanisms for revitalizing both inactive and quiet Sections in the future.

Data and information provided by Bill Wsiok and other AIPG staff, Committee members and senior AIPG members who were involved in the earlier, formative years of AIPG, suggest that these sudden growth spurts can be potentially attributed to relatively unique events that impacted the desirability of extra-academic professional credentials to practicing geoscientists.

Growth Surge 1 - 1963-1967

This growth surge represents the membership growth normally associated with the early stages of initial formation of AIPG. The major stimulus for this expansion was caused by a desire for practitioners in the petroleum community to demonstrate professional credentials beyond basic academic degrees and experience. The early years of AIPG were predominantly guided by geologists in petroleum, engineering and mineral resource extraction industries.

Growth Surge 2 - 1976-1978:

This growth surge is primarily attributable in conjunction with expansion of membership in the field of Environmental Geology. The 886 CPGs registered in 1976 represents the highest single year of new CPGs and is probably due to a combination of a one-time reciprocity event allowing full members of AAPG, SEExG and AEG Registered Geologists to qualify for CPG certification automatically for a two year period. The lack of competing certification bodies at that time provided the CPG certification with a unique position in providing supporting credentials to geologists involved in the field.

Growth Surge 3 - 1980-1986:

This growth surge can be attributed to the cyclic nature of the petroleum industry. The boom/bust cycle was especially strong in the early 1980s, coinciding with a rapid expansion of the environmental consulting, the introduction of extensive governmental requirements in the environmental industry and consequent transfer of geologists into Environmental Problem-solving. This phenomenon, in the absence of any other significant certification bodies in government or other sister organizations, provided AIPG with a unique product and consequent growth in desirability of CPG credentials.

Growth Surge 4 - 1989-1997:

This growth surge actually has several potential stimuli. One involves the general expansion of large-scale, wide-spread environmental projects in the United States (NEPA, Superfund/SARA, RCRA, Underground Storage Tank Regulations at Federal and State Environmental Agencies) and general compliance with expanded EPA regulatory requirements in underground waste injection, wellhead protection and overall groundwater quality protection. In addition, expansion of needs for credentials in other countries e.g. *National Instrument 43-101 (Qualified Person for the Canadian Stock Exchanges)* and *JORC in Australia. (Joint Ore Reserves Committee Code)*, in conjunction with expansion of AIPG into international cooperative agreements, provided stimuli for CPG certification of foreign nationals in the organization.

In evaluating this information, it is quickly obvious that, aside from the cyclic boom/bust character of many industries where geoscientists are employed, the greatest influence on AIPG membership and CPG growth has been traditionally associated with the real or perceived need for credentials outside the normal academic and experience base. When governmental certification/registration of geoscientists (now at 29 states and growing) became common in the 1980s and 1990s, CPG certification was no longer a unique commodity of AIPG and the perceived value of the CPG apparently declined drastically to professional geologists. As a result, the value of membership and involvement in AIPG is no longer obvious to younger geoscience professionals. To remedy that perception, AIPG must develop and implement new strategies to demonstrate relevance and value to modern geoscientists to replace the loss of that unique draw for young professionals.

Recommendations

Assessment and integration of the available information with the results of the Survey responses allowed the Committee to identify a number of potential mechanisms which can provide effective support to the state Sections and regain visibility and credibility with the general Geosciences profession. Two general categories of mechanisms were identified; one category which can be directly implemented by National Headquarters; and a second category that would be best implemented by the Sections as cooperative, self-help programs with strong encouragement and support from National.

Loss of the status of the CPG as a unique extra-academic credential for practicing Geoscientists after expansion of the State Registration/certification programs, suggest that AIPG must develop a new role to accomplish its goals of promoting Advocacy, Professional Ethics and Professional Competence. Discussions with AGI staff, review of the AGI GEOWorkforce report (2009), review of ASBOG reports on test results for State Registration applicants (Williams, John; Warner, J. L.; and Stephen P., (2004); Warner, J. L. and Stephen P., (2009) including discussions with one of the authors, and review of Canadian Geoscience Council Recommendations on Geoscience Curricula (2009), in conjunction with personal experience of the committee members, suggest that there is a very viable role for AIPG as a purveyor of Professional Development and “Remedial Geology” programs for the geosciences community at both National and Section levels.

An example of a one type of a Professional Development Program currently being established in the Kentucky Section is attached (see Appendix 6). The Committee believes this role is highly compatible with our mission of ensuring professional competence of professional geoscientists and should significantly aid the goal of increasing visibility and credibility for AIPG.

Recommended Actions – Implementation by National AIPG

The Committee has attempted to place the recommendations listed below in a general priority based on available resources, perceived importance as indicated in the Survey responses, and potential ease of implementation.

1. Support the Sections by improving and expanding the overall credibility and visibility of AIPG as a professional advocacy organization. Some mechanisms appropriate to accomplishing this goal could include:
 - a. As possible, increase the frequency of Excom members visits and speakers at Section meetings;
 - b. Encourage involvement of National resources for local Sections requesting support in areas of pay and staff ranking equivalency questions in governmental agencies;
 - c. Expand AIPG public relations efforts to the Sections to emphasize the value received for their dues and the accomplishments of the organization on their behalf;
 - d. Prepare packaged factual information (PowerPoint presentations/brochures/fact sheets or other materials) for use by AIPG members and appropriate sister organizations for use in discussions on controversial or major policy questions where Geoscience input is appropriate;; and
 - e. Establish and publicize a speaker's bureau available to Sections to supplement local resources.
2. In order to enhance the perceived value of AIPG to the Sections and to the general membership, the following programs should be considered.
 - a. Encourage and publicize Professional Development programs by local Sections to enhance visibility to AIPG membership and to professional practitioners in general. An example of a potential program and the information basis for its format is described in Appendix 6;
 - b. Ensure that local Section programs, e.g. field trips, professional development events, licensure discussions, major speakers, annual Section meetings and other events of local interest are publicized by National, both before and after the event;
 - c. Expand the general ongoing TPG publication theme by various authors and promote TPG as an applied, "how-to do it properly", publication for teaching through example, using project descriptions, case histories and the use of basic principles in problem-solving for various areas of the profession;
 - d. Encourage inter-Section cooperation in Professional Development programs, field trips, satisfying CEU requirements, proposed regulatory changes and other items of mutual interest in a regional context;
 - e. Encourage ALL Sections to seek cooperation with sister organizations and governmental agencies, such as State Geological Surveys (*especially valuable as resource and support organizations*), academic departments, local geology clubs,

environmental/water resources agencies, and any others that can provide opportunities for favorable exposure for AIPG and the general profession:

- f. As resources become available, develop and publicize some low-cost or no-cost programs at National level, either as face-to-face or on-line offerings, designed to upgrade the professional competence of both members and non-members of the profession. Support for Sections wishing to sponsor those programs locally should be provided as far as National resources can provide, particularly with respect to publicity.

It is patently obvious that National cannot rejuvenate Sections alone. Its most effective role would be to support and encourage activities generated at the Section level. Much of the effort in revitalizing the Sections must come from the grass-roots of the organization; however, National headquarters can provide a strong support system to the Sections, particularly in expanding visibility and credibility in the national arena and in facilitating inter-Section communications and cooperation.

Above all, results of the Survey comments and review of the status of our existing Sections indicate that AIPG must become more visibly involved in activities affecting the profession and our unique missions of Advocacy, Ethics and Professional Competence at both the national and local levels. We must demonstrate to our Sections and to the profession as a whole that AIPG's role of Advocacy for the Geosciences and Promotion of Professional Ethics and of Professional Competence is vital to the growth, vitality and survivability of the profession.

Respectfully submitted,

Dr. James Howard (Kentucky), Committee Chairman;

Committee Members - Helen Hickman (Florida), Bob Gaddis (Oklahoma), Jim Jacobs (California), John Stewart (Carolinias), Foster Sawyer (South Dakota), and Mark Rogers (California)

REFERENCES CITED

1. ASBOG Task Analysis 2010 – A Study of the Practice of Geology in the United States and Canada (2010) Association of State Boards of Geology Report; Warner, Jack L. and Stephen P.
2. Subject-Area Knowledge Measured by Scores on the National Association of State Boards of Geology (ASBOG) Fundamentals Examination and the Implications for Academic Preparation (2004), Williams, John; Warner, Jack L., and Stephen P.
3. Recommended Minimum Requirements of Geologic Knowledge and Work Experience for Professional Practice; Canadian Council of Professional Geoscientists (2009)
4. GEOWorkforce Report- American Geological Institute (2009)

LIST OF APPENDICES

Appendix 1 – Memo on Status of Quiet and Inactive Sections

Appendix 2 – Section Activity for 2009-10

Appendix 3 – Memo on Communication with Sections

Appendix 4 – Table and Graph of CPG Growth 1964-2010

Appendix 5 – President’s Message – July-August, 2011 TPG

Appendix 6 – KY-AIPG Professional Development Program

Appendix 1 – Memo on Status of Quiet and Inactive Sections

TO: S. Gowan
FROM: W. Siok
RE: AIPG Sections Status
DATE: Dec. 1, 2010

Per your recent inquiry, this list supplies names of sections which are truly inactive (no longer assessing dues to its members) and those which are in stasis (leadership or initiative lacking).

SECTION (TOTAL MEMBERSHIP)

- | | | |
|--------------------------------|------|--|
| ▶ Alabama | (40) | Quiet for a few years. Needs leadership. |
| President Terrell W. Rippstein | | 1603 Park Avenue
Moody, AL 35004
Work: (205) 443-5244
Fax: (205) 942-1266
trippstein@gallet.com |
| ▶ Arkansas | (17) | INACTIVE - No officers of record. |
| ▶ Capital | (70) | Quiet for more than five years. Needs leadership. Gene is non-practicing. Maybe can be combined with Virginias. |
| ▶ Hawaii | (13) | Quiet since Mark Rogers relocated. Needs active leadership. |
| Secretary-Treasurer | | |
| ▶ Idaho | (19) | INACTIVE- No officers of record. |
| ▶ Iowa/NB | (46) | INACTIVE - No officers of record. |
| ▶ Kansas | (43) | INACTIVE - No officers of record. |
| ▶ Louisiana | (51) | Needs leadership. |
| President | | |
| ▶ Mississippi | (13) | INACTIVE. |
| ▶ Montana | (55) | Needs leadership. (Please discuss with WJS.) |

- ▶ New Mexico (110) Needs leadership - **No officers of record.**
- ▶ N. Dakota (15)
- ▶ Oregon (40) Needs leadership. HQ has spoken with John Gray numerous times.
- ▶ Utah (32) Quiet since Janet Roemmel relocated and registration statute enacted. Needs direction.
- ▶ Wyoming (40) **INACTIVE. Aging demographics - No officers of record.**

Appendix 2 – Section Activity for 2009-2010

E-Mail 1



Vicki Hill

vlh@aipg.org

To James Howard

From: **Vickie Hill** (vlh@aipg.org)

Sent: Wed 4/06/11 9:58 AM

To: James Howard (jfhoward89@hotmail.com)

1. For 2009-Received reports from Alaska, Arizona, California, Carolinas, Georgia, II-IN, Kentucky, Michigan, Minnesota, Missouri, Nevada, Northeast, Ohio, Oklahoma, South Dakota, Tennessee, Virginia, Wisconsin

For 2010-Receive reports from

Arizona, California, Carolinas, Georgia, Kentucky, Michigan, Minnesota, Missouri, Nevada, Ohio, South Dakota, Virginia, Wisconsin,

(These were reports that came to the office prior to the meeting. Some reports may have been taken to the meeting, but I don't have the information.)

2. 2009- Delegates at the meeting: AK, AZ, CA, Capitol, CO, FL, GA, IL-IN, KY, MI, MN, MO, NV, NE, OH, OK, PA, SD, TN, TX, VA

For 2010 Delegates attending: AZ, CA, Carolina, CO, FL, GA, II-IN, KY, MI, MO, NE, OH, OK, SD, TN, VA,

3. Officers information not received from: Alabama, Arkansas, Idaho, Iowa/Nebraska, Louisiana, Mississippi, Montana, New Mexico, North Dakota, Oregon, Pennsylvania, Utah, Texas, Washington, Wyoming (some of the sections are inactive-no officers and no tax report sent in.. they are Arkansas, Idaho, Iowa-Nebraska, Kansas, Oregon, Wyoming

I do have a few members that have volunteered to be a point of contact for the inactive sections: Those being from Kansas, Iowa-Neb, Texas, Washington, Wyoming

4. It is hard to say what sections haven't recruited new members. When I receive new membership applications, they don't specifically come from a section. The only time I receive applications from a section is if they are new students.

Let me know if you need clarification on any of the above items.

Vickie

E-mail 2

From: **Vickie Hill** (vlh@aipg.org)

Sent: Thu 4/07/11 2:10 PM

To: 'James Howard' (jfhoward89@hotmail.com)

Jim,

I have 7 inactive section (which means not reporting tax information) Hawaii, Iowa-Nebraska, Kansas, Texas, Utah, Washington, Wyoming.

But there are several sections that don't do much of anything. *Vickie Hill*

Appendix 3 - Memos on Communication with Sections

February 12, 2010

To: AIPG National Executive Committee
Tucson, Arizona

From: Ron Wallace, Vice-President

Subject: Communication with Sections

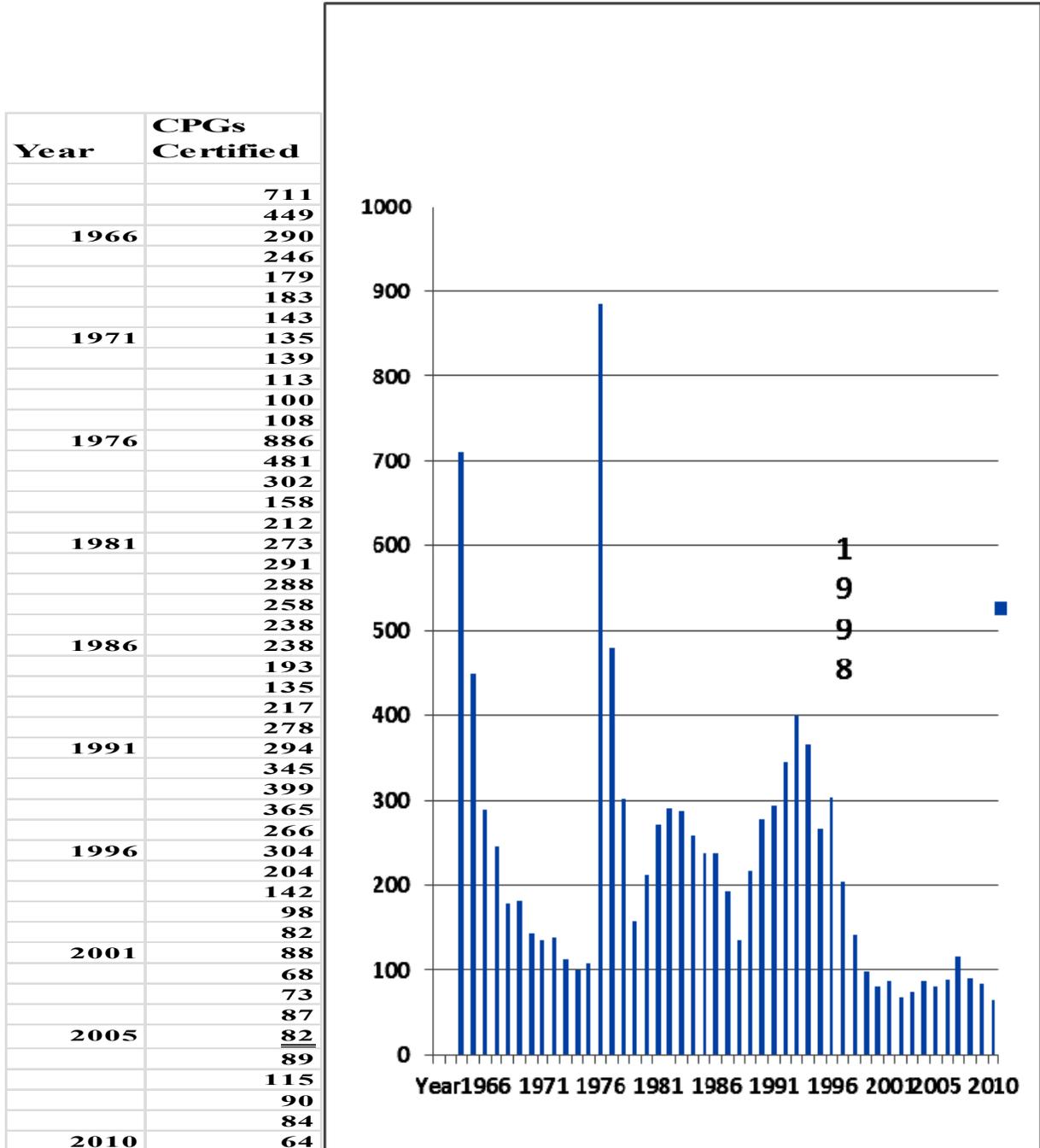
Soon after our National meeting in Colorado I received from past Vice-President Tim Crumie a contact list for the sections. I updated the list from what was available on our web site and reviewing individual section news letters. I initially emailed the sections and requested an update for the correct contacts for 2010, and did receive a few replies. Next I emailed a copy of the Energy Statement to the contacts and requested them to pass it on to their section members and encourage them to send to their congressman and senators and any other appropriate organizations.

I emailed Vickie Hill to contact the members in five inactive sections: Arkansas, Idaho, Kansas, Mississippi, and Wyoming and asked for volunteers as contacts for their section. From the five I received volunteers in Kansas and Wyoming (which are the two largest sections of the five) as contacts. A few sections have asked for help or suggestions. Kansas and Washington may ask National to set up web sites for them.

Attached is an activity form I started a few years to get a fill of which sections are active and which ones may need help. The section news is just counting the total number of articles from the sections in the TPG for each year.

My plan is to keep the sections informed of important activities at the National level and later in the year I will call each section to get their comments and encourage them to attend our National Conference in Orlando, FL.

Appendix 4 – CPG Growth – 1964 to 2010



*Data from National AIPG Files of CPG Applications – 1963 to 2010.
Graph and Table prepared by J. Howard, April, 2011*

Appendix 5–President’s Message Text–July-August, 2011 TPG

The Young Professional Conundrum

I had the pleasure of meeting James Adu (MEM-1311) at our 2009 annual meeting in Grand Junction, CO. James described his experience at that meeting in his article “Here and There!” (TPG, Jan/Feb 2011) in which he zeroed in on an issue that plagues us at AIPG and throughout our profession. That issue being the lack of young geologists participating in professional societies. James clearly enjoyed mingling with our older members, who were the predominant attendees and who readily shared their experiences; however, he expressed disappointment that he could not enjoy the camaraderie of mixing with young scientists who were largely absent.

The lack of young professionals in AIPG and related societies has a personal twist for me since two of my sons are professional geologists working in consulting. It has been embarrassing to admit, as President of AIPG, that neither of my sons were members of AIPG as of this writing, despite much encouragement. Hopefully, that situation has changed as of this printing. AIPG and other similar societies have spent a great deal of energy on trying to rectify this lack of participation by the younger generation. I have spent some time trying to understand the causes.

Two fundamental considerations emerge as integral to the problem. One of these is a lack of understanding of the benefits of belonging to a professional society, and the other is the need for an impetus to get young professionals to join. My opinions on these considerations are a product of my personal experience and certainly do not represent a statistical sampling.

The most obvious benefit of being a member, particularly a Certified Professional Geologist (CPG), is that the individual has the qualifications, through both degree and experience, and the ethical character to be recognized as a qualified professional geologist, and the membership provides an opportunity for exchange of technical and professional information. The less obvious, but perhaps more important and least understood benefit, is our professional support network. I have to admit that my employment during my career was the direct result of friends working in the field of geology. Although I cannot speak for most of you, I can give many examples of other individuals for whom this is true, especially those I have helped along in their careers. The “who-you-know” factor is extremely important especially when you consider that most organizations that are hiring geologists already have one or more geologists on staff, and our profession is constantly evolving as the result of the changing demands of society. Those of you that are mingling among your peers and actively participating in our profession will be the first to adapt to professional disruptions, which are the norm for us.

My focus on the second consideration, which is the impetus for young professionals to join a professional society like AIPG, has once again brought me back to my own experience. I am an active member of six societies devoted to the advancement of the science and/or the profession of geology. I joined the majority of these, including AIPG, due to the direct recommendation of a supervisor, mentor or colleague. My continuous, active participation in these societies was facilitated by the continued support of my employer/supervisor. My experience is certainly a limited sampling that does not in any fashion represent the variety of reasons that our members

joined AIPG; however, it is worth further contemplation.

I investigated the reasons for lack of participation by the younger generation further by interviewing the younger generation in my own family. They cited a lack of involvement, support and encouragement from their employers as the primary reason for the lack of participation by themselves and their peers in professional societies. I would hesitate to conclude that this is the fundamental or only factor in the lack of participation and knowledge of benefits, but it certainly leaves some of the blame at our feet. We, the active members with established careers, need to focus more attention on encouraging the younger geologists within our own spheres of contact.

I will conclude this article with a hearty thank-you to James Adu for expressing his concern and encouragement to his young colleagues. AIPG also takes this challenge very seriously, and, following a recommendation by Missouri Advisory Board meeting representative, Jim Williams (CPG-00374), we instituted an Ad Hoc Committee, chaired by past-President, Dennis Pennington (CPG-04401), to develop strategies to retain young professionals and transition them to CPGs or Professional Members. We also enacted a new member category titled "Young Professional Member" and changed the previous "Member" category to "Professional Member". The "Young Professional Member" dues will be half (1/2) price and will be in effect for the first 3 years after receipt of a baccalaureate or higher degree. We will keep our focus on this issue.

Z:\AIPG\AIPG President Message 3-8-11.docx

Appendix 6 – KY-AIPG Professional Development Program

KY-AIPG Professional Development Program

Summary Report and Recommendations

Submitted May 1, 2011

Introduction

The first Professional Development Program of the Kentucky Section of the American Institute of Professional Geologists (KY-AIPG) on “Site Assessment and Remediation” is now complete and all indications are that it was a success. Our treasurer, Donnie Lumm’s, preliminary count for the event is 71 paid and registered attendees including representatives from 10 different states. I presume a summary of the financial elements of the event will be submitted in the next financial report but it first estimates indicate it was reasonably successful in that category as well.

The eight speakers uniformly commented that the turnout was much better than they had expected and that the attendees were interested and attentive. Discussions with numerous attendees indicated that the event was useful and that the information presented met or exceeded their expectations as well. Several enquired when the next session would be scheduled and evidenced interest in attending. Three others professed interest in participating, two from Indiana in Geophysics (an area of reasonably high interest) and one locally in remediation technology, as potential presenters.

Survey of Potential Future Program Topics

As a part of the initial offering, a survey of potential future event topics was included to assess the interests of future participants. A total of 62 surveys on potential future Professional Development Programs were returned including those I received online. I have summarized the totals and added a list of topics that were suggested in addition to those listed on the pages following this report.

Of the topics listed in our survey, the following led the list as preferred future programs:

1. *Aquifer Analysis and Interpretation,*
2. *Karst Hydrogeology,*
3. *Geologic Controls on Contaminant Migration, and*
4. *Stratigraphic Analysis for Small Contaminated Sites.*

As would be expected from the topic of our first event, the majority of attendees were interested in topics that deal heavily in areas applicable to environmental assessment and problem-solving. Groundwater flow in various geologic settings, aquifer analysis and contaminant transport

controls/prediction appear to be hot areas of interest for future sessions that would both fulfill our intent of upgrading professional competence and generate an economically self-sustaining program. Other general areas of significant interest appear to be *Surface and Borehole Geophysics Applications*, *Expert Witness Testimony*, *Alternative Energy Technologies and Cost-effectiveness* (especially groundwater heat pump systems) and *Horizontal Drilling Technology*.

Discussion

In keeping with earlier discussions with the KY-APG Executive Committee, I have prepared a suggested list of follow-up offerings in the program. These events would help establish an overall plan for the Professional Development Program as a long-term activity of the Kentucky Section.

It is obvious that some topics are easily capable of absorbing a full day session or more, while others are of more limited scope and interest. For that reason, I have included a program of high interest offerings, such as the *Site Assessment and Remediation Technology* event just completed, alternating with other events that would be of more limited interest but of real value to professional geologists. Events of wider interest should provide the financial security to offer less remunerative or even no-profit Topics that are of interest to fewer individuals but still vital to the professional practice in Kentucky and the surrounding states.

Using that philosophy, I propose that the KY-AIPG establish a program to offer at least two events a year, one of which would be of wide interest, such as the one just completed, and one for a smaller, more specialized audience. Topics of even more specialized interest, e.g. *Expert Witness Testimony*, *Mineral Reserve Evaluation*, *Mass Wasting*, etc., can be included as either as smaller components of one of the sessions of greater interest, or alternatively, could be offered as a cluster of multiple thematic sessions presented at a single event.

Sessions that should be considered as single subject, or at least as lead sessions, include the following:

1. *Contaminated Site Assessment and Remediation*. (Repeatable yearly with changes in speakers and specific technologies presented to provide a financial base for the program).
2. *Karst Hydrogeology*. (A higher cost, full day's session with probably fewer attendees that would be more expensive with a paid presenter. It should be exercise-oriented but designed to be a break-even offering or minimum loss event).
3. *Aquifer Analysis Techniques and Interpretation*. (Again a subject of high interest but potentially more expensive for the same reasons in 2, above.).
4. *Groundwater Resource Development and Management*. (This program should include resource evaluation, well design and installation, well development technologies, safe yield assessment, wellhead protection, mechanisms for protecting recharge areas, etc.)

Other topics can be combined to offer a variety that could increase the attendance level and enhance financing for the program. Some examples of this type of event are:

1. A combination topic offering incorporating *Surface and Borehole Geophysics Techniques and Interpretation* with another subject(s), e.g. *Expert Witness Testimony* or *Horizontal Drilling Technology -Applications in Energy and Environmental Remediation*.
2. A combination course of *Mineral Reserve Evaluation*, and *Core and Sample Set Description and Analysis* combined with *Mass Wasting and Engineering Controls*.
3. A combination offering including *Alternative Energy Technologies and Cost Effectiveness* with *Preparation for ASBOG Examinations*

The general philosophy of the program should be to finance the total program with one to three profitable events. However, the organization should not become dependent on the revenue from the program to finance our other activities.

Objectives of the program:

In line with the mission of AIPG to provide a platform for advocacy of the Geosciences, promote Ethical Conduct of the Practitioners of the Geosciences and Encourage Professional Competence in the Application of our Profession, the general purposes of the KY-AIPG Professional Development Program would be as follows:

1. *Enhance the professional competence the general geologic profession;*
2. *Enhance the image of AIPG as an organization of competent professionals who wish to provide a needed service to the profession;*
3. *Use the platform of the Professional Development program to expand visibility of the Geosciences and AIPG and ensure that the individuals practicing in the field are competent and ethical;*
4. *Expose more geologists to the advantages offered by becoming involved with AIPG;*
5. *Improve the public and professional image of both AIPG and the Geosciences.*

Recommendations:

1. To enhance visibility and promote long-term familiarity of the program, a Professional Development event should be offered approximately every 6 months, in the Spring and Fall of each year, using the general timing and arrangements established for the just completed event.
2. Based on the interests expressed in the Survey responses, the next event in the KY-AIPG program should be an all-day session on either *Karst Hydrogeology* or on *Aquifer Testing, Analysis and Interpretation*. The event should be scheduled for a date in early- to mid-October, depending on venue availability.

3. The proposed topics of each event should be selected and planned at least one year in advance in order to allow time to identify potential speakers, prepare the materials necessary to produce a good program and (*to help minimize costs to the attendees*) locate pro-bono or at cost sponsors/speakers from industry or academia who would like to be become involved in return for the exposure we can provide with a successful, long-term overall program. At the same time, we should be prepared to fund selected single topic sessions such as *Karst Hydrogeology, Aquifer Testing, Analysis and Interpretation or Borehole Geophysics Testing and Interpretation* to ensure competent and effective instructors.

I am attaching a proposed three-year schedule of events and a specific proposal for Karst Hydrogeology as the second offering in the series. In the interest of time, I would like to open discussion using our internet communication and place the overall program and the specific Fall, 2011 course offering on the agenda for discussion and approval at the next full meeting of the Executive Committee.

Respectfully submitted,

Jim Howard

Chairman, Outreach Committee

SUMMARY

KY-AIPG Future Workshop Topics Survey (62 Responses Received)

<u>ORIGINAL SURVEY TOPICS</u>	<u>NUMBER OF REQUESTS</u>
1. Aquifer Analysis Techniques and Interpretation –	<u>28</u>
2. Geologic Controls on Contaminant Migration -	<u>27</u>
3. Karst Hydrogeology –	<u>25</u>
4. Stratigraphic Analysis in Small Site Environmental Investigations-	<u>24</u>
5. Environmental Site Assessment and Remediation -	<u>21</u>
6. Surface Geophysics in Site Assessment and Interpretation-	<u>20</u>
7. Horizontal Drilling Technology and Applications -	<u>19</u>
8. Groundwater Resource Development and Management -	<u>18</u>
9. Expert Witness Testimony in the Geosciences -	<u>18</u>
10. Alternative Energy Technologies and Cost Effectiveness-	<u>14</u>
11. Borehole Geophysics and Interpretation –	<u>14</u>
12. Mineral Reserve Evaluation -	<u>13</u>
13. Core and Sample-Set Description and Analysis -	<u>12</u>
14. Preparation for ASBOG Geology Examination -	<u>10</u>
15. Mass Wasting and Engineering Controls-	<u>9</u>

ADDITIONAL TOPICS RECOMMENDED BY SURVEY RESPONDERS

(All single votes except where noted by numbers.)

1. EFFECTIVE COMMUNICATION SKILLS FOR GEOSCIENTISTS. 2
2. GEOSCIENTISTS ROLE IN HAZARD IDENTIFICATION AND MITIGATION
NATURAL DISASTERS: EARTHQUAKE, FLOODING, LANDSLIDES.
3. GROUNDWATER HEAT PUMP SYSTEM DESIGN/ COST EFFECTIVENESS.
4. BEDROCK AND SOIL EVALUATION FOR SITING INDUSTRIAL, UTILITY AND TRANSPORTATION FACILITIES.
5. HISTORICAL GEOLOGY OF THE EASTERN UNITED STATES.

6. PROPER LOCATION, PURGING AND SAMPLING OF MONITORING WELLS.
7. GEOCHEMICAL DATA INTERPRETATION (REDOX, H+ATTENUATION, ETC).
8. GEOLOGY OF LAND BETWEEN THE LAKES
9. TUNNEL TECHNOLOGY AND GEOLOGY
10. FAULTS OF KENTUCKY
11. COAL MEASURES OF KENTUCKY
12. RISC EVALUATION AND ASSESSMENT
13. VAPOR INTRUSION SURVEYS AND REGULATORY COMPLIANCE
14. "GREEN" REMEDIAL TECHNOLOGIES
15. COST-BENEFITS ASSOCIATED WITH REMEDIAL TECHNOLOGIES
16. CONTAMINANT FATE AND TRANSPORT MODELING, CHEMICAL MEDIA PARTITIONING;
 NATURAL ATTENUATION OF CONTAMINANTS _____ 3
17. FOSSILS AND GEOLOGIC HISTORY OF KENTUCKY; PALEONTOLOGY
18. SCIENCE EDUCATION
19. GIS APPLICATIONS _____ 2
20. GEOPHYSICAL METHODS FOR KARST DELINEATION
21. BEDROCK CONTAMINANT REMEDIAL STRATEGIES AND TECHNOLOGIES
22. SOFTWARE FOR THE GEOLOGIC CONSULTANT
23. FRACTURE TRACE ANALYSIS
24. GEOMORPHOLOGIC ANALYSIS IN ENVIRONMENTAL PROBLEM-SOLVING
25. SITE ASSESSMENT AND REMEDIAL TECHNOLOGIES FOR LOW-CONDUCTIVITY CLAYEY FORMATIONS
26. TPH EVALUATION
27. STUDENT ORIENTED FREE WORKSHOP -WORKING INTERNATIONALLY AS A GEOLOGIST; DATA SOURCES AND AVAILABILITY; POTENTIAL EMPLOYERS; SAFETY, FOOD, ETC.; CAREER SUSTAINABILITY; SKILL SETS NEEDED, ETC. *(This one could be combined with a broader, career/employerworkshop open to students and any other interested parties.*

AIPG Professional Development Program - Proposed Event 2

Tentative Scheduling - October, 2011

Course Title - Karst Hydrogeology – Applications in Environmental Problem-solving

Format – One day of Lecture on state-of-the-art methods for characterization and monitoring of carbonate bedrock systems;

Optional second day field component with Field Exercises at a Sinking Valley, a superb local karst site where demonstrations of tracer methods and observations of karst geology and geomorphology can be readily accomplished.

Instructors:

Ralph O. Ewers, Ph.D., PG; Eastern Kentucky University Emeritus

Peter J. Idstein, M.S., University of Kentucky

Day One Lecture Highlights

- 1. Learn practical field techniques for characterizing conduit networks and groundwater movement;**
- 2. Understand how solution porosity controls groundwater flow and contaminant transport in karst;**
- 3. Practice tracer testing with fluorescent dyes for hydrogeologic projects;**
- 4. Discover recent advances in geophysics applicable to karst;**
- 5. Find out how to design and execute tracer tests;**
- 6. Learn the pitfalls of potentiometric surface and water table maps in carbonate terranes;**
- 7. See the latest analytical methods for tracer dyes;**
- 8. Recognize the do's and don'ts of groundwater flow and transport modeling of karst systems; and**
- 9. Integrate rock stratigraphy into appropriate conceptual and stratigraphic models.**

Optional second day field component

1. Access to a superb local karst site at Sinking Valley to observe karst geology and geomorphology;
2. Demonstrations of tracer methods and can be readily accomplished;
3. This course discusses and demonstrates state-of-the-art methods for characterization and monitoring of carbonate bedrock systems;
4. The field exercises will demonstrate field techniques and methodologies widely applicable to contamination issues that are prevalent in carbonate terrains.
5. Two brief underground excursions included in the field program will illustrate characteristics and impacts of solution in Karst terrane.

Logistics

1. Lunch Break logistics for Day One Lectures will be similar to those for our just completed Professional Development Conference on Site Assessment and Remediation.
2. A box lunch will be necessary for the participants on the optional second day field trip.
3. A basic packet of references significant to the field will be provided to all participants.
4. It is recommended that field trip participants use their own vehicles rather than charter a bus to minimize overall costs to the course offering.
5. Pricing for the event should be approximately the same scale as that for the recently completed Site Assessment and Remediation Conference with modification for the Second Day Field Laboratory Demonstration.

Estimated Target Attendance -

1. Target Day 1st Day Lecture Attendance Estimate 20
2. Target attendance estimate - 2nd Day field trip - 10
3. Registration Fees should be partitioned into a base fee for Day One attendance and a second fee for the optional field component of the course.
4. Course Venue - Kentucky Geological Survey Core Storage Facility.