From the Chairman: Continuing education for geologists

The Kentucky Board of Registration for Professional Geologists is considering implementing continuing education (CE) as a requirement for registered professional geologists in Kentucky. Seven other states (Alabama, Delaware, Kansas, Minnesota, New Hampshire, South Carolina and Texas) currently require CE units as part of the registration renewal process. Pennsylvania is in the process of implementing CE requirements. In each of these states, CE programs were established via state statute; these statutes define those activities recognized as continuing education.

The idea of a CE requirement for registered geologists in Kentucky was initially discussed at the Fall Meeting of the Kentucky Society for Professional Geologists (KSPG) in 2008 and later at a meeting of the Kentucky Section of the American Institute of Professional Geologists (KY-AIPG) in 2008. The AIPG national organization has recognized the importance of continuing education for professional geologists and has implemented a Continuing Professional Development (CPD) program for applicants who became registered after July 1, 2006. Approved CPD activities are defined to specifically satisfy the AIPG by laws. According to the AIPG, this approved list will be expanded to include requirements defined by state registration boards as part of the geologic licensure renewal process.

The Kentucky Board considers the implementation of a CE program as a very important task that will require significant effort by each board member. Similar to other professions that have continuing education requirements, professional geologists should stay current and improve their skills each year. The current emphasis by the public on environmental issues such as clean water and resource management places additional importance

Continuous on page 5
Welcome
New Registrants!

Professional Geologists

1/07/2009:
Smith, Andrew P. (IN)

2/20/2009:
Meighen, Penny L. (IN)

2/20/2009:
Thatcher, John Robert (PA)

3/04/2009:
Norris, Charles H. (CO)

3/17/2009:
Lee, Robert S. (TX)

3/19/2009:
Armitage, Jeremiah (IN)

3/20/2009:
Zimmerman, Jr., John Edgar (CA)

4/20/2009:
Rowe, Honore Deborah (KY)
O’Dowd, Timothy Patrick (OH)

4/21/2009:
Voci, Christopher J. (PA)
Guiterrez, Alberto A. (NM)

4/30/2009:
Chasco, Paul David (OH)

Geologists-in-Training

4/20/2009:
Asher, Jr. James D. (MS)
Gray, Boyd A. (KY)
King, Jason L. (OH)
Manning, Carl Joseph (KY)
Milburn, Tyler (KY)
Riker, Ryan J. (KY)
Rivers, Monte R. (KY)
Wheeler, Dustin L. (KY)
Williams, Samuel Karras (KY)

Board Actions

Complaint review report
Agency Case No. 09-02. The Board voted to initiate a complaint against a Kentucky geologist for allegedly aiding and abetting an unlicensed person who called himself a geologist and practiced geology without a Kentucky license; the unlicensed person had previously signed a Cease & Desist Affidavit agreeing to comply with the law.

Board legal actions
Agency Case No. 09-01. The Board voted to take further legal action against an unlicensed person calling himself a geologist and practicing without a Kentucky license; this person had already signed a Cease & Desist Order agreeing to comply with the law.

Licensee disciplinary actions
Agency Case No. 07-01. The Board voted to order and accept a Settlement Agreement taking disciplinary action against John E. McNulty, Jr., PG License No. 2152, Owensboro, Kentucky; Mr. McNulty admitted to one count of a violation of KRS 322A.100 (4) for violating 201 KAR 30:060 § 2(3)(a) by failing to exercise reasonable care when rendering professional services and failing to apply technical knowledge and skills ordinarily applied by a geologist. This violation involved the Respondent’s inadequate completion of a Phase I Environmental Site Assessment in Daviess County, Kentucky. Mr. McNulty and the Board agreed that Mr. McNulty would be reprimanded and placed on probation for one year; temporarily restricted from performing environmental site assessments; required to pay the Board the sum of $500.00 as a fine and the sum of $500.00 in costs; and required to complete a continuing education course covering the standard practice for environmental site assessments in order to be reinstated to perform that work in the future.

Total registrants

1539 Professional Geologists
19 Geologists-in-Training

ASBOG exam results
March 6, 2009

<table>
<thead>
<tr>
<th>Pass</th>
<th>Fail</th>
<th>% Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Practice</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
Representing our Kentucky Board of Registration, I joined about 30 other professional geologists from across the nation at the ASBOG Council of Examiners (COE) meeting held last month in Seattle. Our main tasks were to review results of the March 2009 national competency exam and to prepare the upcoming October 2009 exam. After that, I participated in a separate workshop to develop the 2010 Task Analysis Survey.

2009 ASBOG examinations
Our first activity was to sit for the March 2009 exam. Afterward, the group reviewed each question with an eye on a list of twelve ‘item evaluation criteria’ that related to its content, clarity, fairness, and relevance. The two professional psychometricians who directed the sessions provided quantitative information on the percentage nationwide who answered each question correctly as well as various correlation statistics. In addition, we had important qualitative information to consider. One unusual feature of the ASBOG testing procedure is that candidates are given a form on which to record their qualitative comments about specific questions while they are taking the exam. All these comments are collated and reviewed by the COE to help identify trouble spots. The end result of our review was to eliminate a few questions from the scoring process and to accept a few additional responses as correct.

The next task was to sit for the October 2009 exam and to review each question on it. It is important to realize that for every testing date the questions change because they are a randomly selected subset of a much larger database. The psychometricians suggested that the consistent pass rate the exams display over time indicates that the question pool remains uncompromised – a very good thing. But there are concerns. For example, the pass rate for the previous exam (Fall 2008) had dropped off a bit. Why? Will this be repeated in the March 2009 exam? The COE will monitor these outcomes carefully.

2010 Task Analysis Survey (TAS)
What of the content areas themselves? Could the recent dip in pass rate be explained by a pool of candidates working in, or studying, content areas with different emphases from what was being tested? Every five years ASBOG conducts a nationwide Task Analysis Survey (TAS) and this process will begin anew this fall. The purpose of the TAS is to ensure that the questions on the national exams accurately reflect the importance of the tasks being performed by professional geologists. This is essential and timely due to shifting trends throughout the industry. To this end, the COE framed more than 40 specific task statements and distributed them across eight major topical headings. Each statement is to be evaluated as to its relative importance on the job. The TAS also will contain statements about ethical issues to be rated as to their frequency and perceived seriousness.

The survey will be mailed to about 5,000 licensed geologists and university faculty. The results will be analyzed in Spring 2010 and factored into subsequent exams. If you are chosen to receive the survey, I encourage you to participate fully so that the geological activities taking place across our Commonwealth and region are represented appropriately in the national totals.

Conclusion
This was my second experience working with the COE, and both times I returned home with a feeling of pride in our profession and the knowledge that our standards of practice are being upheld fairly, assessed accurately, and are adding measurable value to society. I appreciate the opportunity to serve our Board of Registration and to tune-up my own professional skills through close interaction with a group of talented colleagues who choose to work to the benefit of our profession.
The Department of Geosciences at Murray State University offers an Area in Geosciences at the undergraduate level and a Masters in Geosciences. At the bachelors level there are options in earth science, earth science secondary certification, environmental geology, geoarchaeology, and geographic information science. Core courses emphasize the utilization of technologies such as remote sensing, geographic information systems (GIS), archaeological information systems (AIS), and global positioning. Students are prepared for positions in business, government, or for further study at the graduate level. Thesis and non-thesis options are available at the graduate level. The graduate program is also based upon the spatial technologies with the most recent focus being in AIS. Please visit www.murraystate.edu/geosciences for more details.

Research opportunities
Murray students are actively involved in research projects with faculty and staff. The department is closely aligned with the Mid-America Remote Sensing Center (MARC), a teaching, research, and resource center for spatial data (www.murraystate.edu/MARC) that uses state-of-the-art hardware, software, and spatial data in remote sensing, GIS, and AIS. Recent areas of research include environmental change detection, erosion and water quality inventory and monitoring, precision agriculture, archaeological site analysis, mapping and analysis of land cover, homeland security, and mineral exploration. Research opportunities are also available through the Murray State Archaeology Laboratory and the Watershed Studies Institute, a Center of Excellence.

New offering in geophysical survey
The department has recently acquired two state-of-the-art instruments used in geophysical surveying: a ground-penetrating radar (GPR) and a flux gradiometer. Dr. Tony Ortmann is utilizing this equipment in a new course, ARC/GSC 556 Remote Sensing Applications in Archaeology. He attended a week-long workshop sponsored by the National Park Service where experts conducted seminars on the use of the equipment and analysis of data.

Service-learning projects
Faculty members and students in the department have been involved in service-learning projects that are encouraged and supported by MSU. These have included a project in the advanced GIS course that analyzed the support base for the Four Rivers Center for the Performing Arts in Paducah. Our land use planning students are working with the planners in the City of Murray to select optimum sites for walkways and bike paths throughout the city. Public archaeology students completed a Phase I archaeological survey for the city, receiving hands-on practice in researching historic records, interpreting aerial photography, surveying, and preparing a scope of work and budget. Our geophysical equipment was also used in a service-learning project in the Murray City Cemetery where numerous unmarked graves were located and mapped.

Outreach to local schools
Five members of our Geoscience Club offered workshops in geology and archaeology to Caldwell County Elementary students on their Science Day last fall. Students were introduced to rocks, minerals, and fossils. They were also given a flintknapping demonstration and learned about a wide variety of artifacts. The elementary students and our students enjoyed the day and we plan to return next fall. Our club members have also visited an elementary school and a home school in Paris, TN.

Time in the field
In the past year, students in the department have had the opportunity to travel to a number of places in the region including the Vulcan Quarry, located near Parsons, TN. There the Birdsong Shale member of the Ross Formation is exposed. It is highly fossiliferous with brachiopods, crinoids, bryozoa, corals, and trilobites that are somewhat rare but highly coveted. Other trips were made to Garden of the Gods in the Shawnee National Forest of southern Illinois to view sediments and structures and to western Kentucky sites to explore the distribution and characteristics of the Cretaceous Tuscaloosa Formation.

A five-week summer Archaeology Field School was held in the Land Between the Lakes during the summer of 2008. The primary purpose of the field school was to discover information about human habitation when the iron industry was active in the 1800s.

For more information
To learn more about learning opportunities in the geosciences at Murray State, please feel free to call me at 270-809-2493 or 270-809-3110 or email me at tom.kind@murraystate.edu.
Continuing education  
con’d from page 1

on the role of geologists in performing these evaluations. The purpose of a continuing education program is to promote the transfer of information and the use of new technologies in solving problems dealt with by practicing geologists. As in any profession, research continues to advance the science. Each one of us, as a practicing geologist, needs to take advantage of opportunities to learn new applications and stay current within our field of work. Such learning is part of being a professional and should be considered vital to every registered geologist.

I would like you to be aware of a key consideration that the Kentucky Board has identified regarding the implementation of a continuing education requirement. First and foremost, our intent is to develop a program that is not a burden, especially financially, to the registered geologists in this state. The Board would welcome your comments concerning continuing education units and what you would like to see included in the list of approved activities. Examples of activities that would be included are: taking college courses in geology; attending field trips and meetings sponsored by geologic organizations; and writing articles on geologic topics that are published in appropriate journals. The decision on the types of activities to include and the number of units required each year has not been finalized. Other states require 12-16 hours of continuing education annually. Consideration needs to be given regarding the number of hours required and approved activities allowed by other states.

This program will not become a requirement immediately, but rather the implementation process will take from one to two years. The development of the program along with changing the regulation through the legislature will take a significant amount of time. There are a number of decisions that must be made in order to develop a fair and consistent program. It is important that the registered geologists of Kentucky understand and are agreeable with the implementation of continuing education requirements. That is why it is important for us to receive your input at this point in time. Please contact Dana Hockensmith, our Board Administrator with the Kentucky Division of Professions and Occupations, to register your thoughts and suggestions. Dana’s e-mail address is dana.hockensmith@ky.gov.

Thank you for working with us to ensure the highest standards in our profession.

Thomas P. Ryavec, PG  
Chairman  
Kentucky Board of Registration for Professional Geologists

Registration by comity

In professional licensure of geologists in the United States, the word ‘comity’ refers to the recognition of another state’s licensure. Kentucky law provides in KRS 322A.040(5) that upon application, registration may be provided to those licensed as geologists in states that have standards at least equal to those provided in Kentucky law. Virginia has recently been added to the list of states that meet that criterion. Because state laws are subject to change, the list of states that fit the comity criterion for registration of geologists in Kentucky is reviewed on an ongoing basis.

Alabama  Nebraska  
Arkansas  New Hampshire  
California  Oregon  
Delaware  Pennsylvania  
Florida  South Carolina  
Georgia  Utah  
Idaho  Virginia  
Indiana  Washington  
Maine  Wisconsin

International Pittsburgh Coal Conference  
September 21 - 24 2009  
Westin Convention Ctr.  
Pittsburgh, PA

Faculty and students interact during regular geosciences seminars at Murray State University. (See story page 4.)