



## AIPG GEORGIA SECTION

Ron Wallace, President  
Eric Lowe, Vice President  
Glen Faulkner, Treasurer  
Chris Gargan – West Georgia student chapter  
Rebecca Pickering – Georgia State student chapter  
Salvador Espinosa – Columbus State student chapter  
John Harper and Patti Northcutt – University of Georgia student chapter

August 2013

### NEXT MEETING

#### ROCK SWAP AND DIG

**When:** 10:00 AM – 6:00 PM Saturday, October 5, 2013

**Where:** Graves Mountain, Highway 378, Lincolnton, Georgia

AIPG Members and guests call or email by Tuesday October 1, 2013, if you plan to attend

[Call Ron Wallace (404) 362-2589 or [ronald.wallace@dnr.state.ga.us](mailto:ronald.wallace@dnr.state.ga.us)]

---

#### **PRESIDENTS MESSAGE**

As I write this the fall semester is getting closer and summer will soon be officially over. But the fall season is a great time in Georgia. There are a number of field trips and conferences to attend. The trees will be changing colors and with all the rain we have had, this could be a spectacular fall.

National has already announced the new Student Chapter of the Year Award and it starts this semester. As soon as I can find out all our new student officers, we will be notifying them of this program. I really would like one of our Georgia student chapters to be the first recipient of this award. Details of the program will be in the July/August TPG and a copy is also in this newsletter. I would very much like to hear from our student officers on what they would like to see this year. Right now we have two remediation systems in Athens that we had planned on visiting these sites last spring but decided to wait until this fall semester. We also hope to have a few career nights at different universities. If you would like to participate let Eric or I know. We hope to have activities in the Atlanta area, Carrollton, Athens, Columbus, and maybe Statesboro.

This will be the first announcement that our 5<sup>th</sup> Conference: Innovative Environmental Assessment and Remediation Technology will be held at Kennesaw State University Continuing Education Building on Wednesday April 23 to Thursday April 24, 2014. We are recruiting speakers right now so if you are interested contact Yo Sumartojo at [yusumarto@bellsouth.net](mailto:yusumarto@bellsouth.net).

Our 50<sup>th</sup> AIPG annual meeting will be held in Broomfield, Colorado from October 23-26, 2013. We have some great field trips and technical talks. If you have never attended I encourage you to come to this special one. I hope I'm not the only one from Georgia and being National President this year it would be nice to see some local faces there.

---

## **WELCOME NEW MEMBERS**

Our section continues to grow. Please welcome the following new Professional and Student Members.

DeAnna Gettler, Randa Harris, Albert Killingsworth, Clayton Collins, Angela Dapremont, Jessica Taylor, Patricia Northcutt, Caroline Potterf, Bradley Griffeth, Travis O'Neill, Chris Lee, Isabella Cantin, and Olufolajimi Okunlola.

To each of our new members the officers of the Georgia Section welcome you to our section and encourage you to attend our field trips and other activities.

---



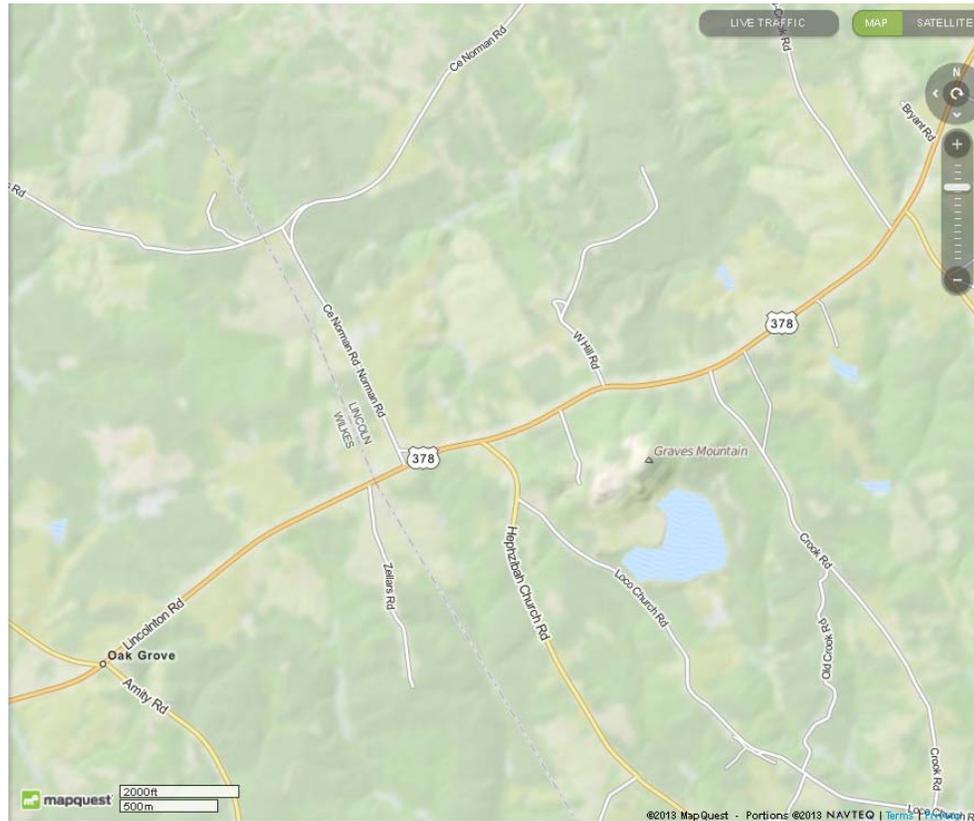
We would like to offer our congratulations to Dr. Jessica Kogel CPG-11224, who was recently elected to National President of Society of Mining, Metallurgy & Exploration (SME). Jessica currently is a Senior Manager Group Mining & Geology at IMERYS in Sandersville, Georgia.

---

## **UPCOMING MEETING**

Twice a year Graves Mountain is open to the public for three days of digs and rock swaps. It will be open October 4-6, 2013 from 8:00 AM to 6:00 PM each day. All participants must stop at the welcome table in the Hospitality tent to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets. I would recommend \$10.00 to \$15.00 because we want to keep this open for the future. There will be hot food cooked on the grill, chips, and cold drinks to purchase. There will be tables set up for rock swaps. We plan to arrive there on Saturday only at about 10:00 AM. The mountain is a premier location for multiple twinned rutile crystals. The dominant rock is a pyrite/sericite/kyanite/quartz rock. Mining began in 1963 for kyanite.

The mountain is located six miles SW of Lincolnton on Highway 378 and about a mile east of the Wilkes-Lincoln county line and approximately 14 miles from the Georgia – South Carolina border on Highway 378. We are inviting our members from the Tennessee and Carolina Sections to attend.



## Graves Mountain code of conduct!

- **Park your vehicle in the designated area(at the end of the paved access road but not much beyond the woods to the right of this road).**
- **NO child under the age of 12 years old is to be allowed on the mountain because of all the dangers involved.**  
**ALL CHILDREN WILL BE ALLOWED DURING THE "Rock Swap and Digs" IF EACH CHILD IS UNDER STRICT ADULT SUPERVISION!**
- **ALL pets must be kept under control and on a leash.**
- **The caretaker, Junior Norman, has final and absolute say as to where you may safely work.**
- **Ladders or power tools of any kind will not be allowed. (HAND TOOLS ONLY!)**
- **STAY AWAY FROM ALL HIGH WALLS!!**
- **NO REPELLING OFF OF ANYTHING!**
- **NO ONE IS ALLOWED TO DRIVE THEIR VEHICLE ON ANY PART OF GRAVES MOUNTAIN BEYOND THE PARKING AREA!**  
**(The caretaker must accompany anyone driving beyond the parking area!)**
- **EVERYONE NEEDS TO BE OFF THE MOUNTAIN BY DUSK. (Absolutely no one is allowed on Graves Mountain after dark.)**

For ones that would like to stay over there are two motels nearby: Cullars Inn located at 140 Elm Avenue (GA Highway 47) and Lincoln Motel 688 S Washington Street, south of town. There are also some nearby camp grounds.

---

***2013 Georgia Geological Society annual field trip and meeting***

***October 11 - 13, 2013***

***The Dahlonega Wine and Gold producing area: Terroir and Geology of Viticulture in Northwestern Georgia***

The Dahlonega area is a novel North American venue in that it is the first site to host both significant gold and wine production since occupation by European immigrants. The California gold rush brought a halt to Dahlonega gold production and prohibition brought a halt to the European style viticulture and wine production. The advent of controlled environments for wine making and the reintroduction of European grape varieties well-suited to the terroir of the Dahlonega have created a viticultural renaissance and the production of world class wines. The purpose of this excursion is to visit and study the geologic, soil, hydrologic, and microclimatic factors that interact with grape plant genetics, which are ultimately expressed in the wine product we consume. At the same time the group will revisit the geology of the gold-bearing units in the region and reflect upon the historical influence of gold production in the context of today's rising gold market commodities. The program begins with a Friday evening social and program overview. Saturday and Sunday mornings include visits to geologic outcrops representative of the region's terroir and the gold-bearing formations. The group will also tour a gold mine and visit select wineries to explore the viticulture industry and experience the soil, hydrologic, and climatic elements that define the region.

The host hotel is the Days Inn Dahlonega, located on 833 South Chestatee Street, Dahlonega, GA 30533. Please call 706-864-2338 to make a room reservation.



## American Institute of Professional Geologists

### AIPG Student Chapter of the Year Award

The purpose of the AIPG Student Chapter of the Year Award is to recognize the most outstanding student chapter for their participation in, and contribution to, the American Institute of Professional Geologists. The award will consist of a plaque to be presented to the student chapter, a certificate to each of the officers of the chapter at the time of their submittal, a \$500.00 award for the chapter, and a trip for one member of the winning student chapter to the annual AIPG conference and executive meetings. The student that attends the annual meeting will observe the organization and functions of AIPG and participate in the executive board meeting.

All AIPG student chapters are eligible to apply for the award. There is no limit on the number of times a student chapter may win the award. Only one chapter will receive the award per year.

The Student Chapter of the Year Award is administered by the Executive Committee of AIPG. The selection of the winning chapter will be decided by the AIPG Education Committee. The deadline for submittal of application materials for the Student Chapter of the Year Award, to AIPG National Headquarters, is June 30 of each year. The application should be submitted in a pdf or similar format. The winning chapter will be announced at the beginning of the Fall Semester. The certificates will be presented to the students at one of their chapter meetings. The award and plaque will be presented to the chapter delegate at the banquet of the annual meeting of AIPG.

The submittal for Student Chapter of the Year Award will consist of a written report. Photos documenting chapter activities are strongly encouraged. The submittal should cover the period from the beginning of the Fall Semester to the end of the Spring Semester and include the following as a minimum:

- 1) Name of the student chapter;
- 2) Names of student chapter officers;
- 3) Number of AIPG student members in the chapter;
- 4) Number of chapter meetings per year;
- 5) Programs to recruit new members;
- 6) Activities within the department (seminars, guest speakers, field trips, career day, mentoring, etc.);
- 7) Fundraisers;
- 8) Activities within the university (geology awareness, recycling, sustainability awareness, Earth Day, etc.);
- 9) Activities within the community;
- 10) Interactions with professional geologists and the local AIPG Section; and
- 11) Other significant activities that the chapter considers important to the mission of AIPG.

---

## FEDERAL DOCUMENTS

### **New study indicates “peak oil” driven by demand, not supply**

Researchers from Stanford University and the University of California-Santa Cruz have released a study that provides a new perspective on the future of Earth’s oil supply. The study concludes that the demand for oil, rather than the supply, will reach a peak and then begin to decline.

In marked contrast to other peak oil studies that generate a wide range of possible scenarios as the world reaches, and then passes, peak oil production, the team of researchers predict that “limits on consumption by the wealthy, better fuel efficiency, lower priced alternative fuels and the world’s rapidly urbanizing population” will decrease the demand for oil before a supply peak is reached.

Those interested can project global oil demand, using the study’s model and their own set of assumptions, located on the Stanford University Environmental Assessment and Optimization Group webpage. Although the study makes no predictions concerning oil prices, its conclusions on customer demand would likely be interesting to the Senate Energy and Natural Resources Committee which held a hearing on domestic oil production earlier this month.

### **USGS trains volcano scientists from around the world**

Scientists and technicians from volcano observatories in nine countries traveled to the United States this month to participate in the **International Training Program in Volcano Hazards Monitoring**. The goal of the program is to help participating nations become self-sufficient in volcano monitoring, in order to decrease the negative impacts of a volcanic eruption.

This summer’s program included training in Hawai’i at the University of Hawai’i in Hilo, the U.S. Geological Survey (USGS) Hawaiian Volcano Observatory, and Kīlauea Volcano; and in Washington State at Mount St. Helen’s and the USGS Cascades Volcano Observatory. At these locations, U.S. scientists provided training on the use of volcano monitoring instruments, data analysis and interpretation, and volcanic hazard assessment. Participants also learned about rapid response during volcanic crises, including effectively partnering with government officials and the media to improve disaster response.

The International Training Program in Volcano Hazards Monitoring has been in existence for 22 years and is organized by the Center for the Study of Active Volcanoes at the University of Hawaii, Hilo, with support from the joint USGS-USAID Volcano Disaster Assistance Program.

### **Distant Quakes Trigger Tremors at U.S. Waste-Injection Sites**

A recent study done by Columbia University and the University of Oklahoma published in the 12 July 2013 issue of *Science* suggests that large (magnitude 7 or above) earthquakes from all over the globe can trigger smaller quakes at waste fluid injection sites where pressure from the fluids has pushed faults close to failure. At some injection locations, a swarm of remotely triggered earthquakes appears to act as a warning sign that large earthquakes related to human activities may be imminent. Several areas in Oklahoma, Colorado, and Texas showed this correlation.

At one of the studied waste injection sites, in Prague, OK, a magnitude-8.8 earthquake off the coast of Chile on February 27, 2010 helped to trigger a notable swarm of earthquakes, which was followed by a human-induced magnitude-5.7 earthquake in Prague on November 6, 2011. Similarly, earthquakes off the coasts of Japan and Sumatra in 2011 and 2012, respectively, set off swarms of earthquakes that were later followed by mid-sized earthquakes at injection sites in western Texas and southern Colorado. Other sites with induced earthquakes did not respond to the passage of seismic waves from remote earthquakes.

The sites that reacted to stresses caused by remote earthquakes all had a decades-long history of injection, are assumed to have been near critically stressed faults, and had low levels of seismicity before the triggered earthquakes.

A separate paper in the same issue of *Science*, authored by William Ellsworth of the U.S. Geological Survey, provides a wide-ranging review of injection-induced earthquakes.

### **EIA interactive map showing energy structure potentially impacted by storms**

The U.S. Energy Information Administration (EIA) has released several interactive maps that combine real-time data from the National Oceanic and Atmospheric Administration's (NOAA) Hurricane Center with maps showing the nation's energy infrastructure and resources. These maps, released as peak hurricane season approaches, serve to better illustrate the potential impact of a storm for industry, government decisions makers, and the general public. The new maps are available at any time on the EIA's Energy Disruptions webpage.

### **New USGS reports on coastal change help community and emergency planners**

The United States Geological Survey (USGS) examined the probability of hurricane-induced coastal change on sandy beaches from Florida to New York in two first-ever studies released at the beginning of the month. Both reports – one examining beaches from Florida to North Carolina, the other beaches from Virginia to New York – can be used by community planners and emergency managers to make better informed decisions about coastline vulnerability and ways to deal with it. The reports include an online mapping tool that will enable users to model predicted coastal change in an area for any storm category.

Modeling data included in the reports indicate that a category 1 hurricane can increase water levels at the shoreline by about 150% above storm surge levels. Data also indicate that dune height and continuity have a strong correlation with coastal vulnerability, with northern beaches with higher average dune heights being less susceptible to overwash (the landward movement of sand and water) than southern beaches, with their long sections of continuous low dunes.

### **House Natural Resources Committee examines U.S. helium production**

On July 11, 2013, the House Committee on Natural Resources Subcommittee on Energy and Mineral Resources held an oversight hearing to discuss the future of helium production in the U.S. The subcommittee heard testimony regarding the current and future U.S. demand for helium, the Federal Helium Reserve, and permitting for helium production.

Currently the Federal Helium Reserve, which provides the U.S. with 50 percent of its helium, is set to close at the end of the fiscal year. The House of Representatives passed a bill (H.R. 527) in April that would extend the life of the reserve. The Senate is slated to vote on a related bill (S. 783) but until a law is enacted, closure of the Helium Reserve remains imminent. In order to avoid reliance on foreign helium sources, it is important to evaluate and understand the existing helium resources on U.S. public and federal lands.

The hearing focused on new technologies and updating permitting process which will increase helium production in the U.S. Technologies in development at Oak Ridge National Laboratory would allow the development of "low-grade" fields, which have lower concentrations of helium, but larger quantities. The Bureau of Land Management said that they are working to update a variety of permits, such as drilling permits where helium is the primary target.

### **House scheduled to consider critical minerals legislation**

House lawmakers must wait to consider legislation that intends to streamline hardrock mine permitting on federal lands. Introduced by Representative Mark Amodei (R-NV) in February, the National Strategic and Critical Minerals Act of 2013 (H.R. 761) hopes to increase domestic production of critical and strategic minerals on federal lands by setting permitting and litigation time limits on proposed mining projects, and establishing a lead permitting agency to increase efficiency.

Although an earlier version of the bill successfully passed the full House last year, the current bill still has many opponents. Those against Amodei's legislation, including the White House, fear H.R. 761 would eliminate environmental and safety restrictions placed on mines under the National Environmental Policy Act. They urge

Republicans to consider alternate critical minerals legislation, including those introduced by Representatives Doug Lamborn (R-CO), H.R. 1063, and Hank Johnson (D-GA), H.R. 981.

The House was supposed to consider the legislation this July, however, due to delays caused by contentious deliberation of the Farm Bill (H.R. 2642), the National Strategic and Critical Minerals Act will likely not be considered until after August recess. August recess begins August 2, and lawmakers will return to Capitol Hill September 9.

### **Streamer – A new online tool to visualize and understand water flow across America**

Streamer is a new interactive, online map service from the United States Geological Survey and the National Atlas of the United States that allows the user to navigate America's major rivers and streams. Using digital hydrographic data at one million-scale (1 inch = 15.8 miles), Streamer allows the user to trace any stream or river upstream and downstream from any point along its course. It allows for the creation of concise or detailed reports of the upstream and downstream traces of any particular stream or river, making it a useful tool for community planners and policy makers. With Streamer, any policy or planning decision can now more easily contain information on upstream or downstream impacts.

Streamer also allows the user to locate areas of interest by entering latitude and longitude coordinates, specifying stream or place names, or entering a USGS stream flow gauge identification number. The user can also print out maps of upstream and downstream traces, identify streams and water bodies by clicking on them, learn about current or historic stream flow at thousands of locations, and collect other useful information.

**EOP** – The Executive Office of the President (EOP) issued a memorandum directing the Environmental Protection Agency (EPA) to issue a new proposed rule to regulate carbon emissions from power plants by September 20, 2013. [Monday, July 1, 2013 (Volume 78, Number 126)]

**USGS** – The United States Geological Survey is requesting comments concerning an Information Collection Request regarding the funding of National Map and other national geospatial databases. The comment period will close on August 30, 2013. [Tuesday, July 31, 2013 (Volume 78, Number 147)]

To contact Eric Lowe:  
678-244-5043  
[elowe@smeinc.com](mailto:elowe@smeinc.com)

To contact Ron Wallace:  
404-362-2589  
[ronald.wallace@dnr.state.ga.us](mailto:ronald.wallace@dnr.state.ga.us)