Atlanta Geological Society Newsletter

Next meeting of the Atlanta Geological Society is
September 29, 2015
Fernbank Museum of Natural History (Clifton Road)
Social begins at 6:30 pm – Meeting begins at 7:00 pm

September 2015

ODDS AND ENDS

Dear AGS members,

I would like to pass on the basic information and the link to the Geogorgia Geological Society annual field trip. The title is: Origin of ore deposits in the Cartersville Mining District & Stratigraphic and Structural evidence for separation of the Cartersville-Great Smoky and Emerson-Talledega Faults. The field trip HQ will be the Calrion Inn in White, GA. The trip will run from October 9, 6:30 pm to October 11, 1 pm. Here's the link: http://www.westga.edu/~ggsweb/fieldtrip/fieldtrip2015.html

Also, there is the AIPG 6th Conference on environmental Assessment and Remediation Technology, September 29 & 30. http://georgiaaipg.weebly.com

We are blessed to have an abundance of choices for expanding our geologic horizons; from the field trip to the practical presentation to foreign lands.

Ben Bentkowski, Newsletter Editor

SEPTEMBER MEETING

Join us **Tuesday, September 29, 2015** at the Fernbank Museum of Natural History, 760 Clifton Road NE, Atlanta GA. The meeting social starts at 6:30 pm and the lecture starts shortly after 7 p.m.

This month the speaker will be **Craig W. Stichtenoth.** The title of his presentation is **Icebergs and Oil Seeps: A Geological Field Trip to Western Greenland**. The abstract for the presentation and the Speaker's bio are presented on the following page.

The sponsor for the evening is Atlas Geo-Sampling and Jim Fineis. They provide direct push drilling and sampling plus vapor intrusion sampling. Please see more details on page 3.

Please come out, enjoy a slice, the camaraderie, and an interesting talk.

SEPTEMBER PRESENTATION INFORMATION

Icebergs and Oil Seeps: A Geological Field Trip to Western Greenland
Craig W. Stichtenoth

Abstract

The geology of Greenland's Disko Island and Nuussuaq Peninsula is distinguished by the presence of a thick succession of Cretaceous clastic sediments overlain by Tertiary volcanics, rocks that contrast greatly with the granitic basement exposed over much of the rest of western Greenland. In places, some of these layered rocks have been found to contain evidence of live oil, indicative of a working petroleum system, which heightens their potential importance as analogues for offshore depositional environments which may hold promise of commercial quantities of oil and gas. As researchers and exploration companies continue to evaluate the oil and gas potential of offshore basins in the North Atlantic and Baffin Bay, these nearby onshore rocks have generated significant interest.

This presentation will summarize and illustrate a one-week field trip in the summer of 2008 to examine these Cretaceous sediments and overlying basalts where they are exposed in various localities on the Nuussuaq Peninsula and northern Disko Island. The field trip participants traveled from place to place by boat, departing from Greenland's third largest town of Ilulissat and concluding the trip at the island town of Uummannaq, located approximately 500 kilometers north of the Arctic Circle. Large scale observations of the geology were made as the vessel passed by dramatic coastal outcrops and during one helicopter flight into the interior of the Nuussuaq Peninsula. The field trip participants went ashore at a number of locations to examine the rocks and their marine and non-marine depositional environments in detail and to observe the intriguing evidence of hydrocarbons at several locations.

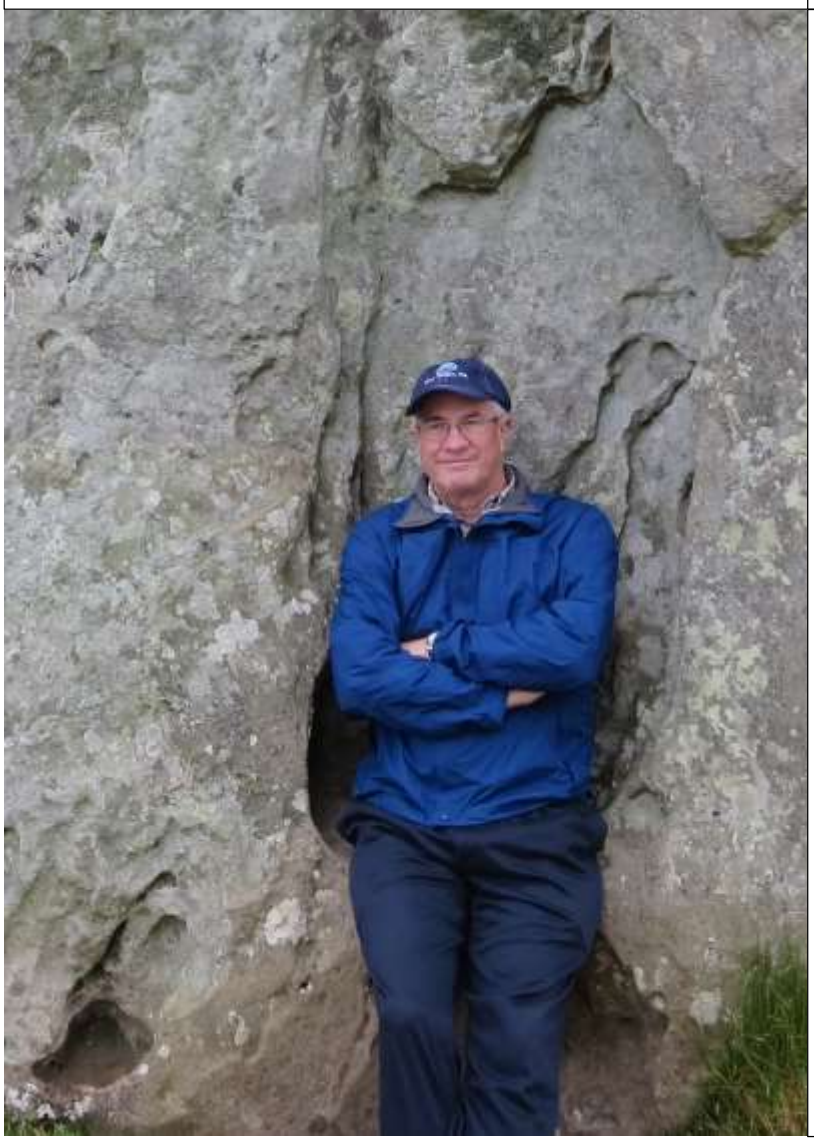
Speaker's Biography : Craig Stichtenoth

Email: CStichteno@aol.com

Craig is a retired petroleum geologist with nearly 36 years of experience with Texaco and Chevron. His technical specialty has been exploration geology, involving the conceptual and technical evaluation of frontier plays and the generation of prospects for potential licensing and drilling. He has experience in a variety of North American onshore basins, the offshore Gulf of Mexico, and a variety of international settings. Craig also had an ongoing interest in various aspects of technical training and learning domain concepts and application, knowledge management, and mentoring.

(cont. on Pg. 4)

Speaker's Biography : Craig Stichtenoth



Craig is a graduate of Miami University in Oxford, OH, with a BA degree in Geology (1975). He earned his MS in Geology (1977) from Bowling Green State University in Bowling Green, OH. Craig's MS degree research involved the ecological analysis of endoliths in Late Ordovician fossils in portions of the Cincinnati Arch region. During his professional career, Craig has worked in Midland and Houston, TX, Denver, CO, and New Orleans, LA, and has traveled to various destinations in Europe, Africa, Asia, and Australia in the course of his work. After retiring from Chevron in 2013, Craig and his wife Beverly relocated from Texas to Canton, Georgia.

An active member of the American Association of Petroleum Geologists (AAPG) since 1978, Craig has also been a member of local professional societies in each city where he has lived and worked, including the Permian Basin nowthe Atlanta Geological Society. In 2000, Craig was on the Technical Program Committee and was Poster Chairman for the AAPG Annual Convention held in New Orleans in 2000.

Thanks to our Sponsor:

CROSS BEDDED MARTIAN SANDSTONE

This sandstone outcrop -- part of a geological layer that Curiosity's science team calls the Stimson unit -- has a structure called crossbedding on a large scale that the team has interpreted as deposits of sand dunes formed by wind. Similar-looking petrified sand dunes are common in the U.S. Southwest. Geometry and orientation of the crossbedding give information about the directions of the winds that produced the dunes. The Stimson unit overlies a layer of mudstone that was deposited in a lake environment. Curiosity has been examining successively higher and younger layers of Mount Sharp, starting with the mudstone at the mountain's base, for evidence about changes in the area's ancient environment.

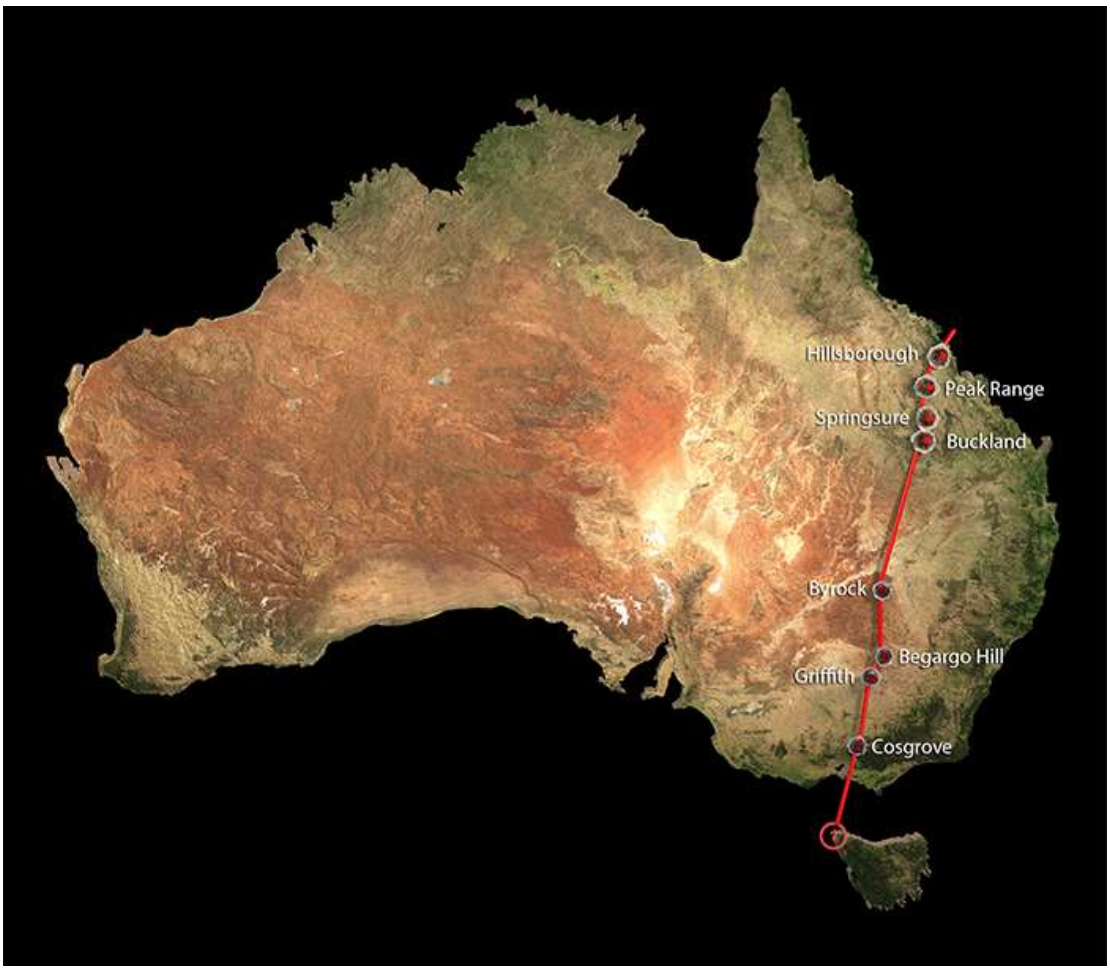
The dozens of individual Mastcam images combined into this panorama were taken on Aug. 27, 2015. Curiosity has driven about 103 yards (94 meters) in the subsequent two weeks, generally southward. Outcrops of the Stimson unit sandstone are still accessible to the rover, and researchers plan to use the rover to collect and analyze a drilled sample of Stimson unit sandstone this month.

Curiosity has been working on Mars since early August 2012. It reached the base of Mount Sharp last year after fruitfully investigating outcrops closer to its landing site and then trekking to the mountain. http://www.jpl.nasa.gov/news/news.php?feature=4716

World's longest continental volcanic chain, the Cosgrove hotspot track, discovered in Australia

ABC Science By Stuart Gary Updated 14 Sep 2015, 8:34pm

The ancient volcanic chain, reported in the journal Nature, runs from Cape Hillsborough on the central Queensland coast, south-west through central New South Wales to Cosgrove in Victoria.
"This volcanic chain was created over the past 33 million years, as Australia moved north-northeast over a mantle plume hotspot which we believe is now located in Bass Strait," said the study's lead author, Dr Rhodri Davies of the Australian National University.
By looking at this chain of volcanoes in Australia ... we will understand volcanism on other continents and through earlier periods in Earth's history which is still poorly understood.
Dr Rhodri Davies
"This track, which we've named the Cosgrove hotspot track [after an extinct Victorian volcano in the chain], is nearly three times as long as the famous Yellowstone hotspot tracks on the North American continent."
This kind of volcanic activity is surprising because it occurs away from tectonic plate boundaries where most volcanoes are found.

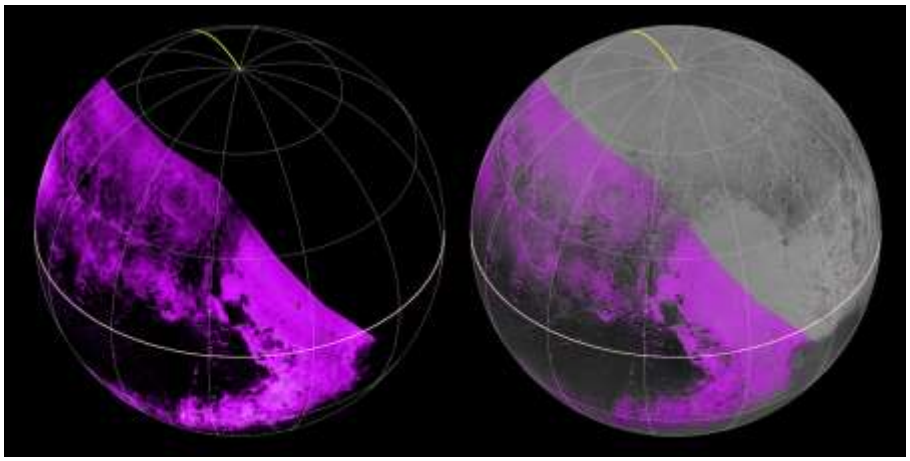


http://www.abc.net.au/news/2015-09-15/worlds-longest-continental-volcanic-chain-in-australia/6769360

IMAGES of PLUTO

In this extended color image of Pluto taken by NASA's New Horizons spacecraft, rounded and bizarrely textured mountains, informally named the Tartarus Dorsa, rise up along Pluto's day-night terminator and show intricate but puzzling patterns of blue-gray ridges and reddish material in between. This view, roughly 330 miles (530 kilometers) across, combines blue, red and infrared images taken by the Ralph/Multispectral Visual Imaging Camera (MVIC) on July 14, 2015, and resolves details and colors on scales as small as 0.8 miles (1.3 kilometers).

http://www.jpl.nasa.gov/spaceimages/details.php?id=PIA19957



The Ralph/LEISA infrared spectrometer on NASA's New Horizons spacecraft mapped compositions across Pluto's surface as it flew past the planet on July 14, 2015. On the left, a map of methane ice abundance shows striking regional differences, with stronger methane absorption indicated by the brighter purple colors, and lower abundances shown in black. Data have only been received so far for the left half of Pluto's disk. At right, the methane map is merged with higher-resolution images from the spacecraft's Long Range Reconnaissance Imager (LORRI).

http://www.jpl.nasa.gov/spaceimages/details.php?id=PIA19953 *It may look ordinary but with a surface of methane ice, its anything but ordinary. Ed.*

Searching for the Queen of Sheba

On view September 26 - January 3

Myth. Mystery Legend.

Shrouded in mystery, the Queen of Sheba has been passed down through the centuries in legend, with conflicting details of her tale found in the Bible, the Qur'an, and in the Ethiopian Holy Book*Kebra Nagast*. Rumored to be magnificently wealthy, beautiful and wise, the Queen of Sheba has inspired artists, mystics, poets, composers, and even modern film-makers since time immemorial. But who was she?
Discover the myth and mystery behind one of history's most elusive female figures in the world premiere of ***Searching for the Queen of Sheba***.
Included with Museum admission. Members always free.

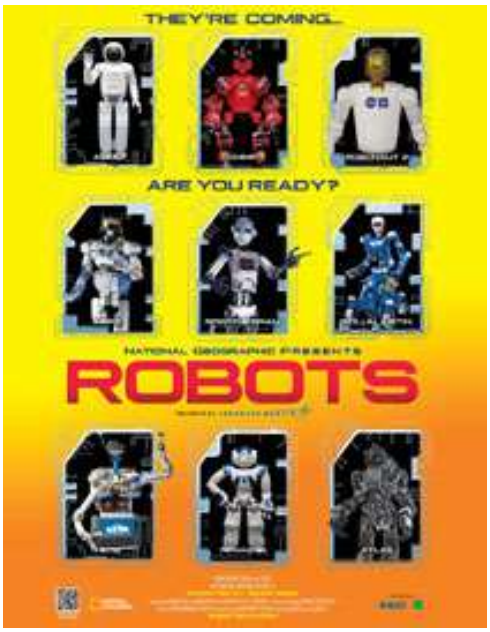
Searching for the Queen of Sheba is organized by Contemporanea Progetti and the Polo Museale del Lazio / Museo Nazionale d'Arte Orientale 'G. Tucci', Rome, Italy.
Sponsored locally and in part by The Rich Foundation, Inc.

FERNBANK MUSEUM of NATURAL HISTORY

Fernbank Museum of Natural History

(All programs require reservations, including free programs)

Now Showing in the Fernbank IMAX movie theater:



Jean-Michel Cousteau's Secret Ocean

See the hidden beauty of our oceans blossom before your eyes as thousands of colorful fish ripple over vibrant corals and stunning, 400-pound giant clams. Observe the genius of a camouflaged octopus hunting along a reef. Hover next to a basket star as it unfurls its tangled tendrils at nightfall. Take a closer look at our oceans and you'll find that the smallest living things can be a powerful inspiration for protecting the blue planet.
Learn more Now showing through October 1, 2015

Robots

Today's robots are nothing short of astonishing. Those coming in the not-too-distant future are simply revolutionary—and they are becoming a lot like us. Take a sneak peek into the future at what might be possible as scientists use innovative engineering and design to make cyber characters less "humanoid" and more human. Robot "actor" RoboThespian will take you on an amazing tour of what's going on in robotics labs around the world.
Learn more Now showing through October 29, 2015

AGS Officers

President: Nils Thompson
nils_t@bellsouth.net
Phone (770) 910-5645

Vice-President: Shannon George
Phone (717)-343-4452
shannonsgeorge@gmail.com

Secretary: Rob White
Phone (770) 891-0519
robeth@bellsouth.net

Treasurer: Lucy Mejia
Lucytaylor360@gmail.com

AGS 2015 Meeting Dates

Listed below are the planned meeting dates for 2015. Please mark your calendar and make plans to attend.

SEPTEMBER
AGS Meeting September 29
Craig Stichtenoth – Icebergs and Oil Seeps: A geological Field Trip to Western Greenland

OCTOBER
PG Study Group October 31
AGS Meeting October 27
Speaker: Tim Richards, Goulder Associates

NOVEMBER
PG Study Group November 21
AGS Meeting November 24

DECEMBER
No AGS meeting, enjoy the holidays

AGS Committees

AGS Publications: Open

Career Networking/Advertising: Todd Roach
Phone (770) 242-9040, Fax (770) 242-8388
tdr@piedmontdrilling.com

Continuing Education: Open

Fernbank Liaison: Kaden Borseth
Phone (404) 929-6342
Kaden.Borseth@FernbankMuseum.org

Field Trips: Open

Georgia PG Registration: Ken Simonton
Phone: 404-825-3439
kws876@gmail.com
John Salvino, P.G.
johnsalvino@bellsouth.net
Ginny Mauldin-Kenney,
ginny.mauldin@gmailcom

Teacher Grants: Bill Waggener
Phone (404)354-8752
waggener80@yahoo.com

Hospitality: Brian Steele
bsteele@gmail.com

Membership Burton Dixon
Dixonburton1@gmail.com

Social Media Coordinator: Carina O'Bara
carina_do@yahoo.com

Newsletter Editor
Ben Bentkowski
Phone (404) 562-8507, (770) 296-2529
BBENTKOW@gmail.com

Web Master: Ken Simonton
kws876@gmail.com

www.atlantageologicalsociety.org

ATLANTA GEOLOGICAL SOCIETY

www.atlantageologicalsociety.org

ANNUAL MEMBERSHIP FORM

Please print the required details and check the appropriate membership box.

DATE:_____

NAME:_____

ORGANIZATION:_____

TELEPHONE (1):_____ **TELEPHONE (2):**_____

EMAIL (1):_____ **EMAIL (2):**_____

STUDENT $10 ☐

PROFESSIONAL MEMBERSHIP $25 ☐

CORPORATE MEMBERSHIP $100 ☐
(Includes 4 professional members, please list names and emails below)

NAME: _____ **EMAIL:**_____

NAME: _____ **EMAIL:**_____

NAME: _____ **EMAIL:**_____

NAME: _____ **EMAIL:**_____

For further details, contact the AGS Treasurer: Lucy Mejia: telephone: 404-438-9584; Lucytaylor360@gmail.com

Please make checks payable to the "Atlanta Geological Society" and remit with the completed form to:
Atlanta Geological Society, Attn: Lucy Mejia
2143 Melante Drive, Atlanta, GA 30324

☐ **CASH**

☐ **CHECK (CHECK NUMBER: _____.)**