

Take Advantage of an Enjoyable Opportunity for Geoscience Education

Come visit Maryland -

From the Mountains....



...to the Sea!

The National Association of Geoscience Teachers

Eastern Section Spring Conference

June 8-11, 2017

Catonsville, MD

“Moving Across, Over, Down, and Through the Old Line State”

Dave Ludwikoski, NAGT-ES Vice President and Conference Host

Contact Dave Ludwikoski, at: dludwikoski@ccbcmd.edu.

As the home of NASA Goddard Space Flight Center, the Space Telescope Science Institute, the world famous Calvert Cliffs, and spanning 5 geographic provinces from the Appalachian Plateau to the Coastal Plain, Maryland is at the heart of an area rich in geologic history and science exploration. And sitting on the midpoint, or “Fall Line” of the area lies the Baltimore metropolitan area, whose human history has been shaped by its geology.

The Community College of Baltimore County (CCBC) is the largest community college in the state of Maryland, comprising five campuses and two extension centers, and serving over 60,000 credit

and non-credit students annually for 60 years. Our conference headquarters will be on the oldest and largest CCBC campus, in Catonsville, MD (800 S. Rolling Road - located on the southwest side of Baltimore, just outside the Baltimore Beltway) which has undergone some significant building construction and renovation in recent years. The newest building to be completed is our new Mathematics and Science Hall (MASH), which was dedicated in August, 2015.

Conference Events Overview

Our meeting will begin on Thursday evening at CCBC Mathematics and Science Hall, 800 S. Rolling Road, Catonsville, MD 21228, with light refreshments followed by a planetarium show. The Benjamin Banneker planetarium is one of the new highlights of the building, and houses a new Spitz SciDome XD digital projector.

Friday morning will involve presentations and round table discussions of ideas among participants that choose to share their “best practices” in teaching in the nearby lecture halls.

Friday afternoon will involve a local field trip to some nearby interesting geological sites, led by our own Martin Schmidt.

Friday evening, as always will be our infamous GeoAuction at the nearby Holiday Inn Express & Suites, our host hotel for the conference.

Saturday is field trip day. There are 2 choices, with details listed in the Agenda section.

Option #1: “**The Blue Ridge of Maryland and Nearby Areas.**” with Martin Schmidt.

Option #2: “**Goin’ South to Comb the Beaches and Cliffs of Calvert.**” with Dave Ludwikoski.

Saturday evening will involve our annual Eastern Section Awards Dinner banquet at CCBC with Lucy Edwards from USGS as our guest speaker.

Sunday morning is our annual Eastern Section business meeting, held at a nearby restaurant, where breakfast will be on your own.

Come to Maryland for Variety!

Maryland spans the 5 major provinces that characterize the central Appalachians. The Baltimore area includes the Coastal Plain and 5 different terranes of the Piedmont. CCBC is on a hill on Coastal Plain sediments (Patuxent Fm) but down the hill is surrounded by Piedmont amphibolites (Mt Washington Fm - and the building stones came from nearby quarries!) which were island arc intrusives - so it's right in the Fall Zone. Less than a mile SE are metamorphosed island arc volcanic rocks of the Chopawamsic Terrane, and 3 miles to the NW are the folded interfingerings of the Precambrian-based Baltimore Terrane. The Coastal Plain sediments on the western side of the Chesapeake Bay have been uplifted enough to create relief - and cliffs along the shore exposing their fossils - while the sediments east of the Bay show much less relief. As they say, "Mountains to the Sea" - there's lots to explore.

Other Nearby Attractions include:

Maryland Science Center – A neat museum with lots of hands-on displays, including a good dinosaur exhibit, planetarium, and observatory in down Baltimore. www.mdsci.org

National Aquarium – walk through exhibits on a variety of marine environments. <https://aqua.org/>

Benjamin Banneker Historical Park, Oella MD – Interesting museum and outdoor exhibits on the site of property owned by a free black scientist who published an almanac, helped to plot the boundaries of Washington, D.C., and was a friend of Thomas Jefferson.

<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/banneker/>

Soldiers Delight Natural Environmental Area - A serpentine area preserved for its special plants and its abandoned chromite mines, once the largest source of chromite in the world.

<http://dnr.maryland.gov/publiclands/Pages/central/soldiersdelight.aspx>.

Conference Agenda

Thursday, June 8:

3:00 pm – 5:30 pm Conference Registration at CCBC Mathematics and Science building, 800 S. Rolling Road, Catonsville, MD 21228. Dinner on your own this evening.

7:00 pm – 8:00 pm Light refreshments followed by host Dave Ludwikoski presenting a planetarium show on "The Great American Solar Eclipse: August 21, 2017", followed by the award-winning full dome movie "Solar Superstorms." The show will be at the Benjamin Banneker Planetarium, CCBC Mathematics and Science Hall.

Friday, June 9:

8:00 am – 9:00 am Conference check-in and registration at CCBC Mathematics and Science building. Breakfast available on your own or at the Holiday Inn.

9:00 am – 12:00 pm Presentations and Round Table Discussions: "Best Practices in Teaching."

12:00 pm – 1:00 pm Box lunches provided prior to afternoon field trip.

1:00 pm – 5:00 pm Local Geology Tour – **Vans leave from CCBC Lot 2 near Mathematics and Science Hall.** Our afternoon field trip will take us to nearby Patapsco Valley State Park, where the Patapsco River cuts an excellent cross-section through the Maryland Piedmont. We plan to visit three sites: First, a site with a base of Rodinia rock (the famous Baltimore Gneiss) and its overlay of now-metamorphosed sediments that illustrate the contrasting landforms created in adjacent rocks of varying resistance. Second, if arrangements with the park go as planned, walk across the fault between continental rocks and early Paleozoic island arc rocks, to see their significant differences. And third, take a scenic walk to see multiple pegmatite dikes and small waterfalls in those island arc rocks. Be

prepared for a little hiking as these aren't roadcut visits, but just hills, not mountains. In the park we'll be collecting photos, not rocks.

5:00 pm – 7:00 pm Dinner on your own.

7:00 pm – 9:30 pm Holiday Inn Express - Geo-auction, with desserts and other sweets.

Saturday, June 10:

8:30 am – 5:00 pm Field Trips – Box Lunches are provided! **Vans leave from CCBC Lot 2 near Mathematics and Science Hall.**

Option #1: “The Blue Ridge of Maryland and Nearby Areas.” with Martin Schmidt.

This trip visits the multiple ridges of the Maryland Blue Ridge, and even a bit into the Valley & Ridge. We'll start with views from Catoctin Mountain in the east and cross the valley in the center of the Blue Ridge province to see the (now-meta)basalt emplaced when Rodinia rifted apart. We hope to visit a small but well-decorated cave at the eastern edge of the Valley & Ridge. Then we'll head up to a fine viewpoint on the western side of the Blue Ridge which is South Mountain, at the first monument built to honor George Washington, now along the Appalachian Trail. We'll come down for a visit to get the lay of the land around Harpers Ferry, WV, and head back across the Blue Ridge to visit Sugarloaf Mountain, a scenic quartzite monadnock in the Piedmont. There may be other stops depending on time available. The trip involves some walking but nothing difficult; rock collecting is limited since we're often in parks.

Option #2: “Goin’ South to Comb the Beaches and Cliffs of Calvert.” with Dave Ludwikoski.

Special Guests: Stephen Godfrey, Curator of Paleontology, Calvert Marine Museum, Solomons, MD
Lucy Edwards, Research Geologist, USGS, Reston, VA

Tentative plans at the moment involve first traveling to the Calvert Marine Museum in Solomons, MD, where we will meet the staff and tour the museum, especially the fantastic exhibit on the marine life of the Miocene Epoch (including sharks). Then we will get an exclusive “behind the scenes” tour of the museum’s collections. Next, we will visit several sites along the bay and learn about the paleontological and stratigraphic importance of the units present, along with opportunities to collect. The sites we visit will be tide dependent, so water-proof boots or waders may be a good idea along with sample bags.

7:00 pm – 9:00 pm Eastern Section Awards Dinner Banquet in Atrium, Mathematics and Science Hall, CCBC.
Speaker: Lucy Edwards, United States Geological Survey Research Geologist, “Buried surprises: A paleontologist tells tales of the Chesapeake Bay impact crater.” Talk to be presented in MASH 032 (next to planetarium and adjacent to Atrium).

Sunday, June 11:

9:00 am – 11:00 am Eastern Section business meeting. Breakfast will be available on your own at the meeting which will be held at a restaurant near the hotel.

Hotel/Housing Information:

It is the responsibility of the conference attendees to arrange for their hotel rooms or other housing. Conference lodging is NOT included in your registration fees.

The Conference Hotel will be the Holiday Inn Express & Suites where a block of rooms have been reserved: **Holiday Inn Express & Suites: 5701 Baltimore National Pike, Catonsville, MD 21228;** this is about 10 minutes from the CCBC campus. **Phone: 443-251-2000.** This location has both single and double rooms reserved for the conference attendees. This hotel has been completely renovated recently and is an excellent deal for the price! **We need as many people as possible to reserve rooms here in order to get the group rate.** Please be sure to mention that you are in the National Association of Geoscience Teachers group. Single and double hotel rooms have been reserved at a cost of \$104 per night plus taxes and will be held only until May 15. **This date is firm from the hotel, so DON'T PROCRASTINATE!! After that, the room rate goes up to the regular rate! The rate includes breakfast.**

Another hotel in walking distance of the HIE includes a Quality Inn, 5801 Baltimore National Pike. Also a short drive away (one exit north) are a Hampton Inn, 1810 Belmont Avenue, and another Quality Inn, 1806 Belmont Avenue, as well as others.

On Friday evening the GeoAuction will be held at the Holiday Inn. On Saturday the banquet will be at CCBC MASH atrium and the field trips on Friday and Saturday will leave from nearby Lot 2 at CCBC.

Hotel Directions: Take I-695 to Exit 15A (US 40 East toward Baltimore) and stay in the right lane. The hotel is on the right at the southwest corner of Ingleside Road. If you pass a Walgreens and a Kentucky Fried Chicken, you've gone too far!

Directions to CCBC from the hotel: Turn right out of hotel parking lot onto Ingleside. Follow Ingleside approximately 2 miles, crossing under I-695, as well crossing as Edmondson and Frederick roads. At Frederick Road, Ingleside becomes Bloomsbury Avenue. **(Lots of good restaurants here!)** Go straight. After approximately another mile, Bloomsbury dead ends into S. Rolling Road at Catonsville High School. Turn left, and then in about .25 mi turn right at the campus entrance (Campus Drive – look for the electronic sign). **Once on campus:** Go down and then up to the hill and bear right at the fork. The MASH building is the 3rd building on the left across from the Center For The Arts building. Park either in Lot 2 (on left just before MASH building) or in Lot 3 (behind Arts building). The Banneker planetarium is the curved part of the building on the right as you face the building. You have arrived!

Directions to CCBC from I-695: Use Exit 12B from I-695 (Wilkins Avenue West). Follow Wilkins Avenue west about .4 miles and bear right onto Valley Road as you approach its traffic light. Follow Valley Road (narrow but scenic) through one stop sign, then, at the first traffic light (which is Rolling Road), Valley Road becomes Campus Drive. Continue straight across Rolling Road, enter the campus, and follow the on-campus directions above.

Campus Map is available at this link:

<http://www.ccbcmd.edu/~media/CCBC/About%20CCBC/CCBC%20Locations/PDFs/Full_Size_map_catonsville.ashx?la=en> or go to <<http://www.ccbcmd.edu/>> and find the map under the Campus Life & Activities tab.

Registration Form

National Association of Geoscience Teachers Eastern Section Conference and Field Trips

June 8-11, 2017, Catonsville, MD

Each participant must submit a registration form. Lodging accommodations are the responsibility of the registrant. Pre-registration for the conference deadline and the **firm** hotel cut-off date is **May 15, 2017**.

Registration questions? Please contact Dave at dludwikoski@cbbcmd.edu.

Please fill in the form below and indicate your registration preferences. **Please register early!**

Make a check for the total registration fee payable to **David J. Ludwikoski** and send it along with this form to: David J. Ludwikoski, 1020 Marksworth Road, Catonsville, MD 21228.

OR Register Online at: <https://nagt2017easternconference.eventbrite.com>

Name _____

Affiliation: _____

E-mail: _____

Mailing Address: _____

Cell phone: _____ Home phone: _____

OESTA Award Winners from Spring 2016 meeting attend Free! Please indicate this on your registration information.

Please circle the appropriate selection(s) below:

Full Conference Registration (includes Saturday field trip but not Saturday Banquet)

NAGT member	\$60
(after May 15, 2017)	\$70
Spouse/Significant Other	\$40
Student	\$40
Non-member	\$70
(after May 15, 2017)	\$85

Check if you are a 2016 OEST Awardee: _____

Friday- Only Registration

NAGT member	\$45
Student	\$35
Non-member	\$50

Saturday- Only Registration

NAGT member	\$45
Student	\$35
Non-member	\$50

Saturday Awards Banquet and

Keynote Speaker - all \$30

(no charge for 2016 OESTA winners & one guest)

Add Field Trip Fee (Please circle) \$6 or \$20

Total Fee Enclosed: _____

Sunday Business meeting held at nearby restaurant. Breakfast available.

Please circle: I will attend business meeting yes no

Please indicate any dietary restrictions here: _____

Saturday Field Trip Choice (choose one):

_____ Blue Ridge with Martin Schmidt
(Add \$20 admission fee to registration)

_____ Calvert Cliffs & Marine Museum tour
(Add \$6 admission fee to registration)

Friday Box Lunch Sandwich (choose one):

_____ Roast Beef and Cheddar on Ciabatta

_____ Grilled Chicken Breast on Focaccia

_____ Roasted Veggie on Multigrain

Saturday Box Lunch Sandwich (choose one):

_____ Spicy Italian Baguette

_____ Turkey and Sharp Cheddar

_____ Hummus, Avocado & Roasted Veggie Wrap



PRESENTATION PROPOSAL FORM
NAGT-Eastern Section 2017 Annual Meeting

Submission Deadline: May 15, 2017

Presentations will be scheduled for **45-minute blocks**. Double sessions will be accommodated only as space and time permits. As many presentations as possible will be accommodated.

Return completed form to: David J. Ludwikoski, 1020 Marksworth Road, Catonsville, MD 21228

You may also submit proposals electronically at dludwikoski@cbbcmd.edu.

Poster displays are also welcome and should use this same proposal form.

Name: _____

Email: _____

Affiliation: _____

Address: _____

Phone: _____ Fax: _____

Presentation Title: _____

Description (max. 100 words): _____

Presentation equipment needed: (all rooms have projectors, computer, laptop drop and sound)

Other facilities needed? (subject to availability) _____

Check one: Poster presentation _____ Oral Presentation _____