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1 March 2023-7:00 PM - In-Person & Virtual Options Available

Jesse Lubbers (National Grid) will present:

Horizontal Directional Drills - Identifying & Mitigating Risks

The use of Horizontal Directional Drills (HDDs) has steadily risen across several industries over the past decade. Each trenchless crossing project presents numerous risks that need to be overcome for a successful drill. With proper planning and design key risks can be avoided or the impacts of those risks, if they come to fruition, can be minimized. One major area of risk that have proven to be the largest impact on the overall success of a project is the understanding of the geology being crossed. This presentation will provide an overview of HDDs and Risk Management, as well as, provide case studies of projects with challenging geology.



An application is pending with NYSCPG for this presentation to count for 1 NY PDH towards your NY-PG continuing education requirements

BOTH IN-PERSON and VIRTUAL options are available!

Virtual registrants will receive Zoom login instructions the morning of 3/1/23 and we look forward to seeing inperson registrants at the Spaghetti Warehouse!

Location: Spaghetti Warehouse, 689 North Clinton Street, Syracuse, New York or ZOOM **Time:** 5:00 – 6:00p.m. social hour: 6:00-7:00 p.m. dinner; 7:00 p.m. technical presentation **RSVP:** https://cnyapg.org/ or Bonnie (Parratt Wolff) bolney@pwinc.com or (315) 437-1429

CNYAPG Newsletter

The CNYAPG Newsletter is a monthly publication of the Central New York Association of Professional Geologists dedicated to sharing upcoming events, delivering regular articles of interest and providing the Membership a forum for discussion.

The newsletter is prepared by the Officers and Board of Directors of CNYAPG (listed below).

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President's Message-March 2023

Is it just me, or does it seem like this year is flying by? It is March already. We are three months into 2023 and it feels (At least to me) that New Year's was just a few weeks ago. Not to jinx us, because it is not over yet, but we have had a very mild winter. However, the temperature swings, in February, here in central New York, have been more like Mother Nature has forgotten normal daily winter temperatures, and instead, she has been trying to pick winning lottery numbers. However, have faith; spring is in a few weeks. Ok, let's get started, we have a lot of important things to cover in this month's letter, so get comfortable.

First, I want to thank Helbert Garcia-Delgado for presenting his very interesting research project entitled "Impact of climate and tectonics on erosion and sedimentation rates in low latitude active orogens: a case study in the Colombian Andes." The event was well attended and very thought-provoking. Thanks again, Helbert. For our March 1st presentation, CNYAPG is thrilled to be hosting Jesse Lubbers from National Grid. Jesse's presentation is entitled: Horizontal Directional Drills-Identifying and Mitigating Risks. We are all longing forward to hearing his talk. As has become our practice, we will be hosting our talks both in-person (at Spaghetti Warehouse) and virtual (via Zoom). I hope to see all of you at the meeting, and remember you can register online at: www.cnyapg.org.

Next, after reviewing many very good, well-written student research grant submittals, and a special vote by the CNYAPG board of directors, I am pleased to announce this year CNYAPG will have two grant recipients. These two recipients will not be sharing a single \$1,000 prize, but because the two best proposals were of equal quality, and one student only asked for only \$500, the grant committee requested a board vote to issue two awards for the full amounts to each student. So, without further ado, I want to congratulate Mr. Benjamín Guerrero Lewin for his research project entitled: The influence of climate on hillslope processes using 14C-10Be cosmogenic nuclides – the case of Central Chile (30-36°S), and Mr. John Mark Brigham for his research project entitled: Does the tectonic environment of serpentinization influence arsenic concentrations in serpentinites? A case study using serpentinites from the northern Appalachian Mountains. Benjamín will receive his requested \$1,000 in funding and John will receive his requested \$500 in funding. Both Benjamín and John are Syracuse University students, and you can see and read more about them in this newsletter. Congratulations again to both Benjamín and John, and their advisors, excellent work. To all the other students who submitted research proposals, well done and please keep up the good work, and don't forget you can submit a proposal again next year.

In other student-related news, on Saturday, April 15th, Syracuse University will be hosting the Central New York Earth Sciences Student Symposium and Job fair. It will take place at Heroy Hall on the Syracuse University campus. CNYAPG will be again offering a \$200 prize for the best student poster presentation during the symposium. Registration for the event will begin at 9am and the job fair portion of this event will tentatively begin at 10:30 and end at 2:30, with a more exact schedule to follow. Lunch will be provided for all attendees, including company representatives. Company representatives

are also invited to attend the presentations given by researchers before and after the career fair portion. If you have further questions or would like a table to support the job fair portion, please contact Sam Nesheim at Syracuse University or email me and I can forward it along to Sam. Maybe there will even be a lava pour, like last year.

Also, things are moving along very well for CNYAPG's planned Geology Field Days event for students and professionals. It is now planned for early to late September and we have several environmental and geotechnical-related consulting firm volunteers to demonstrate field equipment and techniques. Plans are also moving along with offering PDHs credits for presentation at the field days event for those with PG licenses. Please continue to stay tuned, and if you want to get involved, contact me or any of the others on the CNYAPG board of directors.

During the month of April, CNYAPG will be holding elections for the positions on the board of directors. Several people have expressed an interest in being on the board, but more are needed! Remember, the CNYAPG board members volunteer their time and energy to see that CNYAPG continues to be a valuable resource for our professional geoscience community. Active Members and Honorary Life Members of CNYAPG in good standing are eligible to vote. The ballot will also provide an opportunity to write-in candidates for any vacant positions. If you want to get involved, contact me or any of the others on the CNYAPG board of directors before the end of March.

As you know, the area of Turkey and northern Syria experienced a 7.8 magnitude earthquake on February 6th. The main event was followed by more than 2,100 aftershocks. Sadly, the death toll as of February 19th (the time of this writing) was more than 47,000 people. This event is the fifth deadliest earthquake of the 21st century, only surpassed in fatalities by Indonesia in 2004, Kashmir-Pakistan in 2005, Sichuan-China in 2008, and Haiti in 2010. Our hearts go out to the survivors. The earthquake occurred along a section of the Anatolian Transform Fault boundary. Segments of the North Anatolian Fault moved over three meters and segments of the East Anatolian fault moved over nine meters. This fault system is part of a triple junction where the Arabian, Anatolia (the microplate on which most of Turkey sits), and the African tectonic plates meet and interact.

Most likely not related to the Turkey-Syria earthquake, but there was another earthquake event early in the morning of February 6th, one much closer to home. The Buffalo area was struck by a magnitude 3.8 earthquake the fourth strongest earthquake on record for Western New York. The strongest event ever recorded in western New York was in 1929. It was the Corfu, New York event in Genesee County, which had a magnitude of 4.8. Earthquakes in New York State are not uncommon, and western New York has a fault system known as the Clarendon-Linden fault system. This is a major series of faults that extends through Genesee, Allegany, Orleans, and Wyoming counties, and is responsible for much of the seismic activity in the region. According to the USGS, the epicenter of the Buffalo area quake was located one-kilometer northeast of the town of West Seneca with a hypocenter of 5.7 kilometers beneath the surface.

As I have done in past messages, I encourage all of you to stay involved in the Geosciences Community. When possible, participate in local student sciThe CNYAPG was founded in 1993 to strengthen and advance the geological sciences. CNYAPG conducts regular meetings on the first Wednesday of each month from September to May. Meetings feature dinner and distinguished speakers whose presentations invite comment and discussion.



ence events (online or in-person) and continue to engage our community at any level you are comfortable with. CNYAPG is still looking for interesting photos of our local geology, geological-related puzzles, and brain teasers for our newsletter.

Lastly, the hallmark of my President's letters, I leave you with a quote: "Science is part of the reality of living; it is the what, the how, and the why of everything in our experience." – Rachel Carson.

Sincerely,

Calvin K. Prothro; P.G., CPG President, CNYAPG



CNYAPG SPRING 2023 ELECTIONS ARE FAST APPROACHING (APRIL)!

CNYAPG IS IN NEED OF CANDIDIATES FOR THE FOLLOWING POSITIONS:

- 1.) SECRETARY
- 2.) DIRECTOR (THREE OF THESE POSITIONS WILL BE ON THE BALLOT)

Minimal time commitment required—one virtual board meeting per month!

Please email Will Hackett—WHackett@PWInc.com with questions or interest

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2023 Student Grant Recipients Benjamín Guerrero Lewin & John Mark Brigham



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- Statistical Analysis





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Upcoming Events

March 1 2023 7:00 PM- CNYAPG- Jesse Lubbers- National Grid—Horizontal Directional Drills - Identifying & Mitigating Risks—Dinner Meeting—www.cnyapg.org

April 5 2023 7:00 PM- CNYAPG- Jean Patota—Your PG License and Tips to Keep It— Dinner Meeting—www.cnyapg.org

May 3 2023 7:00 PM- CNYAPG- Dr. David Finkelstein- Hobert & William Smith —Dinner Meeting—www.cnyapg.org

September 2023 TBD- CNYAPG- Field Days!

November 13-15 2023 7:00 PM- NYSCPG- Geology Days— https://nyscpg.wildapricot.org/



Butte- Miles City, Montana *Photo courtesy of Lee Penrod*

CNYAPG Governance

Membership Renewal

CNYAPG's membership period follows the CNYAPG meeting year from September through August. Renewals are due in September. To renew or become a new member, simply complete the membership form, available on our website at www.cnyapg.org. Membership is only \$25 per year and all money received is used in support of our organization.

Join CNYAPG at our social networking groups on Facehook and LinkedIn. These sites (always under development) will provide online forums for discussion, as well as another way to inform our members and networking opportunities. For more information about our social media sites e-mail us at admin@cnyapg.org.

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