

**CNYAPG
December 2022**



**Central New York Association
of Professional Geologists**

Dr. Tao Wen
(Syracuse University)

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7 December 2022- 6:00 PM Dinner, 7:00 PM talk
Dr. Tao Wen (Syracuse University) will present:

Using Machine Learning Approaches to Address Carbon Cycling-Related Questions

Quantification of carbon fluxes from the weathering of various rocks in addition to other sources in the land water system is critical to understand the global carbon cycle and to tackle the inevitable climate change. Traditional modeling approaches are limited with respect to reproducing empirical estimates. Characterization of coupled water and carbon cycling is utterly complicated due to their heterogeneous and anisotropic properties, especially when anthropogenic activities are also involved. In the big data era, the improved computational capability along with the new assemblage of varying types of geochemical, geophysical, and biological datasets provide us with new tools to probe carbon cycling-related questions, particularly those pertaining to the assessment of anthropogenic impacts. In this presentation, we will demonstrate a few examples of our recent research efforts in which we apply various data-driven approaches to resolve a few critical carbon cycling-related science questions on multiple spatiotemporal scales. In addition, we will also share our thoughts on what we can benefit from and contribute to the emerging big data evolution across the Earth science fields, particularly as geochemists.

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 12/7/22 and we look forward to seeing in-person 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

Next dinner meeting - January 2023

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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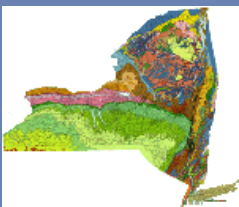
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President's Message— December 2022

The last month of this strange and eventful year is upon us. Here in central New York, we were blessed with wonderful weather for our Thanksgiving Day, but we all know it was just a teaser for next spring. We had another great presentation month, thanks to Dr. David Barclay of SUNY Cortland. His presentation “Megathrusts and tree-rings: High precision dating of the penultimate great earth in southern Alaska” was highly informative, and I personally learnt something new about Dendrochronology and carbon dating. Thanks again Dave.

I am pleased to announce that on the 7th of this month, CNYAPG will be hosting Dr. Tao Wen of Syracuse University. He will be presenting a presentation entitled: “Using Machine Learning Approaches to Address Carbon Cycling-Related Questions.” This is very timely given that we just wrapped up the U.N.’s COP27 talks in Sharm El Sheikh, Egypt. We are all looking forward to learning about this novel approach to handling Carbon related questions.

On November 11th I was invited to give a presentation to the Wayne County Gem and Mineral Club in Newark, New York. My presentation was one I had previously given to the Syracuse Gem and Mineral Society and is based on a series of lectures I used to give in my former Solar System course. The talk was entitled: “The Rocks and Minerals of Mars”. In spite of it being a monsoon rain event that evening, the talk was very well attended. I just want to acknowledge The Wayne County Gem and Mineral Club for inviting me and giving me such a warm welcome, Thank You again.

As noted last month, CNYAPG has contacted twenty-four public and private colleges and universities in Central New York to make them aware of our 2022-2023 Earth Science Student Research Grant. We have begun receiving student proposals and the review committee is looking forward to discussing the merits of each proposal. Please remember all submissions are due by December 9th. A reminder email was sent the weekend before the Thanksgiving holiday. If you are a college educator, please check your email inbox including your junk mail. I would also like to remind you that the CNYAPG Earth Science student Research Grants will directly support student research and help disseminate that research through conference attendance. The winning student (s) will be awarded grants totaling \$1000 in combined value. If any of you would like to make a monetary contribution to the Student Research Grant fund, it would be most welcome, and CNYAPG would again like to thank all our corporate and individual supporters.

This is normally the time of year I would be taking students on field trips to some local state park. I will miss those student interactions, but I can still go out in the field for myself. It may be a little cold and a little wet, but all of you who are able should get out and visit the natural world. There are no leaves on the trees to obscure outcrops and with a good pair of binoculars, entire geologic units are visible in hillsides, not to mention the host of wintering wildlife. If braving the elements this time of year is not your cup of tea, try engaging your fellow geoscientists in other ways. You can post geologically related items to our CNYAPG’s Facebook, LinkedIn, or Twitter pages (just search for CNYAPG and Yes, I know.... social media ☐) and start a friendly, Geoscience related discussion.

President's Message (Continued...)

Lastly, as I have said before, doing this time of year when we think of peace on earth and good will towards all, try to remember our fellow Americans who may not be doing so well this Holiday season. Try to give a little smile to a stranger, or a "Thank You" to a store clerk. Wave and shout "Happy Holidays!" to a group of strangers. As of the time of this writing, there are currently thirty-three countries engaged in some type of warfare. From outright modern warfare as between Russia and Ukraine to Civil Wars as in Myanmar to Terrorist Insurgency as in Algeria to Drug wars like what is taking place in Mexico. The results of the last election showed us just how divided our own nation is. As Geoscientists (Geo from the Greek meaning Earth, land, country) who work to understand and protect the planet, I think we can all spare one extra "Thank You," one extra "Happy Holidays," one extra smile or wave to bring a fraction of more cheer to the world.

Please have a safe and happy holiday season, and I look forward to seeing you all on the 7th for Dr. Wen's talk. As is my custom, a quote. "Do your little bit of good where you are; it's those little bits of good put together that overwhelm the world." – Desmond Tutu (1931-2021, Archbishop-Cape Town, South Africa, Nobel Peace Prize Winner-1984).

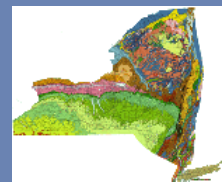
Season's Greetings!

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



Pyrite Concretion– Butler Island, Lake Champlain, Vermont
(photo Courtesy of Will Hackett)

The CNYAPG was founded in 1993 to strengthen and advance the geological sciences. CNYAPG conducts regular meetings on the third Wednesday of each month from September to May. Meetings feature dinner and distinguished speakers whose presentations invite comment and discussion.



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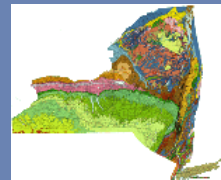
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www.twitter.com/cnyapg

Upcoming Events

December 7 2022 7:00 PM– CNYAPG– Dr. Tao Wen– Syracuse University —Dinner Meeting

www.cnyapg.org

January 4 2023 7:00 PM– CNYAPG– TBD– TBD —Dinner Meeting

www.cnyapg.org

February 1 2023 7:00 PM– CNYAPG– Helbert Garcia– Syracuse University —Dinner Meeting

www.cnyapg.org

March 1 2023 7:00 PM– CNYAPG– TBD– TBD —Dinner Meeting

www.cnyapg.org

April 5 2023 7:00 PM– CNYAPG– TBD– TBD —Dinner Meeting

www.cnyapg.org

May 3 2023 7:00 PM– CNYAPG– Dr. David Finkelstein– Hobert & William Smith —Dinner Meeting

www.cnyapg.org

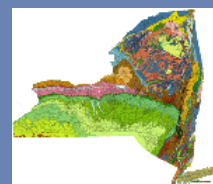
CNYAPG Governance

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 [Facebook 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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