

## Hudson - Mohawk Professional Geologists Association

## NOVEMBER MEETING

www.hmpga.net





A Multidisciplinary Approach to Deciphering the Tectonic History of the Northern Appalachian Orogen in Maine



Speaker: Dr. Allan Ludman, Professor Emeritus

Queens College of the City University of New York

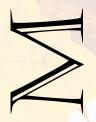
## This course is pending approval for 1 PDH+

<u>Abstract:</u> Many textbooks still describe a Northern Appalachian evolution featuring three orogenic events. Half a century of mapping reveals a much more complex history comprising of six orogenies, as island arcs formed in two ancient oceans, back-arc basins opened and closed, and the oceans disappeared as their oceanic crusts were subducted: the Cambro-Ordovician Penobscot; Mid to Late Ordovician Taconian; Late Silurian Salinic; Early Devonian Acadian, mid-Devonian Neoacadian; and Permian Alleghanian events.

Geologic mapping itself has changed - it is more efficient and more accurate now than when I started, and several different kinds of data come with me into the









<u>Abstract:</u> (cont'd) field. I no longer carry paper maps, photographs, or a GPS unit, and can automatically send outcrop locations and notes to the Maine Geological Survey. I still write field notes in a notebook (but don't have to), wear field boots, and carry a geologic hammer.

Bedrock geologic mapping is challenging at best, but my field areas have not been the "best". They have always had less than 1% outcrop, so a multidisciplinary approach is needed to squeeze every bit of information out of the rocks. This talk will cover several such approaches: igneous geochemistry to interpret the tectonic setting of volcanic and plutonic rocks; U/Pb zircon geochronology to date igneous rocks and correlate volcanic units; detrital zircon ages to constrain the ages of clastic sedimentary rocks and identify their provenance; micropaleontology for rocks that refuse to contain visible fossils (i.e. nearly all of them); and geophysical techniques including magnetic and gravity surveys and seismic reflection transects.



**About the Presenter:** Dr. Allan Ludman is a Brooklynite, educated in New York City K-16 public schools including his B.S. in geology at Brooklyn College. He earned his MA at Indiana University and his PhD at the University of Pennsylvania, and has just retired after 53 years in higher education - the last 47 as Professor of Earth and Environmental Sciences at Queens College (CUNY).

Dr. Ludman has studied the evolution of the Northern Appalachian orogen for 57 years, mostly in Maine and the Canadian Maritime Provinces. His research in several geoscience disciplines has appeared in more than 60 professional journals.

Dr. Ludman was elected as a Fellow of the Geological Society of America, the Geological Association of Canada, and the Atlantic Geoscience Society. He served as Vice-Chairman and Chairman of the Northeastern section of the Geological Society of America, and for several years was a discussant for more than a decade at the Society's round table advising session for geology graduates seeking their first academic position.

## Reservations are required by Monday

## November 14, 2022

Whether attending the dinner or only the in-person presentation Register on-line at <a href="https://www.hmpga.net">www.hmpga.net</a>

Questions? Call or email Jonathan Dippert at (518) 786-7563 • j.dippert@ctmale.com

Cost: \$10.00 for student members\*
\$25.00 for dormant geologists
\$30.00 for members
\$35.00 for non-members
In-person program only: Free

\*PDH certificate available for: \$5.00 (member w/ dinner) • \$10.00 (member for program only) • \$20 (non-member)

\* Student dinner sponsorship available for qualifying students - contact Jonathan Dippert • j.dippert@ctmale.com

Location: Century House Time: Social Hour 5:00pm 997 New Loudon Road Dinner 6:00pm Latham, NY 12110 Program 7:00pm

<u>Sponsorship is available for this meeting!</u> <u>Dinner sponsors</u> receive free dinner, a display table set up for the social hour and a 5-minute presentation to the dinner audience, prior to the presentation. Please contact Jonathan Dippert at <u>j.dippert@ctmale.com</u> for more information.

## President's Message

#### Dear HMPGA Members,

Thank you to all the members that made the trip up the Northway to attend our October 2022 meeting, held in conjunction with the Geology Days Conference presented by the New York State Council of Professional Geologists. It was a wonderful event and we would like to thank the New York State Council of Professional Geologists for inviting us to be a part of it.

We have a lot of great upcoming speakers and events, so please, if you haven't already done so, remember to renew your membership for the 2022-2023 season. Corporate memberships are also available and I encourage interested parties to visit our Membership Information page at <a href="https://www.hmpga.net">www.hmpga.net</a>. A reminder that events like our Annual Holiday Meeting in December are free to current members.

Our November meeting will include a presentation by Dr. Allan Ludman, Professor Emeritus, Queens College CUNY. See the meeting flyer for additional information and we look forward to seeing you then.

Please remember there are always opportunities with HMPGA for members to be involved with the Board of Directors and assist with other support. I encourage interested persons to contact myself or other board members.

Thank you,

Brian Taylor, P.G.

President 2022-2023

## **Volunteer Opportunities**

Your opportunities here.

#### **EVENTS**

November HMPGA Meeting 11/16.







#### BOARD MEMBERS

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We assist with evaluation techniques focused on the chemical properties of water and its interactions with rock, soil, or sediment as a compliment to standard hydrogeology techniques, which typically focus on the physical properties and available quantity of water (i.e., flow paths/flow rates)

- Water Types/Hydrochemical Facies Evaluation
- Graphical Data Analysis/Mapping
- Geochemical Calculations/Modeling
- Statistical Analysis

NOVEMER 2022

## NOVEMBER'S GEO-CRYPTOQUOTE

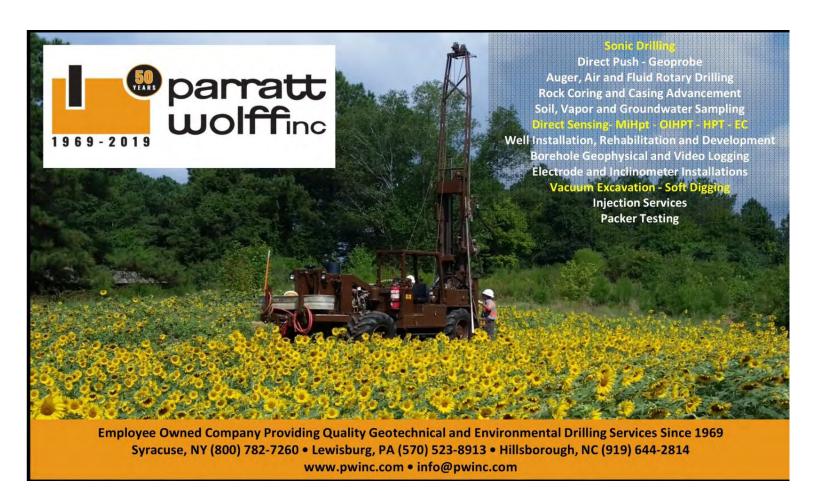
**CLUES:** F = V; U = X; and I = B

(Note: Puzzle is a quotation related to geology. Each letter of the quotation is substituted by another letter.)

"ZO MWFO WA Q JYBWOLE OUSVWJWLOME POHOAPOAL VHYA
JBWOABO QAP LOBKAYMYTE, WA ZKWBK KQNPME QNEYAO CAYZJ
QNELKWAT QIYVL JBWOABO QAP LOBKAYMYTE" - BQNL JQTQA

OCTOBER'S GEO-CRYPTOCIPHER SOLUTION

"I SUGGEST THAT THE BEST GEOLOGIST IS HE WHO HAS SEEN THE MOST ROCKS" – HERBERT HAROLD READ



NOVEMER 2022

#### JOB POSTINGS

**Title:** Environmental Geologist / Hydrogeologist

**Company**: C.T. Male Associates

Location: Latham or Poughkeepsie, NY

Brief Description: C.T. Male Associates, a multi-discipline consulting firm in the Northeast, is seeking a driven and hands-on Environmental Geologist / Hydrogeologist to join our Latham or Poughkeepsie, NY team. This full-time position offers a complete benefits package (including comprehensive health insurance, 401(k) plan, bonus program, educational assistance/professional development programs, company-paid life insurance, and much more), and a variety of exciting projects across disciplines with technical and managerial growth opportunities that provide the experience necessary to obtain/maintain your professional registration. The successful candidate has strong technical abilities, and excellent organizational and communication skills.

Links: Latham - https://www.applicantpro.com/openings/ctmale/jobs/2636228-40142

Poughkeepsie - <a href="https://www.applicantpro.com/openings/ctmale/jobs/2637929-40142">https://www.applicantpro.com/openings/ctmale/jobs/2637929-40142</a>

**Title:** Geologist / Hydrogeologist

**Company**: Alpha Geoscience

Location: Clifton Park, NY

**Brief Description**: Alpha Geoscience, a geological consulting firm in upstate New York, is seeking a geologist with 2-5 years of experience, with a Bachelor of Science Degree, or higher, in Geology. Experience or educational background in stratigraphy, structural geology, hydrogeology, petrology, and geological field methods is required. A detail-oriented individual with interest or experience in rock core logging and familiarity with drilling oversight is preferred. Candidate is expected to conduct field and office work related to mining, water supply, and environmental projects. Travel is required, as needed, to support project assignments. This is a full-time position and includes a complete benefits package including health insurance, 401(k) plan, and bonus program.

**Link to Posting**: <a href="https://www.alphageoscience.com/about-us/career-opportunities/">https://www.alphageoscience.com/about-us/career-opportunities/</a>

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### HMPGA PROGRAM DIRECTORS

Being active in HMPGA is a fully volunteer activity that often demands a great deal of attention.

The following members chair this year's committees and we thank them:

Webmaster Evan Rafferty <u>erafferty@alphageoscience.com</u>

Newsletter Josh Gowan

jgowan@alphageoscience.com

Educational Outreach Joe Osso

Joseph.Osso@nyserda.ny.gov

Programs Jonathan Dippert

J.Dippert@ctmale.com

Membership Vacant

# HMPGA CALENDAR

DATE	SPEAKER	TOPIC  Deciphering the Tectonic History of the Northern Appalachian Orogen in Maine  Holiday Party  TBA	
November 16, 2022	Dr. Allan Ludman		
December 21, 2022	NA		
January 18, 2023	TBA		

#### OTHER EVENTS:

Watch our website (http://www.hmpga.wildapricot.org/), Facebook, and LinkedIn for announcements of future events!



- Mine Planning
- Reserves Analysis & Stockpile Inventories
  - Stormwater Design, Permitting, & Compliance
    - Hydrogeologic Impact Studies
  - Petroleum & Chemical Bulk Storage
     Permitting, Compliance, & SPCC Plans
    - Air Permitting & Compliance
    - Energy/Sustainability Solutions



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Preferred Environmental Services	Jill Haimson	516.546.1100
PVE Sheffler	Chris Brown	845.454.2544
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Eastern New York (ENY) Chapter of the Air & Waste Management Association (MASS-A&WMA). They encompass the greater Capital District and Hudson Valley region of eastern New York State. A professional non-for-profit association of engineers and scientists working in the environmental field, with a particular focus on issues related to air and waste. www.awmanenychapter.wildMAYicot.org



The Geological Society of America (GSA) strives to be a leader in advancing the geosciences, while enhancing the professional growth of its members, and promoting the geosciences in the service of humankind. <a href="https://www.geosociety.org">www.geosociety.org</a>



The New York State Museum is a major research and educational institution. It is dedicated to promoting inquiry and advancing knowledge in the fields of geology, biology, anthropology, and history, through the investigation of material evidence germane to New York State's past, present and future. www.nysm.nysed.gov



New York State Council of Professional Geologists (NYSCPG) strives to strengthen and advance the geologic sciences as a profession, promote the protection of public health and welfare and the environment through the professional practice of geologic sciences, and create high standards of ethical conduct among its members and within the profession of geology, as well as the legal standing of geologists and their ability to practice geology in New York State by promoting the licensing of geologists in New York State through statutory regulation. www.nyscpg.org



The Capital District Environmental Breakfast Club is an informal group of environmental professionals that meets monthly to discuss current environmental issues. Each meeting features a speaker on a topic of interest, a regulatory update, and an open forum. Meetings are held on the first Friday of each month except July and August. The Environmental Breakfast Club meets at the Holiday Inn Turf on Wolf Road in Colonie, New York. Meetings start at 7:30 am. The cost is \$15 per person, which includes a full breakfast buffet. www.youngsommer.com



Buffalo Association of Professional Geologists (BAPG) conducts regular membership meetings on the third Wednesday of the month, January through June and September through November. Meetings feature distinguished speakers and interesting topics. Field trips and technical seminars sponsored by the BAPG encourage the exchange of scholarship and expertise. www.bapg.org



Central NY Association of Professional Geologists (CNYAPG) conducts regular meetings on the second Thursday of each month, unless otherwise posted, from September to May. Meetings feature dinner and distinguished speakers whose presentations invite comment and discussion. www.cnyapg.org



Long Island Association of Professional Geologists (LIAPG) is a not-for-profit professional organization dedicated to the professional and business needs of geologists located in the Long Island / Metro New York area. www.lipg.org



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