



**“Karst hydrology – Water supply and contaminant transport in carbonate aquifers of New York”
Presented by Dr. Arthur Palmer**

This slide-illustrated talk will consider the unique characteristics of the major carbonate aquifers of New York State. These carbonate aquifers underlie unusual topographical features such as sinkholes, sinking streams and caves. These surficial features and the associated underground drainage below are collectively described by the geologic term “karst”. In New York State, continental glaciation and the local stratigraphic and structural conditions have produced unusual karst phenomena that affect the quality and quantity of groundwater. November’s program will focus not only on surface aspects (sinkholes, sinking streams, springs, etc.) but also on the nature of underground conduits. The origin of the conduits and ways of predicting their distribution and behavior will also be discussed.

About the speaker: Arthur N. Palmer teaches hydrology, geochemistry and geophysics at SUNY Oneonta and is a coordinator of the Water Resources program at that school. He is a SUNY Distinguished Teaching Professor and recipient of the SUNY Chancellor’s Award for Research. His specialty is the origin, geology and geochemistry of limestone caves, and he has received the Geological Society of America’s Kirk Bryan Award for research in that field.

His statistical models for groundwater flow in carbonate rocks have been adopted by the US EPA as guidelines for water managers. His wife Peggy is also a geologist and has contributed a great deal to these studies.

Meeting logistics: The meeting will take place on Thursday, November 21st at the Genesee Inn, 1060 East Genesee Street, Syracuse, NY. A social hour will be held at the Inn from 5:30 p.m. to 6:30 p.m., followed by a buffet dinner. The dinner will start at 6:30 p.m. and our featured speaker, Dr. Palmer, will begin his program at 7:30 p.m. The cost of dinner is \$20 for members, \$22 for non-members, and \$15 for student members. Please RSVP by Monday, November 18 to Bonnie at Parratt-Wolff via e-mail at bolney@pwinc.com or 437-1429.

DIRECTIONS: To get to the Genesee Inn, take the Route 690E exit from Route 81S. Take the first exit off of 690 (Teal Avenue) and turn right at the bottom of the off-ramp. Go approximately 1 mile (crossing Erie Boulevard) and turn west (right) onto Genesee Street. The inn is on the south side of the street, between Crouse and University Avenues.

Calendar

December 19, 2002	No CNYAPG monthly meeting – HAPPY HOLIDAYS!!!!
January 2003	START OFF THE NEW YEAR BY ATTENDING A FEW CNYAPG MEETINGS THIS YEAR!
Thursday, January 16, 2002	CNYAPG Monthly Dinner Meeting, Genesee Inn, Syracuse, NY. Speaker TBD. From 5:30 to 6:30 pm there will be a cocktail hour, followed by dinner at 6:30 pm. Our speaker’s talk will begin at 7:30 pm. As of press time the speaker is still to be determined.

Our President's Voice –

Many thanks to those who joined us for last month's short course/meeting. Mr. Ken Hayes drove four hours each way to present an excellent overview of sediment sampling during his short course, followed by a wonderful recount of his Egyptian experiences while collecting sediment cores there in 2001. Though geology was not the primary focus of his presentation, we were given a wonderful taste of Egyptian life through Mr. Hayes video and picture presentation. The fact that there are cities resting under water certainly questions the geologic history of this area. It will be interesting to see the Discovery Channel special and see how Mr. Hayes' sediment cores were interpreted and the theory that results from his research.

Our next meeting with Dr. Arthur Palmer promises to be most interesting as well. Dr. Palmer is highly respected for his work related to karst hydrology and we are fortunate to have him join us. I hope that many of you who have not been able to join us yet this year will come to see Dr. Palmer's presentation. We have seen many familiar faces and a few new ones as well, but we continue to look for more involvement from fellow geologists in the upstate New York area. We are a small (about 150) group dedicated to strengthening the profession of geology in upstate New York. As with most other professional organizations, we rely heavily on membership to support our organization.

In addition to being an organization that provides a network for practicing geologists, we would like to be an asset to local geology students as well. I am certain that the local universities provide an excellent formal education for their students, but how many students actually are familiar with the professional and business aspects of geology? The goal of your education is to

find a rewarding career in the field of geology, and by attending our meetings you are given the chance to meet with many local professionals who can offer advice about career paths in the geologic field (and maybe even work!). CNYAPG is a very good way to start your professional involvement in the geologic world – please join us and see what we have to offer.

- Christin Gachowski

Did you know?

Guess what mineral resource is the most valuable commodity in New York State? You betcha – carbonate rock. This type of rock makes up the limestone, dolostone and marble belts that have wide distribution across our state. These rocks are used in various ways in the construction industry. From simple crushed stone products to paving materials, this product is essential to our State. On large construction projects, the cost of shipping makes up a huge percentage of the overall cost of the product. Thankfully, New York State has carbonate rock quarries close to most of its large population centers. Carbonate rock can also be processed to make Portland cement or concrete. When burned in a kiln, the carbonate rock is turned into quicklime or hydrated lime and used on everything from chemical processes to farm fields. Ninety percent of the stone sold in New York State is either limestone or dolostone. Now you know the rest of the story!

A great source of information on the mineral resources of New York is the NYS Geological Survey's Educational Leaflet No. 28 – [Geology of New York](#). The information for this article was taken from their 280-page publication. If you want to know how to obtain this publication or others, go to the NYS Geological Survey's website. It can be found linked at www.cnyapg.org.



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