Rochester Academy of Science

BULLETIN

"An organization of people in the Natural Sciences"



October, 2018 - Vol. 72, #8

President's Message: Come to the Scientific Paper Session!

We will gather at Geneseo College for the 45th annual Scientific Paper Session on November 10th, hosted by the Chemistry and Research Departments. Featured presenters will be area scientists, students, and RAS members, who will share their investigations and interests about scientific topics. Join us for the program finale, the Larry King Memorial Lecture given by geologist Dr. Richard Young. The lecture is free to the public. I hope you will come!

Jutta Siefert Dudley

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Second Call for Presentations at the Fall Paper Session

Have you been engaged in a project? Share your experiences with the community! We are eager to hear all about it! You have a great opportunity to tell us at the next RAS Scientific Paper Session through a poster or short oral report. There is still time to sign up and send in your abstract before the **deadline October** 22nd. Go to http://rasny.org and follow the link to the presenter's reservation forms. There is a small registration fee per project.

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RAS Scientific Paper Session Schedule

Saturday, November 10 Geneseo College

Contact: RAS@geneseo.edu

Parking: Free. Park in lots L, LL, or A.

https://www.geneseo.edu/pts/parking-map

8:30 a.m. Presenters sign-in. Refreshments for all attendees. Bailey Hall.

9:30 a.m. – 12:30 p.m. Oral Presentations followed by Poster Session. Bailey Hall & Newton Hall.

12:30 p.m. Box lunch, optional. \$10.00. Newton Hall.

Lunch Reservation required by November 2. Online payment preferred. Go to http://go.geneseo.edu/RASregister

1:00 p.m. Welcome & Larry King Memorial Lecture.
Newton Hall.

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Larry King Memorial Lecture

November 10 1:00 p.m. Newton Hall

A newly recognized late glacial advance in western New York: Relation to the Bölling-Alerod and Younger Dryas climatic instability

Presented by Dr. Richard Young.



The Late Wisconsin glacial chronology of western New York is inadequately constrained by radiocarbon dating of major glacial landforms between the Pennsylvania border and Lake Ontario. Few radiocarbon ages have previously been directly or definitively related to distinct landforms such as moraines or formally named glacial till sheets, unlike the published evidence for eastern NY, the Midwest and the upper Great Lakes. More than thirty-five ¹⁴C ages on wellpreserved wood specimens excavated from glacial tills in the Buttermilk Creek basin south of Buffalo, NY, and from long-term

studies in the Genesee Valley provide compelling evidence for a previously undated late glacial advance well into Cattaraugus and **Livingston Counties** approximately 13,300 calendar years ago. The chronologic evidence compiled from four key sites indicates that a late glacial advance spread a thin till over the surface without significantly modifying the preexisting glacial topography in some locations. A partially floating ice shelf during a short-lived advance may best explain some of the field evidence. Such a glacial advance at this time, extending 43 km south of Lake Ontario in the Genesee Valley, requires a reconsideration of the overlapping chronology proposed for glacial Lake Iroquois, which existed in the Lake Ontario basin approximately 14,500 to 13,100 years ago, and that created the prominent Ridge Road shoreline. The timing of such an event now can be compared with the detailed climate record derived from the Greenland and associated ice-core studies.

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About our Speaker

Dr. Young's undergraduate studies were in engineering and geology at Cornell University prior to completing his PhD at Washington University (St Louis) on the geologic mapping of the western Grand Canyon (2000 square miles of the Hualapai Indian Reservation). Dr. Young joined the Geological Sciences Department at SUNY Geneseo in 1966 and has continued his Arizona and New York research to the present. After participating in photogeologic studies for the

Apollo 15-17 lunar landings for NASA during the 1970s, he concentrated on his undergraduate teaching, and on revising the Quaternary and recent geologic history of the Genesee Valley and western New York, when not continuing his summertime Arizona field research. He participated in the completion of two of the five sheets of the current "Surface Geologic Map of New York State" produced by the NY State Geological Survey. He currently mentors students on undergraduate research projects. He has participated in research funded by NASA, the US Geological Survey, the New York State Geological Survey, the US Army Corps of Engineers, the US Bureau of Indian Affairs, the US Department of Energy, the New York State Energy Research and Development Authority, and The US Army (Viet Nam), as well consulting with engineering firms on environmental projects. Dr. Young freely provides his geologic expertise to assist local scientific and environmental organizations and individuals, and is Vice President for Science for the Rochester Committee for Scientific Information. His formal publications include 75 peer-reviewed contributions in state and federal government documents, symposium volumes, scientific monographs, and scientific journals.

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What happened at the end of the Ice Age? Getting wet and muddy is how Dr. Young figures it out!

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RAS Student Grant Applications for Research Announcement

The Academy will award up to \$500 for supplies and \$50 unrestricted funds to a top qualifying research proposal from an undergraduate college student. Partial funding of at least \$100 will be awarded to four other proposals.

Applications are due by December 18, 2018. Detailed information about the grants and the procedure for applying are found on www.rasny.org. The information is annually emailed to science departments in colleges throughout western New York State.

HAPPY AUTUMN!



Events for October, 2018

For updates to events, check the Academy website, http://www.rasny.org, and Section websites.

2 Tues: FOSSIL SECTION MEETING

7:30 p.m. Brighton Town Hall., Downstairs Meeting Room. Speaker: Dr. Chiara Borrelli, Research Associate and lecturer, Department of Earth and Environmental Sciences, UR. Topic: "Foraminifera: Very Small but Amazing Microfossils". Contact Dan Krisher at DLKFossil@gmail.com or at (585) 698-3147

5 Fri: ASTRONOMY SECTION MEETING

7:00 p.m.–10:00 p.m. RIT Carlson Center for Imaging Science, CAR-1125. Parking Lot F. Speaker: Chad Forrest, UR. Topic: "Experiments with OMEGA Laser Facility to Study Nucleosynthesis." Snacks available at 7:00 p.m. Contact: Mark Minarich (585) 257-6042.

6 Sat: ASTRONOMY PUBLIC OPEN HOUSE

12:00 p.m. - 4:00 p.m. (or later, if skies are clear). Marian and Max Farash Center for Observational Astronomy, 8355 County Road 14 Ionia, NY 14475. *NEW MOON!* Members observing night. For cancellations or changes contact: Mark Minarich; (585) 257-6042, or see: www.rochesterastronomy.org/calendar-of-events

8 Mon: ASTRONOMY BOARD MEETING

7:00 p.m. UR, Bausch & Lomb Hall, 4th floor Chart Room. All ASRAS members welcome. Contact: Mark Minarich (585) 257-6042.

13 Sat: LIFE SCIENCES HERBARIUM WORKSHOP

10:00 a.m. – 2:00 p.m. Basement of the Rochester Museum and Science Center (RMSC). No experience necessary. Bring lunch or purchase at the RMSC. Have RMSC front desk have staff call ext. 368 in the Herbarium. If you plan to attend, please send an RSVP to Elizabeth Pixley. To attend, or for more information, contact herbarium curator: Elizabeth Pixley, (585) 334-0977 or eypixley@gmail.com).

16 Tues: MINERAL SECTION MEETING

7:00 p.m. Brighton Town Hall, Downstairs Meeting Room. David Joyce says he will tell us about "All the Places that I've Roamed (to bring those crystals home). Join us for an entertaining evening, door prizes, and refreshments. Contact: Stephen Busschaert, (585) 351-7633.

17 Wed: RAS BOARD MEETING

7:00 p.m. Brighton Town Hall, Stage Conference Room.

20 Sat: ANTHROPOLOGY SECTION

10:00 a.m.- 4:00 p.m. Rochester Museum and Science Center.
Anthro members will attend the International Archeology Day events at the RMSC. We will have a table along with the Archeological Institute of America (AIA) and display naturally dyed fabrics and other Anthropologically related items. If you wish to help at table, please

contact Karen Wolf: 670-9709.

27 Sat: LIFE SCIENCES FIELD TRIP

10:00 a.m. Kent Park Arboretum, Schlegel Rd., Webster. We will be doing a fall foliage walk. For directions call Larry Hirsch 429-6199.

ONGOING EVENT

STRASENBURGH OBSERVATORY

ASRAS will operate the telescope at Strasenburgh Planetarium on mostly clear Saturday nights. Contact: Jim Seidewand (585) 703-9876.

ASTRONOMY STAR PARTY

ASRAS hosts public outdoor star parties once a month on Fridays, either at Mendon Ponds Park or Northampton Park near Brockport. Notices are posted on the prior Wednesday at the ASRAS Facebook page, and www.rochesterastronomy.org/cale ndar-of-events, or, contact Jim Seidewand, (585) 703-9876.

UPCOMING RAS EVENTS

Sat Nov 10: RAS FALL SCIENTIFIC PAPER SESSION

8:30 a.m. - 2:00 p.m. Geneseo College. Oral and Poster Sessions, 9:30 a.m. -12:15 p.m. Lecture by Dr R. Young, 1:00 p.m. See this Bulletin for details. Contact: Jutta Dudley, (585) 385-2368 or Dan Krisher, (585) 698-3147.



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Return Service Requested

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CHANGING ADDRESS?

Temporary or Permanent? Notify whallah3@naz.edu. A returned newsletter costs us 59¢ Please help stop this waste.

ABOUT THE ACADEMY - The Rochester Academy of Science, Inc. is an organization that has been promoting interest in the natural sciences since 1881, with special focus on the western New York state region. Membership is open to anyone with an interest in science. Dues are minimal for the Academy and are listed in the membership application online. Each Section also sets dues to cover Section-related publications and mailings.

For information, contact President Jutta Dudley at (585) 385-2368 or by e-mail: pres@rasny.org.

The Academy Internet website is

http://www.rasny.org

Or see us on Facebook at

https://www.facebook.com/RochesterAcademyof Science.

This "BULLETIN" is produced monthly, except July and September, by the Astronomy Section, Rochester Academy of Science. Submissions are due by the 10th of the month and may be emailed to: editor@rasny.org.

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