



President's Message

Many thanks to my colleagues on the Board who are volunteering their time and talent once again to serve as officers in the upcoming year. We welcome two new directors, Tim Tatakis and Tony Golumbeck. We still need a special person to oversee membership. Please consider being appointed to fill this vacancy.

It was a pleasure to welcome Martin Pepe as a new Fellow of the Academy at the annual meeting April 11. Please read the citation presented to him in this newsletter.

Following the business meeting Dr. Jessica Cantlon presented us with interesting insights into the developing numeracy of primate and human minds. I and others were amused to see monkeys tapping on screens, at what seemed to be revved up speeds, to identify correct patterns and receive a reward. Turns out they do this much faster than humans. Our forebrain interferes with a quick reaction (not required for these experiments) but perhaps we do not enjoy working for peanuts as much as baboons do!

SUNY College at Geneseo has agreed to host our next Scientific Paper Session on November 10th. A public lecture will be offered by RAS at the event. We welcome your recommendations for topics of interest or specific speakers.

Jutta Siefert Dudley

Election Results of April 11, 2018

President: *Jutta Dudley, Ph.D.*

Vice President: *Michael Grenier*

Secretary: *Helen Haller, Ph.D.*

Treasurer: *William Hallahan, Ph.D.*

Director 3 year term: *Chris Collins, Ph.D.*

Director 3 year term: *Timothy Tatakis, Ph.D.*

Director 1 year term: *Anthony Golumbeck*

Membership: *open*

Positions begin June 1, 2018.

Martin J. Pepe FELLOW 2018

Citation read at the annual meeting April 11, 2018

Martin J. Pepe's involvement in science began at an early age, evidenced by an endless boyhood curiosity of "How does it work?" Following formal education (ET, BSEE, MSEE), his engineering and education skills have continued to expand with multiple post-graduate activities covering a constantly broadening spectrum of technologies from product development to applied research. Marty joined the Astronomy Section of the Rochester Academy of Science in 1991 and shortly thereafter became engaged with Section activities and leadership responsibilities. He served on the Board of Directors as Vice Chair in 1994 and 1995 and later as Program Director. More recently, he served as a Director from 2015 through 2017.

Marty has been interested and engaged in radio astronomy for many years. His leadership in this field allowed the blossoming of radio astronomy studies locally; this has led to contributions of global significance. He mentors teams of students at several local universities. The students are actively engaged in designing and constructing equipment and solving problems related to radio frequency reception from celestial objects. One project involves the recent installation of a 7-foot dish at our Farash Center for Observational Astronomy.

(continued next page)

The telescope will serve as a solar radio spectrometer, collecting radio frequency data from sunspot activity for the eCallisto global network. The monitoring by that network provides an important warning for dangerous space weather and significantly, the instrument in Ionia will help reduce the paucity of detectors across North America. In his exploration of radio frequency signatures from sunspots, Marty has developed a background noise removal method for radio signal processing. This innovative original work has been shared with the eCallisto network and may help scientists find a way to reduce the interference by local radio frequencies.



Mark Minarich, ASRAS president read the citation to Fellow Marty Pepe.

Teaching about the universe through the subject field of radio waves is Marty's passion. Besides mentoring future scientists and engineers, he voluntarily shares his knowledge with eager learners of all ages. Armed with a small radio telescope known as an 'Itty Bitty' Telescope, he has given workshops and presentations to school groups, Scout troops, and science teachers, as well as to the public at community events.

In recognition of these contributions we welcome Martin J. Pepe as a Fellow of the Rochester Academy of Science

The citation is signed by President Jutta Dudley and Secretary Helen Haller.

RAS Volunteers Invited to Science Exploration Days 2018

On Thursday evening, May 17th (7 p.m. to 9 p.m.) and on Friday the 18th (9:30 a.m. to 1:00 p.m.), all the sections of the Academy will have an important presence at Science Exploration Days, an annual event at St John Fisher College, that is organized by the Central Western Section of the Science Teachers Association of NYS. For 47 years the program has focused on acquainting young people with research, scientific concepts, applied technology, local natural history, and various topics beyond the standard classroom fare.

RAS Section tables provide hands-on activities and informative displays in the exhibit hall that teach and enlighten visitors of all ages. We provide telescopes, minerals, fossils, and edible plants, so visitors have something interesting to see, do, and learn. To do all this well, we would like your help!

As a volunteer, at the Thursday evening program, you will meet families excited to learn something new. During the school program on Friday, you'll interact with some of the 1500 registered students in grades 7 through 12. You'll be treated to a luncheon afterwards.

Let your Section Leader know you can help! Section leaders, for information about setting up on Thursday afternoon contact Karen Wolf, who serves as RAS exhibits liaison with the SED committee: karen_wolf@urmc.rochester.edu.

Events for May 2018

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

4 Fri: FOSSIL SECTION MEETING

7:30 p.m. The Arts and Crafts Room of the Brighton Recreation and Senior Center. Dr. Gordon Baird of SUNY Fredonia will be speaking on "Red Bedford mystery within an end-Devonian climatic enigma". Contact: Dan Krisher; DLKFossil@gmail.com.

4 Fri: ASTRONOMY SECTION MEETING

7:30 p.m.–10:00 p.m. Marian and Max Farash Center for Observational Astronomy, 8555 County Road 14 Ionia, NY 14475. Major Presentation: ASRAS Vice President David Bishop will be giving his annual Astronomy year in review presentation. Short talk: Ted Lechman - "Knitting to the Moon". \$1.00 hotdogs available at 7:00 p.m. prior to meeting. Contact: Mark Minarich; (585) 257-6042.

7 Mon: ASTRONOMY BOARD MEETING

7 p.m. Farash Center at Ionia. All ASRAS members are welcome. Contact: Mark Minarich; (585) 257-6042.

9 Wed: LIFE SCIENCES HERBARIUM WORKSHOP

1 pm -4 pm. Basement of the Rochester Museum and Science Center (RMSC). At RMSC go to the front desk and ask staff person to call ext. 368 in the Herbarium. No experience needed! We will be continuing

work on organizing the Herbarium specimens in alphabetical family order. If organizing things is your thing, join us! If you plan to attend, please send an RSVP to: Elizabeth Pixley, herbarium curator 334-0977 or eypixley@gmail.com.

12 Sat: FOSSIL SECTION FIELD TRIP

9 a.m. We will be visiting 3 family-friendly Middle Devonian sites southeast of Batavia. Contact: Dan Krisher; DLKFossil@gmail.com.

15 Tues: MINERAL SECTION MEETING

7:00 p.m. Brighton Town Hall, downstairs meeting room. The topic is to be determined. Enjoy door prizes and refreshments. Contact: Stephen Busschaert; mineralvp@rasny.org, or 351-7633.

16 Wed: RAS BOARD MEETING

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

18 Fri: ASTRONOMY STAR PARTY

9:30 p.m. – 10:30 p.m. Mendon Ponds Park, at Hopkins Point Road near the youth camping area. On day of event check the ASRAS Reflector or contact Jim Seidewand at (585)703-9876 to confirm.

20 Sun: 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, 8555 County Road 14, Ionia NY 14475. Events include Young Astronomers activities, observatory training, facilities improvement and star party in the evening – skies permitting. For weather related cancellations or changes contact: Mark Minarich; (585) 257-6042 or see:

www.rochesterastronomy.org/calendar-of-events

JUNE 6 Wed: FOSSIL SECTION FIELD TRIP

Time to be determined. The Section will be visiting the Middle Devonian sites of Pompey Center, Coon Hill and Lords Corner. These are located a few miles south of Syracuse. Contact: Dan Krisher; DLKFossil@gmail.com.

ONGOING EVENT

ASRAS will operate the telescope, or one on the sidewalk, at the Strassenburgh Planetarium on mostly clear Saturday nights. Contact: Jim Seidewand; (585)703-9876.

OUTSIDE EVENTS

17 Thurs & 18 Fri: SCIENCE EXPLORATION DAYS

St John Fisher College. Student Life Center.

Thursday, 7:00 p.m. to 9:00 p.m. RAS display tables in Exhibit Hall; open and free to the community.

Friday, 9:40 a.m.-12:45 p.m. Exhibit Hall open to pre-scheduled Junior and High School Students.

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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/RochesterAcademyofScience>.

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editor@rasny.org.

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