# Rochester Academy of Science™

# BULLETIN

"An organization of people interested in the Natural Sciences"



June/July 2024; Vol. 78, #5

# **President's Message**

### **Annual Meeting**

Our Annual Meeting was held on April 25, and I thank all of you who gave a vote of confidence in your Board of Directors and Academy Officers. You elected a new Director—Robert Crumrine—and reelected the incumbent officers and Director candidate. I am very happy to have these hard-working and effective members in these positions with your approbation. Thank you. I look forward to continuing to work with your Board and Officers to deliver on the important programs of the Academy.

\* \* \*

The 25th Annual ADK Outdoor Expo is featured on our calendar on page 2 for Saturday, June 8 in Mendon Ponds Park, Pittsford. Several of our sections will be set up with displays and to talk with potential members on behalf of the Rochester Academy of Science. Help is needed and you can both assist at our tables and see everything there is at the Expo. Contact your section leader if you can help. Our Astronomy, Fossil, and Mineral Sections will show and give away educational materials and specimens. You'll sit in the shade. Presented by the Genesee Valley

Presented by the Genesee Valley
Chapter of the Adirondack Mountain
Club and Monroe County Parks, the
Outdoor Expo is a celebration of the
great outdoors. They will have many
workshops and demos. Try out a
kayak or canoe on the 100-Acre Pond,
go for a short hike on the park's
beautiful trails, visit the Wild Wings
birds of prey facility and the Mendon
Ponds Park Nature Center, explore

canoeing, kayaking, camping, backpacking, bicycling and bike repair, crafts, the petting zoo, live music by the Golden Link Folk Singing Society, many other events and displays, and food/ice cream for purchase from Dave's Sidewalk Café and Molly V's. For the full schedule of events, see: https://adk-gvc.org/play/outdoor-expo-before/



Follow the path to the pond & you will find us under some pop-ups.

This event is free, open to the public, and fun for the entire family. *Get Outside... It's for Everyone!* 

# **2024 Scientific Paper Session Announced**

We sent the First Call for Abstracts to department chairs throughout the Upstate NY region for our annual Fall Paper Session. It will be held at SUNY Brockport on Saturday, November 16, 2024. RAS members are encouraged to attend and will have benefits.

The purpose of this event is to provide an opportunity for local colleges and university science students and faculty to gather and share their research interests and results.

This will be our **50th Annual Session**, which is quite a track record. For more information on the RAS paper session and to register go to <a href="mailto:rasny.org/paper-session">rasny.org/paper-session</a>. We need members as volunteers to help

organize the Paper Session and also to help run it on the day.

Classified Advertisement

# **♣** Employment Opportunity **♣** RAS Scientific Paper Session

### RAS Scientific Paper Session Coordinators

Rochester Academy of Science, Rochester, NY.

Part-time volunteer **Registrar** to receive registration emails from attendees from mid-September through mid-November and transfer data to registration spread sheet. Expected number of registrants is 300. Registrar sends spreadsheet to committee weekly. This job can be shared.

Part-time volunteer **Abstract Publisher** to receive abstracts from Registrar and assemble them into a book of abstracts to be published digitally. Format will be provided. Send note of interest to mgrenier@frontiernet.net.

\* \* \*

#### **Eclipse News**

April 8 has passed, and our eclipse is history. Out-of-state visitors were thrilled with the experience here and I hope you made the most of it, given the overcast conditions. But oh, what clouds they were! It was a strange scene as they suddenly darkened with an immediate onset of night and just as rapid daybreak, unlike any other. The temperature plunged and as quickly soared as the sunlight was blocked and unblocked. Near Braddock Bay, one saw what looked like sunset at the horizon in all directions. Sound changed, and there were many other effects. It was not totally satisfying without the corona but worth the while, nonetheless.

(Continued on page 3)

# Events for June / July, 2024

#### **JUNE EVENTS**

# June 1 Sat: Fossil Section Field Trip

Little Beard's Creek: This is a large shale exposure of Windom Member of the Moscow Formation in a stream near Geneseo. For details, see the latest RAS FossiLetter or contact Dan Krisher at (585) 698.3147

or DLKFossil@gmail.com.

# June 4 Tues: Joint Fossil and Mineral Section Picnic and Meeting

6:00 p.m. Farash Center, 8355 County Road 14, Ionia, NY, Wolk Education Building. Attendees are asked to bring a dish to pass as well as a beverage. After the picnic, David Bishop will present his Astronomy Year in Review lecture. If attending, contact Dan Krisher at (585)698.3147

or <a href="mailto:DLKFossil@gmail.com">DLKFossil@gmail.com</a> no later than Monday, June 3.

# June 5 Wed: Astronomy Board Meeting

7:00 p.m. – 9:00 p.m. Farash Center. ASRAS Members are welcome to attend. Contact: Anthony Golumbeck at semp@use.startmail.com.

# June 7 Fri: Astronomy Members Meeting

7:30 p.m. – 10:00 p.m. Farash Center, 8355 County Road 14, Ionia. Hernan Rincon from the University of Rochester will speak about "DESI Science." Contact: Anthony Golumbeck at semp@use.startmail.com.

#### June 12 Wed: Herbarium

12:00 p.m. - 3:00 p.m. The Life Sciences section will hold a workshop at the RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). We will be continuing to organize plant specimens in preparation for digitizing the collection. If you plan to attend, please send an RSVP to <a href="mailto:rasherbarium@gmail.com">rasherbarium@gmail.com</a>. At RMSC go to the front desk to meet other

participants. For more information, contact herbarium curators, Tim Tatakis and Steven Daniel, by emailing <a href="mailto:rasherbarium@gmail.com">rasherbarium@gmail.com</a>.

### June 19 Wed: RAS Board Meeting

6:00 p.m. Farash Center, 8355 County Road 14, Ionia, NY, Wolk Education Building. Picnic and facility tour. Meeting at 7:00 p.m. also on Zoom. For details, contact: Michael Grenier, mgrenier@frontiernet.net

# June 23 Sun: Astronomy Open House

12:00 p.m. – 3:00 p.m. Farash Center, 8355 County Road 14, Ionia. Contact: Anthony Golumbeck at semp@use.startmail.com.

# June 26 Wed: Astronomy Members Forum

7:30 p.m. Farash Center and on Zoom. Topic: Cleaning your optics. Contact: Anthony Golumbeck at <a href="mailto:semp@use.startmail.com">semp@use.startmail.com</a>.

# June 28 Fri: Astronomy Public Observing

7:30 p.m. – 11:00 p.m. Farash Center, public welcome. Contact: Anthony Golumbeck at <a href="mailto:semp@use.startmail.com">semp@use.startmail.com</a>.

# June 29 Sat: Fossil Section Field Trip

Penn Dixie Fossil Park, 4050 North Street, Blasdell, NY 14219. <a href="https://penndixie.org">https://penndixie.org</a>. This family-friendly site is a large open shale pit. There is a modest daily fee to collect. The site exposes the Middle Devonian Windom Member of the Moscow Formation. A wide variety of fauna can be found but the site is most well-known for its trilobites. The date selected is shortly after the Dig with the Experts so there will be many well-weathered piles. For details, see the latest RAS FossiLetter or contact Dan

Krisher at (585) 698.3147 or DLKFossil@gmail.com.

### **JULY EVENTS**

# July 3 Wed: Astronomy Board Meeting

7:00 p.m. – 9:00 p.m. Farash Center. ASRAS Members are welcome to attend. Contact: Anthony Golumbeck at semp@use.startmail.com.

### July 13 Sat: Fossil Section Field Trip

The trip will visit the Jaycox Run site between Avon and Geneseo and the collecting will be in the Middle Devonian Jaycox Members of the Ludlowville Formation and Deep Run Member of the Moscow Formation. Corals, brachiopods, trilobites and a variety of other types are very common. Collecting will be limited to surface collecting, only the removal of exposed fossils. For further information or to sign up, email <a href="mailto:DLKFossil@gmail.com">DLKFossil@gmail.com</a>.

### July 14 Sun: Astronomy Open House

12:00 p.m. – 3:00 p.m. Farash Center, 8355 County Road 14, Ionia. Contact: Anthony Golumbeck at <a href="mailto:semp@use.startmail.com">semp@use.startmail.com</a>.

# July 26-28: RocheStar Fest

See page 5 for more information.

### **STRASENBURG OBSERVATORY:**

ASRAS will operate the telescope at the Strasenburg Planetarium on mostly clear Saturday nights, dusk until 10:30. For more information, contact: Jim Seidewand at (585) 703-9876.

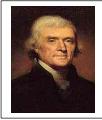
### **OUTSIDE RAS EVENTS:**

### June 8 Sat: ADK Outdoor Expo

9:30 a.m. – 3:30 p.m. Mendon Ponds Beach Area. RAS will be represented by Astronomy, Fossil, & Mineral Sections. Volunteers needed at the RAS booth! Questions? Contact your section leaders. (continued from page 1)

Rochester's last eclipse in 1925 was also clouded over and only lasted 1 minute 12 seconds.

Here's another example from history: To David Rittenhouse in Albemarle, Virginia, July 19, 1778. Dear Sir, I sincerely congratulate you on the recovery of Philadelphia . . . We were much disappointed in Virginia generally on the day of the great eclipse, which proved to be cloudy. In Williamsburgh [sic], where it was total, I understand only the beginning was seen. At this place which is in Lat. 38 degrees-8' and Longitude West from Williamsburgh [sic] about 1 degrees-45' as is conjectured, eleven digits only were supposed to be covered, as it was not seen at all till the moon had advanced nearly one third over the sun's disc. Afterwards it was seen at intervals through the whole. The



egress particularly was visible. It proved however of little use to me for want of a time piece that could be depended on.

The Letters of Thomas Jefferson

This eclipse was on June 24, 1778, four days before the Battle of Monmouth during the American Revolution and lasted 5 min. 52 sec.

A better view of our eclipse could be had if you got above the clouds. Here's one from way above the clouds, looking away from the moon. <a href="https://www.youtube.com/shorts/TWozoAOvO1c">https://www.youtube.com/shorts/TWozoAOvO1c</a>

The next total eclipse visible in Rochester is only 44,977 days away — on October 26, 2144. Expect the skies to be cloudy.

There will be a partial eclipse visible here on August 12, 2026. The sun will be blocked only 9% from our viewpoint. That is the next eclipse visible anywhere and eclipse chasers will be in Greenland, western-most Iceland, and cruise ships between Greenland and the north Portugal



Photo of the Aurora Borealis taken from the shore of Lake Ontario on Friday, May 10, with iPhone, by Margie Oyer, Astronomy Section. This photo was published in the *Webster Herald* weekly on May 15 with permission.



This photo was taken by Nick Paratore also over Lake Ontario on May 12. Notice the meteor streak captured in the upper left corner.

coast where it comes to land again, across central Spain and into the Mediterranean Sea. After that, Aug. 2, 2027: from Spain to Somalia. July 22, 2028: Christmas Island, Cocos Islands, Australia, New Zealand.

### Aurora of May 10-12

Weather was much better for the surprising display of the Aurora Borealis which was well-publicized by TV and radio news and drew huge crowds. The massive G4 solar

storm on May 10 put Earth in the direct path of the Coronal Mass Ejection.



Michael Grenier, RAS President

### **Carol Latta inducted as RAS Fellow**



The Fellow award to Carol Latta was made by Tony Golumbeck on behalf of the Board of Directors. Photo credit: Jeff Gutterman.

Fellows of The Rochester Academy of Science are chosen in recognition of scientific attainment or distinguished service to the Academy. This is a rare honor bestowed by the Academy. At the end of last year, we had 343 members. Just twenty one are honored as Fellows. They have been named over the past 47 years, with our senior Fellow, Elizabeth Pixley, admitted to the Fellowship in 1977. Our other living Fellows in order are Richard Hamell 1984, Robert Spahn 1985, Bruce Gilman 1985, William Hallahan 1987, Thomas Dey 1989, Kevin Griffith 1985, Mark Torrens 1993, R. Clark Lewis III 1996, David Strong 1998, W. Brian Oyer 2000, Alvin Ureles 2001, Matt Sinacola 2003, Dominic Sherony 2003, James Seidewand 2004, David Bishop 2006, John Handley 2011, Jutta Dudley 2017, Paul Dudley 2017, Martin Pepe 2018, and Robert McGovern 2021.

At our Annual Meeting this past April 25, we inducted the newest Fellow, Carol E. Latta. Carol has a long history of distinguished service to the Academy and to the Rochester community with heavy emphasis on scientific communication, especially within the Astronomy Section. Carol joined the Academy in 1999, became an ASRAS director in 2001, Secretary in 2002, Vice President in 2004, President in 2006 for five terms, and Past President for three terms.

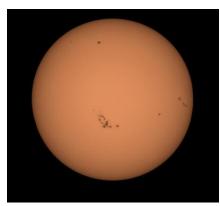
She has created and overseen programs for the benefit of members and the public. These include the ASRAS Historical Information Project to collect and preserve important documents, the ASRAS Winter Education Lecture program for sixteen years, the Women's Messier Marathon, and the ASRAS Astronomy 101 Forum starting in 2022. She has ably contributed for many years to RocheStarFest, the Annual Farash Report, work parties at the Farash Center, and speaker programs. In 2010 she created and led the Young Astronomer program, which ran for 9 years.

As Director of Mees Observatory Tours for University of Rochester, Carol has enriched the lives of people through public awareness and understanding of scientific discovery and investigation. She applied these skills on behalf of the Academy in leading Strasenburgh Planetarium Saturday night observing from 2001-2005 for thousands of visitors. She often represents the Academy and ASRAS at the Ionia Fall Festival, the Mendon Ponds Winterfest, and other events. She has been active in Solar Eclipse Planning for the public for the past two years, among other contributions.

In recognition of these outstanding contributions, we welcome Carol E. Latta as a Fellow of the Rochester Academy of Science.



Moon just before Aurora, Kevin Lyons, May 10, 2024



Sun in white light, Kevin Lyons May 7, 2024



# Roche Star Fest 2024

July 26 - 28, 2024, Marian and Max Farash Center for Observational Astronomy, Ionia, NY

Featured Speaker - Roxanne Kamin: An avid amateur astronomer and fly fisherman, Roxanne Kamin has viewed night skies from both the Northern and Southern hemispheres, including three trips to Australia with the Southwest Research Institute (SwRI) / NASA. Recently retired from IBM and residing near Hershey, she is active in measuring asteroids with SwRI along with the International Occultation Timing Association (IOTA) and can be found most clear nights observing at Cherry Springs, the Naylor Observatory, Ryan Observatory at Muddy Run or simply from her home. Roxanne's observing gear currently include a 16" f/4 New Moon Dob along with a C11HD SCT and an 80mm Stellervue (EQ6R-Pro, HAZ31, Pegasus NYX101 mounts) or on sunny days, a SolarMax III. Her go to cameras are QHY and MallinCam.

The Astronomy Section of the Rochester Academy of Science (ASRAS) will hold the 27th annual RocheStar Fest on July 26th to July 28th. This weekendlong event features astronomy, lectures, demonstrations, and camping at ASRAS's Ionia, NY observing grounds. A picnic dinner will be held on Saturday. Door prizes and a silent auction add to the fun. Proceeds benefit ASRAS, a non-profit organization devoted to education and public outreach in the fields of astronomy and space sciences. Camping arrangements are available at no charge, tents and small campers permitted. These are primitive camping sites - no

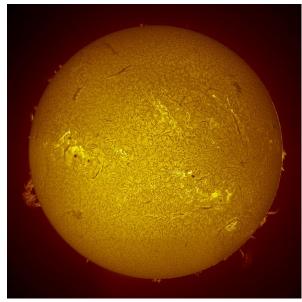
electric hookups, water ho	okups, or showers are ava-	ilable. No pets or ground fires are allowed.
Schedule of Events Friday, July 26 <sup>th</sup>	6:00 pm	Arrival for camping, Astro-Jeopardy and music trivia contest (rain or shine), observing (beginning at dark, weather permitting)
Saturday, July 27 <sup>th</sup>	11:00 am	Registration begins – pick up Door Prize tickets at Registration table; <u>hot dogs will be available for purchase or bring your own lunch</u> , drinks available at modest cost
	1:00 – 4:30 pm	Talks, Demonstrations, & Experiments – Contact Lori Englund (lenglund175@gmail.com) to get your talk or demonstration on the schedule
	1:00 – 5:00 pm	Silent auction, door prizes
	4:30 pm	Members Reception (bring appetizers to share if you'd like)
	5:15 pm	Door Prizes followed by group photo
	6:00 pm	Barbeque Dinner at Ionia Volunteer Firehouse  Beef brisket, pulled pork, smoked turkey, hamburgers, hot dogs, potato salad, baked beans, pasta salad, and veggies. Bring your signature dish or dessert if you'd like.
	8:00 pm	Featured speaker: Roxanne Kamin, "Catching a Shadow from beyond Neptune – Wait a minute, how far away is Neptune?"  Observing to follow, weather permitting
Sunday, July 29 <sup>th</sup>	10:00 am - Noon	Cleanup (breakfast at 9:00 am)
	oing arrangements, contact	to help, contact <i>Lori Englund</i> at (585) 820-5012. If you can donate a door prize, contact <i>Mark Minarich</i> at a <i>Roger McDonough</i> at (585) 519-9121 ther <b>ASRAS summer activities, at www.rochesterastronomy.org!!</b>
×		
<i>O</i> •		stration due by Friday, July 19, 2024

Day of registrations will be accepted: dinner purchases available but r	ot guaranteed
Complete and mail this form with your payment (checks made out to ASRAS) to Lori Englund, Attn: Roche <i>Star</i> Fest Registration, P.O. Box 20292 Rochester, NY 14602	
Name:	-
Address:	-
Phone #:	
Email address (optional):	
Number of adults attending:	
Number of children attending (under 12):	
Total number attending:	
Camping? Yes No (Tents and small campers allowed; no hookups are available.)  Amount due	Day of Registration Fees:
Early-Bird Event Fee: \$15 for individuals or \$25 for families \$	(July 27, 2024)
<b>Dinners:</b> Number of adult dinners: x \$10	Individual: \$20
Children 6 thru 12 (5 and under FREE) x \$5 \$	Family: \$30
Children 5 and under free Registration Total \$	1 mmy . 000

## **Recent RAS Member Photos**



Indigo Bunting, Doug Kostyk, Farash Center May 19, 2024



Sun in hydrogen alpha, Doug Kostyk, May 19, 2024.



Eastern Towhee, Bob Crumrine, Highland Park, May 10, 2024



Lilac blooms, Bob Crumrine, Highland Park, May 8, 2024



Eclipse composite from Sherbrooke, Quebec, Joe Alteri.

# Rochester Research in Review.

(These are Hot Links which when clicked lead to the press release on the Science Daily website.)

Long snouts protect foxes when diving headfirst in snow. Cornell University, April 29, 2024.

'Baby asteroid' just a toddler in space years. Cornell University. May 2, 2024.
New study finds Al-generated empathy has its limits. Cornell University. May 8, 2024

Robotic system feeds people with severe mobility limitations. Cornell University. May 9, 2024.

Researchers introduce new way to study, help prevent landslides.
Rochester Institute of Technology. April 26, 2024.

<u>Can diet help with advanced breast</u> <u>cancer? All indications are positive.</u> University of Rochester, May 22, 2024.

Streamlined microcomb design provides control with the flip of a switch.
University of Rochester. May 22, 2024

SUNY ESF Leads Groundbreaking
Research in Groundwater's Role in
Ecosystem Sustainability. April 3, 2024

<u>Caller ID of the Sea, the link between</u> <u>whale communication and behavior,</u> <u>Syracuse University, March 15, 2024.</u>

Beyond Rochester with Cornell contributor:

Webb Telescope Offers First Glimpse of an Exoplanet's Interior. Johns Hopkins University, May 20, 2024



Aurora over Hemlock Lake, Nick Lamendola, May 10, 2024.

(585) home//cell

### **ABOUT THE ACADEMY**

The Rochester Academy of Science<sup>™</sup>, 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. We are recognized as a 501(c)3 organization.

For information, contact President Michael Grenier at (585) 671-8738 or by email <a href="mailto:paleo@frontier.com">paleo@frontier.com</a>.

The Academy Internet website is <a href="http://www.rasny.org">http://www.rasny.org</a> or see us on Facebook at <a href="https://www.facebook.com/Rochester-Academy-of-Science-792700687474549">https://www.facebook.com/Rochester-Academy-of-Science-792700687474549</a>.

This "**BULLETIN**" is produced monthly, except January, by the Rochester Academy of Science<sup>TM</sup>. Submissions are due by the 10th of the month and may be emailed to the Bulletin Editor Robert Crumrine at <a href="mailto:bob.crumrine@gmail.com">bob.crumrine@gmail.com</a>.

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