#### **Rochester Academy of Science** P.O. Box 92642 Rochester, NY 14692-0642

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ABOUT THE **ACADEMY** - The Rochester Academy Of Science, Inc. is an organization which 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. Each Section also sets dues to cover Section-related publications and mailings.



For applications and/or more information contact membership chairman Stephen Busschaert, 54 Keswick Rd., Rochester, NY 14609; by telephone 288-5683; or by e-mail

<sbusschaert@msn.com>.

The Academy Internet web page is http://www.rasny.org

The Astronomy Section Information phone number is (585) 987-5330. The *Astronomy Section* Internet web page is http://rochesterastronomy.org

This "BULLETIN" is produced monthly, except July and September, by the Astronomy Section, Rochester Academy of Science. The editor is Frank Boy, 16 Gladbrook Rd., Pittsford, NY 14534 Phone (585) 422-9910 (days) and (585) 385-1518 (evenings), e-mail <editor@rasny.org>

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The Academy Postal address is P.O. Box 92642, Rochester, NY 14692

#### **Rochester Academy of Science**

# BULLETIN

May, 2008 - Vol. 62, #5



"An organization of people in the Natural Sciences"

PRESIDENTS REPORT **MAY 2008** 

Reaching out to the community and to students

At a recent Board of Directors' meeting, we started working on a plan to provide the RAS Sections with resources (small gifts) to use during their student and community outreach programs. The discussion was started as we were in the midst of Astronomy Section running a week-long school vacation program at the Planetarium where these rewards were purchased by some of the **Astronomy Section members** buying them out of their pocket.. Kym Pocius, one of our Directors, recommended that we all look through our closet for new or almost new science trinkets that we can use as motivational givea-ways for contests and challenges for all Sections to use at outreach programs.

These don't need to be anything elaborate, small things like National Geographic pull-outs or

small mind challenging toys make great give-a-ways. So everyone should look through their science closet or attic and pull out a few items to give to your Section officers to use.

We will also be trying to find some monies so we can put together a small endowment fund to support an annual budget for these items. If you want to contribute to such a fund, make your check (or cash) out to RAS and send it to our Treasurer, Bill Hallahan, or give it to your Section President and note that it is for the Outreach Endowment.

Stan Spector President, RAS

#### Editor's Note

Years ago, the *Bulletin* skipped July and August, but required all summer event notices by May 15<sup>th</sup>. In recent summers, the *Bulletin* has been issued bimonthly. requiring only June and July events notices in May, but adding a July 15<sup>th</sup> due date for August and September events.

The question to the Sections and their members is this:

#### Do you have a preference?

Please let me know at: editor@rasny.org

#### **SCIENCE EXPLORATION DAYS 2008**

For over three decades, Science Exploration Days has been providing enrichment opportunities for students in the Rochester area. Founded and organized by the Central Western Section of the Science Teachers Association of New York State (STANYS), the program brings together people from the community, industry and academia to share their scientific expertise and science-based technology with secondary students. Through seminars and a large exhibit hall, the young people become acquainted with research, scientific concepts, applied technology, local natural history, and various topics beyond the standard curriculum.

Hosting the event, since its inception, is St. John Fisher College. Presenters, exhibitors, and teachers with students will be welcomed on campus May 14<sup>th</sup> and 15<sup>th</sup>. Registered senior high students will attend from 9:30 AM to 1:00 PM on Wednesday, followed by the junior high students on Thursday. The public is invited to view the exhibits on Wednesday evening, between 7:00 and 9:00 PM.

The Rochester Academy of Science is an important presence at Science Exploration Days,

especially in the exhibit hall. Hands on exhibits and informative displays by the Sections teach and enlighten visitors of all ages. It's an excellent opportunity for us to make the Academy known and to solicit new members.

You are encouraged to participate in this upcoming event by helping your Section prepare an educational, interactive exhibit. Please volunteer to provide materials or be present to engage with the visitors. Contact your Section Leader or Karen Wolf, who is the RAS liaison to the SED program. These people can provide you with more information.

Jutta Siefert Dudley RAS Director President, STANYS

(Note: St. John Fisher College is located on East Ave. (Rt. 96) at Fairport Rd. (Rt. 31F))



#### **Bacteriophages: The Most Common Life-Like Form on Earth**

There are more bacteriophages on Earth than any other life-like form. These small viruses are not clearly a form of life, since when not attached to bacteria they are completely dormant. Bacteriophages attack and eat bacteria and have likely been doing so for over 3 billion years ago. Although initially discovered early last century, the tremendous abundance of phages was realized more recently when it was found that a single drop of common seawater typically contains millions of them. Extrapolating, phages are likely to be at least a billion billion (sic) times more numerous than humans. Pictured above is an electron micrograph of over a dozen bacteriophages attached to a single bacterium. Phages are very small -- it would take about a million of them laid end-to-end to span even one millimeter. The ability to kill bacteria makes phages a potential ally against bacteria that cause human disease, although bacteriophages are not yet well enough understood to be in wide spread medical use.

(Astronomy Picture of the Day, April 21, 08; photo courtesy of Wikipedia)

# EVENTS for MAY 2008

(For updates to events, check the Academy web site, http://www.rasny.org, or appropriate Section web site.)

#### Fri 02 ASTRONOMY GENERAL MEETING

7:30 PM at RIT, Gosnell Hall, room A300. This month's meeting features Marty Pepe speaking on "Life at the Extremes" plus short talks by members. Marty's talk asks: "What if the competition for basic food and lodging forced us into living at the extremes of the elements on this little blue marble we call home?" He'll look at examples of life at extremes of temperature, moisture and pressure, along with some potential conditions beyond the "Third Rock from the Sun." Visitors are always welcome. Come early and socialize. For information, contact Carol Latta at 230-9548, or <cosmos@rochester.rr.com>

#### Fri 02 FOSSIL MEETING

(Note change of day and location) 7:30 PM Dr. Gordon Baird, SUNY Fredonia, will talk of "Unraveling the great Taghanic mystery in New York and Pennsylvania: ongoing discoveries relating to a global Late Middle Devonian biotic crisis." Meeting location to be announced. For more information, call Al Mura at 227-9931 or check the RAS web site, above, for updates.

#### Sat 09 ASTRONOMY STAR PARTY

9:30 - 11:00 PM at Northampton Park on Hubbell Road. Join us for views of Saturn and deep sky objects in members telescopes. No need to bring equipment or a deep understanding; just come and enjoy the views. Dress warm as evenings may be cool and you may want to stay a while. For more information, contact Jim Seidewand at 723-6225 or cell 703-9876

# Tue 13 LIFE SCIENCES MEETING

6:30 PM at Karen Wolf's home, 1397 Five Mile Line Road. Bring a dish to pass for dinner and help prepare salad for SED the following 2 days. All Sections of RAS are still looking for help on these two very interesting days at St. John Fisher. Karen Wolf 670-9709.

# Wed 14 Thur 15 SCIENCE EXPLORATION DAYS

This annual event at St. John Fisher College provides us with an opportunity to demonstrate and talk about minerals to area junior high (Thursday) and senior high (Wednesday) students. Volunteers will be needed to work at section tables on both days from 9:30 AM to 1:00 PM, and during the public program Wednesday evening from 7:00 to 9:00 PM.

# Tue 20 MINERAL MEETING

7:30 to 9:30 PM. Downstairs at the Brighton Town Hall, 2300 Elmwood Ave. The program will be a talk by Dr. Rick Batt from Buffalo State College entitled "Fire Mountains and other Volcanic Features of the Pacific Northwest...with a Look at Hawaiian Volcanoes Too." Refreshments and door prizes. There will also be a mineral sale held by members. Visitors are welcome. For more information, call Al Mura at 227-9931 or check the RAS web site for updates.

### Thur 22 LIFE SCIENCES HERBARIUM WORKSHOP

10:00 AM to 2:00 PM at the RAS Herbarium, in the basement of the Rochester Museum and Science Center (RMSC). We will work on filing herbarium specimens returned from loans and repairing and re-mounting of specimens. We may also work on entering plant data into the computer database. No experience needed! If you plan to attend, please RSVP to E. Pixley. Then, at RMSC, go to the front desk and ask a person there to call ext. 368, which rings in the Herbarium. You can either bring a lunch or purchase food at the RMSC café. For more information, contact Elizabeth Pixley, herbarium curator (334-0977 or epixley@rochester.rr.com).

#### Fri 25 ASTRONOMY STAR PARTY

3

9:30 - 11:00 PM, off Hopkins Point Rd. in Mendon Ponds Park. Cloud date Saturday. Join us for views of Saturn and deep sky objects in members' telescopes. Members will be on hand to answer questions and show how to navigate in the sky. Dress warm as evenings may be chilly! For more information, contact Jim Seidewand at 723-6225 or cell 703-9876

# Thur 29 LIFE SCIENCES HERBARIUM WORKSHOP

10:00 AM to 2:00 PM at the RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). We will work on filing herbarium specimens returned from loans and repairing and remounting of specimens. We may also work on entering plant data into the computer database. No experience needed! If you plan to attend, please send an RSVP to E. Pixley. Then, at RMSC, go to the front desk and ask a person there to call ext. 368, which rings in the Herbarium. You can either bring a lunch or purchase food at the RMSC café. For more information, contact Elizabeth Pixley, herbarium curator (334-0977 or epixley@rochester.rr.com).