**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 <frank.bov@xerox.com>

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### **Rochester Academy of Science**

# BULLETIN





### A NEW NAME FOR THE **BOTANY-ENTOMOLOGY SECTION**

Discussion has been going on for several months now about a possible change in the name of the Botany-Entomology Section of the RAS. The Botany Section has a long history; it began in 1881 when the Academy was formed. Over the years, the Entomology Section was merged with the Botany Section. All of this makes for interesting historical reading, but does not necessarily entice people to attend meetings.

The question that we have been working to answer is this:

What kind of organization will draw natural scienceinterested, Rochester-area residents to meetings and other activities?

We believe that there is local interest in activities involving the life sciences, in addition to those available at the Rochester Museum and Science Center and other organizations. Therefore, we plan to proceed with a name change from "Botany-Entomology Section" to "Life Sciences Section" of the RAS. We will welcome the involvement of any past or present members of any sections of RAS interested in

a broad range of topics, such as birds, butterflies, amphibians, mammals, plants, ecology, and environmental issues. Our focus will be on the interconnectedness of all living things and the various ways in which we all impact life on the planet. To this end we anticipate scheduling speakers who will inform us and encourage discussion on relevant topics. We also plan to continue to schedule field trips to local sites of interest.

The first meeting of the newlynamed Life Sciences Section will be on Monday, April 17, beginning promptly at 7:00 PM at the Brighton Library in the Friends of the Library Learning Center room (Brighton Memorial Library, 2300 Elmwood Avenue). The program will be a very interesting film titled "The One Degree Factor," which is part of the National Geographic film series "Strange Days on Planet Earth." The film includes topics such as declining caribou populations in Alaska, rising asthma rates in the Caribbean, ailing coral reefs and temperature shifts in the ocean. Are these seemingly random occurrences all linked to global climate change? We hope you will plan to attend and join the discussion.

Elizabeth Pixley Karen Wolf

### UNDERGRADUATE STUDENT RESEARCH **GRANTS FOR 2005-2006**

At the beginning of the fall semester, undergraduate science students at local academic institutions were invited to submit applications for funds to support their research projects. The grants are funded each year by income from the Grace Murray memorial fund and the T.F. and A. A. Murray memorial fund. In addition, the Botany section contributed \$50 for the study of phytoplankton in Keuka Lake.

The two Murray funds generate enough income to fully support the Undergraduate Student Research Grants Program and commemorate the many years Grace Murray dedicated to promoting and maintaining this program. The expense of mailing RFP's has been eliminated by use of an email distribution list. No member dues are used to support this program.

### SAVE THE DATE THURSDAY, APRIL 13 **RAS SPRING LECTURE**

See events listing on page 3 for details.

This year, there were seven proposals submitted. A committee of five reviewers selected one proposal that was of superior quality and therefore a full-funding award of \$500 was awarded to the student's college to pay for supplies and the student was also awarded a \$50 unrestricted award.

Bill Hallahan, Chair, RAS Student Grants Committee

### 2005-2006 GRANTS

### Award #1

\$500, full funding plus \$50 to the student

<u>Title</u>: Evaluating bedrock sources of arsenic near Hollis, NH.

<u>Student</u>: Suzanne Opalka,

<u>Sponsor</u>: Brooks McKinney and Tara Curtin, Department of Geoscience, Hobart & William Smith Colleges.

### Award #2:

\$200, partial funding

<u>Title</u>: Comparison of secondary metabolite genes of *Streptomyces* species using DNA microarrays. <u>Student</u>: Daniel DeSimone <u>Sponsor</u>: Mark A. Gallo, Department of Biology, Niagara University, NY.

### **Award #3**:

\$225, partial funding

<u>Title</u>: Synthesis of Poly(4-vinylphenol) derivatives for application in antibacterial surface coatings.

Student: Vincent Carroll
Sponsor: Ronny Priefer,
Department of Chemistry,
Niagara University

**Award #4**: (\$200, partial funding)

<u>Title</u>: Experimental quantification of phytoplankton growth limitations within Keuka Lake. <u>Student</u>: Matthew Beckwith <u>Sponsor</u>: Tim Sellers, Director of the Center for Aquatic Research, Division of Natural Sciences and Mathematics, Keuka College.

### Award #5:

\$100, partial funding

<u>Title</u>: Determination of a proteomic signature for *P. putida* grown with 2-naphthylamine. <u>Student</u>: Mark Zimmerman. <u>Sponsor</u>: Paul Craig, Department of Chemistry, Rochester Institute of Technology.

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# FREE LECTURE AT NAZARETH COLLEGE

Einstein: The Man, The Scientist And The Thinker

Speaker: Dr. V. V. Raman Professor of Physics, Rochester Institute of Technology

Thursday, March 23, 2006, 7:30 PM in the Shults Community Center Forum, Nazareth College, 4245 East Ave.

Sponsored by the German Cultural Center, the Nazareth German Club and the Nazareth International Club.

FREE and open to the public

Dr. Raman's topic will be Albert Einstein the scientist and aspects of his theory of relativity. This talk is intended for an educated lay audience. Dr. Raman will discuss Einstein's young years and his interaction with the scientific community that did not

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immediately pick up on his special theory of relativity in 1905. He will discuss Einstein's late life as it developed in Germany and then in the United States. Also information on Einstein's relationship to the atom bomb and his later attempts to find answers about gravity and unified field theory. Finally, Dr. Raman will describe Einstein's relationship to culture and religion.

# RMSC DISTINGUISHED SCHOLAR LECTURE

\* \* \*

The Lost Dinosaurs of Egypt

Josh Smith Ph.D. Washington Univ. at St. Louis

Wednesday, March 22 7:30 PM Eisenhart Auditorium

In 1944 bombs obliterated the Munich Museum, and with it a unique collection of dinosaur bones discovered in Egypt in 1911 by paleontologist Ernst Stromer. Over fifty years later, Josh Smith and a team of scientists set out to find "The Lost Dinosaurs of Egypt." Their experience is chronicled in a book by that name, as well as an A&E Documentary. Hear about this amazing adventure and astonishing finds.

Josh Smith is Assistant Professor of Earth and Planetary Sciences at Washington University at St. Louis.

Call (585) 697-1942 for Tickets: RMSC Members

\$14 adult; \$7 student Public \$15 adult; \$8 student

# EVENTS for MARCH 2006

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

### Thur 02 ANTHROPOLOGY MEETING

7:00 PM Vanden Brul Pavilion of the Memorial Art Gallery to discuss the status and direction of the Section. At 7:30 we will join the AIA Lecture in the Auditorium. Dr. Mary Voigt will give a lecture titled "Deities and Dolls: Public and Private Ritual in Early Neolithis Societies" For more information contact Karen Wolf, 670-9709 evenings.

### Fri 03 ASTRONOMY GENERAL MEETING

7:30 PM at RIT, Gosnell Science Bldg; 1st floor room A-300. Our program features talks by three members. Bob McGovern will talk about lunar and solar image processing techniques. Steve Rothstein will speak on deep space imaging from the new club observatory. Brian Oyer will continue his series of talks on basic astronomy, talking about the HR diagram. Visitors are always welcome. For information, call Carol Latta at 230-9548

### Sat 11 BOTANY-ENTOMOLOGY FIELD TRIP

3:00 PM -Winter Picnic. We will have a hike around Karen Wolf's property and Baumens Farm Market's greenhouse where they have many starter plants and vegetables growing. Test your skills at identifying plants newly developed from seeds. Bring a dish to pass for dinner around

5:30 at Karen's home/patio (depending on weather). We will have members' experiences discussions and slides, and also discuss more plans for the new name and format for the section. 1397 Five Mile Line Road, Penfield, 670-9709.

# Wed 15 RAS BOARD OF DIRECTORS MEETING

7:00 PM Brighton Town Hall, 2300 Elmwood Ave., Stage Conference Room.

### Wed 15 RAS BULLETIN

Deadline for the April issue notices to reach the editor.

# Tue 21 MINERAL MEETING

7:30 PM Brighton Town Hall 2300 Elmwood Ave., in the Auditorium. Dan Robertson from MCC will be speaking on gold mining. Refreshments. For information call Chuck Hiler 924-7496 or check the Mineral Section web page for updates.

### Wed 22 RMSC DISTINGUISHED SCHOLARS LECTURE

7:30 PM at Eisenhart Auditorium. Josh Smith Ph.D. of Washington University at St. Louis will deliver a lecture titled: *The Lost Dinosaurs of Egypt*. Call (585) 697-1942 for Tickets: RMSC Members \$14 adult; \$7 student and General Public \$15 adult; \$8 student

#### Thur 23 EINSTEIN LECTURE

7:30 PM at the Shults Center Forum, Nazareth College, 4245 East Ave. Dr. V.V. Raman of the Rochester Institute of Technology will speak on *Einstein: The Man, The Scientist And The Thinker* Sponsored by the German Cultural Center, the Nazareth German Club and the Nazareth International Club. Free and open to the public

### MAJOR EVENTS IN APRIL

### Thur Apr 06 to Sun Apr 09 33RD ANNUAL ROCHESTER MINERALOGICAL SYMPOSIUM

Radisson Hotel, 175 Jefferson Rd. See RAS web site for details. Note: Thursday evening's lecture is free to all RAS members

### Thur Apr 13 RAS RAS SPRING LECTURE

7:30 PM Brighton Library
Community Room, 2300
Elmwood Av., Brighton, NY
News from Mars, An Update on
the Rover Project by Zoë Learner,
Mars Rover Science Operations
Working Group Documentarian.
The lecture is free and open to the
public. Dinner preceding the
lecture at 6:30 PM for \$16;
reservations are required by April
7<sup>th</sup>. Contact Stan Spector at 4611272 or RochAcSci@aol.com.

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