



## President's Message:

### RAS Annual Meeting and Spring Lecture, April 3, 2014

*Jutta Dudley, President RAS*

The Annual Meeting of the Academy will commence at 7:30 p.m., April 3<sup>rd</sup> in the auditorium of the Brighton Town Hall. At the brief business meeting, the results of the election for the Board of Directors will be announced. A ballot is included in this Bulletin on page 2. Please show us your support by returning the completed ballot.

The Spring Lecture will follow the business meeting. We are delighted to have as our guest speaker, Dr. Vasilii Petrenko, a paleo-climatologist. He is doing leading edge climate research with data gleaned from air locked in glacial ice. In recognition of his work, he became one of 16 scientists awarded the prestigious David and Lucille Packard Foundation Fellowship for Science and Engineering. The fellows are awarded funding over a five year period to spend on research of their choice. Dr. Petrenko's work takes him to Greenland and Antarctica to remove ice cores and into the lab to extract chemical clues of atmospheric changes from the ice-trapped air bubbles.\*\*

We look forward to hearing about his climate research and his team's adventures on the Ice. This is a lecture you don't want to miss, so mark your calendar now!

\*\*For more information visit the Petrenko Lab web site and listen to a

brief summary of ice core research at <http://ees.rochester.edu/petrenko/slideshow/>. Read the entertaining and interesting blogs from team members "on the ice" as well:

<http://rochestericelab.wordpress.com>

\* \* \*

### Ice Core Records of Climate Change: Drilling into the Past to Learn about the Future

*By Vasilii Petrenko, Ph.D.*

Human activity is changing the Earth's climate in a potentially fundamental way. There is a need to improve our understanding of the Earth's climate system in order to make more accurate projections of climate in the future. One way to do this is to look closely at Earth's climate history and associated climate drivers (e.g., greenhouse gas concentrations and insolation). Glacial ice cores contain some of the best-dated and highly resolved records of the past environment. In addition to providing information about past temperatures, ice cores contain further information such as past atmospheric composition, wind strength and volcanism. In this talk I will provide an introduction to how ice cores work and discuss some of the most important findings about the Earth's climate history to come out of ice core records.



*V. Petrenko processes ice cores from the Taylor Glacier, Antarctica*

### About the Speaker

Vasilii Petrenko is an Assistant Professor of Earth and Environmental Sciences at the University of Rochester. He holds a BA in Chemistry from the University of New Hampshire, a Master's degree in Education from Harvard University and a PhD in Earth Sciences from UC San Diego. His research focuses on using records of the past atmosphere from glacial ice cores to improve understanding of the Earth's climate system. He and his research group regularly travel to Greenland and Antarctica to conduct their experiments and recover new ice core samples.



A cool camp site on the Taylor Glacier, Antarctica



Glacial air bubbles, like these from an Icelandic glacier, hold clues to atmospheric conditions at time of entrapment.

Photo credits: Antarctica images, V Petrenko. Iceland, P Dudley

## ROCHESTER ACADEMY OF SCIENCE BALLOT FOR JUNE 2014 – MAY 2015 OFFICERS

Please vote for each office and three directors.

OFFICE	NAME	✓	WRITE-IN CANDIDATE
<b>President:</b>	<b>Jutta Siefert Dudley, Ph.D.</b>		
<b>Vice President:</b>	<b>Jeff S. Gutterman, P.E.</b>		
<b>Membership:</b>	<b>open</b>		
<b>Treasurer:</b>	<b>William Hallahan, Ph.D.</b>		
<b>Secretary:</b>	<b>Helen Downs Haller, Ph.D.</b>		
<b>Member, Board of Directors</b>	<b>Douglas Kostyk</b>		
<b>Member, Board of Directors</b>	<b>Lee Tutt, Ph.D.</b>		
<b>Member, Board of Directors</b>	<b>Michael Grenier</b>		

Completed ballots delivered in person at the RAS Annual Meeting & Spring Lecture on April 3, or can be mailed to the RAS post office box: Rochester Academy of Science, PO Box 92642, Rochester NY 14692-0642

### Introducing a new candidate for Director: Michael Grenier

**Education:** Thesis in Phylogenetic Analysis of Dariwillian Diplograptacea graptolites underway to complete paleontological M.S. Geology degree at SUNY Buffalo, Coursework in Computer Science M.S. program at University of Rochester, MBA Marketing & Computer Systems, University of Rochester Simon School 1975, BA Geology University of Rochester 1971.

**Work Experience:** Xerox Corporation (1975-2005): Computer systems analysis & design, IT management, HR management, Principal Consultant; voluntary departure to pursue scientific interests. US Army Reserve.

**Current Science Education, Leadership, and Volunteer Activities:** Buffalo Museum of Science volunteer paleontologist, Museum of the Earth volunteer educator, Webster Community Chest Board of Directors, British Brigade historical association Trustee & past CEO, BSA leader and Merit Badge Counselor, volunteer lecturer about paleontology in schools, youth camps, public outreach events.

**Past Community Activities:** Xerox Work School Partnership Program, Xerox Community Enrichment Board of Greater Rochester, BSA Explorer Post 505, BSA Troop 110, BSA Pack 110, United Way, Data Processing for Disabled People.

#### **RAS Contributions:**

RAS Fossil Section member and director, helped at the 2012 Mineral Show and conducted Boy Scout Geology Merit Badge session, RAS Fall Paper Session presenter 3 yrs, RAS Fall Paper Session moderator 2 yrs.

#### **Goals for Academy:**

My goals as a Board of Directors member include increasing our scientific outreach in the community, particularly with youth, and to strengthen existing programs to ensure long term health of the organization.

# Events for March, 2014

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

## **MARCH EVENTS**

### **FOSSIL SECTION**

The date for the March Fossil meeting has not been set at press time. For more information, please visit [www.rasny.org/fossil](http://www.rasny.org/fossil) or contact Dan Krisher at 293-9033.

### **Fri 07 ASTRONOMY SECTION**

7:00 p.m.–10:00 p.m. RIT, Gosnell Hall, Room A300. Grover Swartzlander from RIT will speak about Exoplanets. Contact Valerie Rapson at 301-3424.

### **Mon 10 ASTRONOMY SECTION BOARD MEETING**

7:00 p.m.–10:00 p.m. U of R, Bausch & Lomb, Chart Room. ASRAS Board meeting. Contact Valerie Rapson at 301-3424.

### **Sat 15 HERBARIUM**

10:00 a.m. – 2:00 p.m. Life Sciences section will hold a workshop at the RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). No experience needed! Plan to come and help with this valuable collection – and see some interesting plants! Lunch is served in the RMSC Cafe until 2 pm. If you plan to attend, please send an RSVP to Elizabeth Pixley. Then, at RMSC, go to the front desk and ask staff person there to call ext. 368, the phone in the Herbarium. For more

information, contact Elizabeth Pixley, herbarium curator (334-0977 or [epixley@rochester.rr.com](mailto:epixley@rochester.rr.com)).

### **Tue 18 MINERAL SECTION MEETING**

7:00 p.m. - 9:00 p.m. at Brighton Town Hall, 2300 Elmwood Ave., Rochester, NY 14618. Dr. Dori Farthing from SUNY Geneseo, Geology Dept. will speak on "X-Ray Diffraction for Mineral Analysis". Door prizes and refreshments. Contact Stephen Busschaert at [mineralvp@rasny.org](mailto:mineralvp@rasny.org) or 585-732-5321.

### **Fri 21 ASTRONOMY WINTER EDUCATION SERIES**

7:00 p.m.–8:30 p.m. RIT, Gosnell Hall, Room A300. Valerie Rapson will talk about Citizen Science projects. For more information, contact Valerie Rapson at 301-3424.

### **Sat 22 LIFE SCIENCES FIELD TRIP**

10:00 a.m. Mendon Ponds Park for Winter Tree ID with Ken Wolf. Meet at Hopkins Point, near 100 Acre Pond. Dress for walking in snow covered trails. Contact Karen Wolf 670-9709. Find a map of Mendon Ponds here: <http://www2.monroecounty.gov/files/parks/MendonPark.pdf>.

### **Sun 23 ASTRONOMY OPEN HOUSE**

12:00-3:00 p.m. Open house at Ionia. For more information contact Bob McGovern (585) 381-7877.

### **Wed 19 RAS BOD MEETING**

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

### **ONGOING EVENT**

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

### **EARLY APRIL EVENTS**

### **Mon 01 FOSSIL SECTION**

7:30 p.m. Brighton Town Hall, Downstairs Meeting Room. Speaker to be determined.

### **Thurs 03 APRIL RAS ANNUAL MEETING and SPRING LECTURE**

7:30-9:00 p.m. Auditorium, Brighton Town Hall.

### **Fri 04 ASTRONOMY SECTION**

7:00 p.m.–10:00 p.m. RIT, Gosnell Hall, Room A300.

**Rochester Academy of Science**  
**P.O. Box 92642**  
**Rochester, NY 14692-0642**  
 Return Service Requested

NON-PROFIT ORG.  
 U.S. POSTAGE  
**PAID**  
 ROCHESTER, N.Y.  
 PERMIT NO. 220

«RASCat» «Sections» «YearPaid»

«FirstName» «LastName»  
 «CO»  
 «Street»  
 «City», «State» «Zip»-«Zip4»

---

March, 2014 - Vol. 68, #3, Page 4

**ROCHESTER ACADEMY OF SCIENCE OFFICERS**

		<b>Phone</b>	
		(585) home	work
Jutta Dudley	President	385-2368	
Jeff Gutterman	Vice President	392-8299	789-1364
Eric Drum	Secretary	216-9313	
William Hallahan	Treasurer	624-1628	389-2552
Open	Membership		
Stan Spector	Past President	461-1272	
Karen Wolf	Anthropology	670-9709	273-4500
Valerie Rapson	Astronomy	(cell) 301-3424	
Karen Wolf	Life Sciences	670-9709	273-4500
Dan Krisher	Fossil	293-9033	
Stephen Busschaert	Mineral	732-5321	
Elizabeth Pixley	Herbarium	334-0977	
Jutta Dudley	Publications	385-2368	
Bob Crumrine	<i>Bulletin</i> Editor	(cell) 813-4157	
William Hallahan	Student Grants	624-1628	389-2552
Paul Dudley	Website Coordinator	385-2368	
Reginald Smith	Director '16	244-4979	
Open	Director '16		
Frank Bov	Director '15	385-1518	422-9910
Douglas Kostyk	Director '14	943-3419	
Lee Tutt	Director '14	872-3033	
Helen D. Haller	Director '15	387-9570	

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

**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. Each Section also sets dues to cover Section-related publications and mailings. For applications and/or more information, contact Jutta Dudley, 140 Railroad Mills Road, Pittsford, NY 14534; by telephone (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>

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