

Eastern Section News

Winter 2010, Vol. 12

Inside This Issue

A Note from Your Eastern Section Chair.....

By Steve Fielman, Chair/DAL for Intermediate *Email:* sfielman@verizon.net

- 1 Message from the Section Chair
- 2 Message from the Section Vice Chair
- 3 Earth Science
- 4 Greater Capital Region Science and Engineering Fair & Science Congress
- 5 Chemistry
- 5 Physics
- 6 Retirees News
- 7 Intermediate and Living Environment
- 8 STANYS Conference at Siena
- 9 Lab Day 2011 Proposal Form
- 10 Informational Flyer for Lab Day 2011
- 11 Contact Information

Not a STANYS member? Join online today!

www.stanys.org

The Science Teachers Association of New York State is comprised of educators dedicated to the advancement of science education. I would like to recognize two longtime STANYS members who were recently honored at the Annual Conference in Rochester. First, I'd like to congratulate **Dr. Bruce Tulloch**, who was awarded STANYS' highest honor by being named a STANYS Fellow. During his time with STANYS Bruce has been a Director for the Eastern Section as well as President for STANYS. Currently he heads the Consortium, which advocates for Excellence in Science Education and Policy. Bruce has been a very strong advocate for Science Education as evidenced by his work as a science teacher, Department Chair, Associate at SED and most recently as Assistant Professor of Education at Union Graduate School. We want to thank "Sir Bruce" for all he has done for us here in our section, as well as for science education across New York State.

Next, I would like to congratulate **Dr. Patricia Price**, Associate Professor of Education at The College of St. Rose, who received the STANYS Service Award. Pat dedicated her life to educational excellence evidenced by her work as an Associate at SED and her tireless efforts on behalf of our pre-service teachers. Pat has held various positions in the Eastern Section, including SAR for Colleges/Pre-Service Teaching. Statewide, she most recently held the elected office of DAL for Colleges. Congratulations to both!

Sadly we need to say farewell to two of our teachers we have been VERY lucky to have in our section as SAR's. Through their dedicated effort and service, they have been able to offer many opportunities for collaboration, dissemination of information, and teacher support at our local Eastern Section and State Conferences. **Joyce Valenti** and **Debbie Valerio** have given countless hours of time, energy and expertise to help not only teachers of the Living Environment and Elementary Science but ALL those interested in bettering the educational process for our students! I would be remiss if I didn't take this opportunity to thank them publically as they move on to another stage in their lives. Their passion for teaching and sharing best practices in the name of STANYS has been obvious to everyone who has met either of them. Thank you, Joyce and Debbie, for being the "True Heroes," both in and out of the classroom! The impact of everything you've done will be felt for years to come. Thank you, Thank you, and Thank you!

We love you and will miss you!

It's Beginning to Look A Lot Like Snow Day's

By Paul Nooney, Jr. – Eastern STANYS Vice-Chair and Earth Science SAR Email: <u>nooneypa@gmail.com</u>



It's hard to believe that time of year is here again. That's right, it's time for faculty from all over the building to approach us as Earth Science teachers and ask the all important question, "What are the chances of there being a snow day tomorrow?" Being the resident weather experts in our schools it is a responsibility that comes with the job and a service we are happy to provide, especially when we're right!

All joking aside, I do hope that the first quarter of the school year is going smooth for everyone. I want to take a moment to congratulate one of our fellow Eastern Section members. Rebecca Remis from Schalmont High School (and former Earth Science SAR) was elected as the STANYS statewide Director-at-Large (DAL) for Earth Science. I look forward to once again working with Becky as she brings her vast knowledge of teaching to "Earthies" all over the state now! CONGRATS BECKY!

Are you a member of the local Earth Science network? In the next few months I would like to plan a "field trip" or two and will be putting out the word of the ESN. If you are not a member, please email me at

pnooney@brittonkill.k12.ny.us and we'll make sure you get added to the list!

Since we are in a relatively "quiet" time in the Earth Science world, I would like to write the majority of this article from my vice-chair podium. Last week, I had the pleasure of spending a few days with other STANYS members at the state conference in Rochester. Walking around at the convention center, it amazed me how much high quality professional development was being offered at the conference. From a presentation given by NASA employees, to a "crime scene" investigation, teachers received ideas on how to bring the latest and best teaching practices into their classroom. What was even more impressive was how many of these workshops were given by STANYS members themselves. This is the kind of professional development you can't find from other sources. Even if you can't make it to Rochester, we offer similar professional development right here in the Eastern Section. The Siena conference and Lab Day are also "teachers teaching teachers", and none of this would be possible without the support of our STANYS membership.

If you're reading this newsletter, you are most likely already a STANYS member. So here is my request for you. Look around your department. Is everyone a member of STANYS? Is your department chair or science administrator part of STANYS? If you answered no to either of these questions, PLEASE encourage them to join. Maybe even point them in the direction of stanys.org where they can enroll online. STANYS is only as strong as its members and you can help us continue to bring you high quality to professional development, here in our section and throughout the state!

We've Been Adopted

By Arden R. Rauch Email: <u>raucha@union.edu</u>

Good news and could be better news, the Earth Science Network (EsNet) and the Environmental Science Network (EnvNet), have been adopted by the Geology Department of Union College. This will enable teachers to continue to receive information about local opportunities. The bad or could be better news is that the Teacher Center, which supported both distribution lists for many years, was not funded and has ceased to operate.

However the opportunities for continuing education for teachers are alive and well. Currently, several tours are being planned: Tour of the Watervliet Arsenal; Tour of the Colonie Price Chopper; and a Tour of the Single Stream Waste Plant.

The Networks are free and you do not have to teach either Earth or Environmental Science to join to receive information about local events. To join, (or remove your name) Email: <u>raucha@union.edu</u>

Don't forget to look at our flyer for Lab Day 2011 at the end of the newsletter. Please post it in your building.

Earth Science Network Update – We're Alive and Well!

By Becky Remis, Membership Chair Email: <u>rremis@aol.com</u>

The Earth Science Network is an informal group of local teachers, college professors, and science professionals who have a common interest in Earth Science. This group has been around for many years with sponsorship from the Greater Capital Region Teachers Center. Since the closing of the teacher center earlier this fall, Arden and I (mostly Arden ©) have continued to keep the network going. The purpose of the group is to provide periodic and brief electronic communication to its members about local events and resources of interest.

Recently, local geologist Paul Griggs (from the Hudson-Mohawk Professional Geologists Association) led a group through the Petrified Sea Gardens in Saratoga Springs. This site is just down the road from Lester Park, and has been closed to the public for several years. However, Paul was able to get us in to see some of the best Stromatolite fossils anywhere, and he was there to answer all of our questions. Other features included joints and "standing stones", as well as many trees and other plant life unique to the area.

This is just one of several opportunities the Earth Science Network offers to local teachers which would otherwise be off limits. If you would like to join the ES Network or update your email with us, please contact either Arden Rauch (<u>raucha@union.edu</u>) or myself (<u>rremis@aol.com</u>) and we will get you "in the loop".



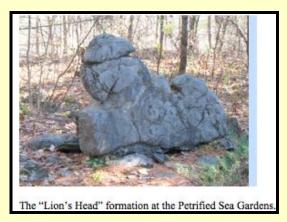
Stromatolites at my feet



"Standing Stones" at the Petrified Sea Gardens.



Checking out the joints at the Petrified Sea Gardens, Saratoga Springs



PAGE 4

Earth Science in Space Has No Boundaries

By Joan Wagner, Fair Director http://www.science.rpi.edu/Science_Fair/ Email: jsw2012@aol.com

The summer Institute, Earth Science in Space Has No Boundaries will run again at RPI, August 8-12. 2011. The number of contact hours will be increased to 55. Please contact Joan Wagner at <u>jsw2012@aol.com</u> for more information. The new application form will be placed on the web this fall.

This program is funded by a grant from NASA and NSF. Participants pay no fee. Graduate hours may be offered at a reduced price.

Participants will upgrade their astronomy knowledge and learn how to integrate space into their day-to-day program. The curriculum for this institute is articulated to the standards.



We need presenters for our Lab Day 2011!

Do you know a science teacher who is interested in sharing great educational practices? Please share information about our Lab Day 2011 with them. A proposal form and an informational flyer are located at the back of our newsletter.

Greater Capital Region Science and Engineering Fair & Science Congress

http://www.science.rpi.edu/Science_Fair/ By Joan Wagner, Fair Director

Email: jsw2012@aol.com



The 21st Greater Capital Region Science and Engineering Fair will take place on March 26, 2011 at RPI. Information about the Fair and all forms can be downloaded from the website, <www.gcrsef>. Registration is done online. All forms must be received by January 18, 2011. Please feel free to contact me <jsw2012@aol.com> if you have any questions.

This is the regional fair for the Intel International Science and Engineering Fair and the STANYS Science Congress. The Intel ISEF will take place May 8-13 in Los Angeles, California. The STANYS State Science Congress will take place next June at the College of St. Rose, Albany, NY. Check the STANYS website: www.stanys.org for more information. The STANYS Science Congress is sponsored by STANYS to support student research and encourage students to choose science related careers.

Society for Science and the Public (SSP) is the sponsor of the Intel ISEF. The organization announced that it has a new sponsor for a national competition for participants in grades 6-8. This new competition is called the Broadcom Master. Our fair hopes to nominate students to participate in this national competition.

Chemistry

By Maria Russo, Eastern STANYS SAR Chemistry Email: chemlady302@yahoo.com

A belated welcome back to school to everyone! Your Eastern Section has been very busy this fall participating in the state conference in Rochester and hosting the annual fall conference at Siena College. To those who could not make it to either event, try making plans now for next year's events.

At the Siena Conference I did a workshop on the benefits of curriculum mapping and in Rochester I had the pleasure of showing chemistry teachers how Matthew Johll's text "Investigating Chemistry: A Forensic Science Perspective" can be used to teach regents chemistry. The publishing company gave a book to each participant and each teacher then was shown two lab activities that we all do, measurement and specific heat, but with a forensic twist. Which brings me to what I would like to write about in this article: How can we find an appropriate textbook for our students? I asked the 30 + participants at my workshop how many used a textbook and only a few hands went up. The reasons for not using one varied but there was one reason that many agreed upon – the students couldn't or wouldn't read them. I think that many students won't read a text because they don't understand what they are reading. So how can we help them? A number of years ago, I did some research on teaching reading in the content area. One article told me to show my students how I learned new material from a text. So I went to the math department borrowed a calculus book, opened it to the contents page, and chose an unfamiliar topic. I then kept track of everything I had to do to understand and use this new concept to answer chapter questions. It was time consuming, frustrating, and not all that rewarding. I shared this with my classes and they thought it was a hoot that I had trouble teaching myself. They assume we can do ANYTHING!! But, I did gain some insight as to how they approach their texts and that was enlightening. The best and the brightest can do it on their own, we already know that. But those other kids will get something from an exercise like this. Yes, it did take up a whole period but it was definitely worth it. From that year on, I did the same exercise with new groups of students. I wish I could say from that day forward they "ate up" their books; but no they didn't. I did get to a few of them though and sometimes that is enough. Try it, I guarantee you will gain insight into how your students approach learning. (Next newsletter I'll tell you what I did with vocabulary)

Save the Date

"The Capital District Chemistry Teachers Professional Study Group will be holding their next meeting at Guilderland High School at 4:00 PM on December 16.

Please contact Colleen Petroff at <u>petroffc@GUILDERLANDSCHOOLS.ORG</u> if you would like to attend."



Physics

By Paul Fedoroff SAR Physics Email: pafedoroff@bhbl.org

If you didn't make it to the Siena Conference this past October, then you should really put it on your to-do list for next fall. As always, there was more than one choice for physics teachers. I actually wound up in an intermediate level session focused on Newton's Laws. You never know what you might come away with, even if you are teaching a different level of the same science. Was anything missing from the sessions? What would you like to see offered next year? Through your recommendations we not only make the Siena Conference informative, we can make it better.

Not only were there informative and hands-on sessions, but also the keynote speaker was all about physics. Dr. Weatherwax showed us all about the satellite that they are building to study lightning. Yeah, that's right, a real satellite. Read on for a potential field trip possibility.

If you didn't make the trek out to Rochester for the state conference, you missed out. The following are some bits of sessions that I thought were interesting.

Continued from page 5



Sandra George from the Western Section showed us how you can make an ocarina out of a raw egg if you drill some holes, blow out the yolk with a straw, and then use that straw to blow across one of the previously punched holes. Can you make a whole scale? Itai Cohen from Cornell showed some crazy slow motion video of fruit fly wings and got really in depth into the lift, drag, Newton's laws, etc. Bill Leacock from the Nassau section had some fun with homopolar motors. If you don't know what that is, look it up. It's simple but still pretty neat. Joe Samascott and Alejandro Victoria from our own section had some fun ideas dealing with magnetism.

At our Physics Breakfast, Gene Gordon, our DAL, had an interesting live video feed from NASA with good stuff about the sun. Also, we were reminded about Cornell's CIPT summer program..., which is now in its last year! So if you've ever wanted to go, go now. If you've gone and loved it, then contact them and see what you can do to help keep the program alive.

If you have not been to one of our Capital Region Physics Teachers Group meetings, then put a little asterisk on your calendar somewhere around January Regents week. That's when we met last winter and it seemed like the least bad time to meet. Don't worry; there will be a snowstorm that day. Send me an Email if you are interested in joining our group., Spearheaded by Rose Finn, the Siena Physics Faculty has graciously offered to host our meeting again and as a bonus we have been offered a tour of Dr. Wetherwax's lab that's making the afore mentioned satellite. As always, we will have our Eastern Section Lab Day in March. I'm sure you've seen the date somewhere in this newsletter. Why not present something? If not present, then let me know what you would like to see there? Anything in particular? As it stands right now, I'll probably have you doing the lab with yourself made balloon equipment that we introduced in October.

Retirees

By Larry Smith, Eastern Section SAR Retirees Email: <u>lfiziks@aol.com</u>

We are all back from a very good and enlightening conference held in Rochester at the beginning of the month. Many retirees were able to get together at several of the workshops, and enjoyed our camaraderie at the Retiree Luncheon. Looks like next year, we are going to need a bigger room for lunch!

At the conference in Rochester, retirees met with Bob Dayton, our DAL, and several state SARs. We are working hard to get the Teacher Reserves, a national volunteer corps of retired science educators "re-serving" education, up and running in our state and section. It offers an abundant resource of trained, experienced, ready and willing professionals to serve the field of education in the spirit of Edward M. Kennedy's Serve America Act. This program will offer a valuable service where there is need. Retired teachers will share their creativity, stimulate growth in their local classrooms, and help them maintain a vibrant life throughout their retirement.

Teacher Reserves is a great benefit to our children and our active teachers. The children may receive one-on-one tutoring, small group activities, and prepared extra-curricular activities. The subject matter presentations the students will receive are tailored to the age of the student. Students will learn valuable study skills, and receive homework assistance.

Current classroom teachers will receive mentoring from retired, experienced teachers. Ideas and help will be offered to create valuable science teaching materials for their classrooms. Their mentors will act as a learning coach.

Continued on page 7

Continued from page 6

Fred Pidgeon mentioned the Children's' Museum in Troy is interested in having some retired science teachers to work there and do some science activities for people/kids who visit the museum program. This could be a springboard for our Teacher Reserves. We are waiting for their new board of directors to be installed before we can volunteer at the museum.

It is hoped that each section, after the Conference, will develop a website which will tailor the needs of individual schools and the gifts of individual teacher volunteers, matched through a Teacher Reserves website and propelled by the creativity of current and former science educators. The website would include a searchable database of schools and services, assessable by zip codes, age of students, discipline, and topic with which schools will be able to input their needs and the Teacher Reserves will be able to respond to these requests.

If any retired science teacher, in good standing with STANYS, wishes to become an active volunteer in the Teacher Reserves Program, please contact me at <u>Ifiziks@aol.com</u>. I will then compile a list of retirees interested, and forward it to Bob Davies. I look forward to hearing from our interested retirees.

The Living Environment

By Joyce Valenti Living Environment SAR Email: joyceevtoy@aol.com

It was great to see so many familiar faces at the annual STANYS Conference in Rochester just last week. So many great Living Environment Workshops were held for teachers to participate in continual Professional Development in our discipline. The highlight for so many of us was The Biology Breakfast where Ken Miller was the guest speaker. We all thank Prentice Hall for sponsoring such a wonderful event once again. We, especially, thank Kathy Hoppe, the DAL for Living Environment, who organized and hosted a great event. The amount of door prizes given away this year was well worth the early attendance to this breakfast meeting!!!

Our own Eastern Section Annual Conference at Siena College in October was also so very successful. I was happy to meet so many "beginning teachers" of Living Environment in "The Making Connections to the Living Environment Course" workshop which is designed specifically to give these teachers a "jump start" to teach the course.

I highly recommend that you try to attend at least one, if not both of these conferences next year. Put it on your calendar today, so you will be reminded of the great opportunities that are in store for you next year.

Intermediate

By Elisabeth Milot – Intermediate SAR Email: <u>emilot@ichabodcrane.org</u>

In previous articles I have written about the importance of technology in the classroom to prepare our students with 21st Century skills, in combination with traditional methods of teaching, (or should I say students have the skills and we as teachers have to keep up with progress?) and find ways to incorporate this technology into our daily lesson plans. After attending a few conferences this year I continue to find new methods to enhance my lessons with technology.

This year's STANYS conference in Rochester focused on STEM education, and many workshops and speakers I attended were built around the concept of technology and its use in planning lessons. I already utilized a few I learned about, such as recording a lab lesson with a flip cam and transferring it to an itouch to allow students who missed a lab instruction to watch it and complete the lab with ease. I also made use of a free, secure social networking site as a tool for communication between students, teachers and parents.

Students are excited and motivated using these new components in our day and they constantly bring in new ideas for the utilization of cameras, smart boards, and podcasts, which in turn has me motivated to try something new and benefit from the enthusiasm that students bring to class.

Seeing student motivation and enthusiasm in the class reinforces my belief daily that it is essential to use technology in the classroom to prepare our students for the future.

Summary of the 29th Annual Siena Conference

By Theresa Newkirk

On Friday, October 15, 2010, the Eastern Section had its annual fall conference. Once again, our gracious host was Siena College. Over 150 participants braved the cold, rainy weather to attend almost an alphabet's worth of workshops related to all areas and levels of science. Warm collegial exchange occurred during a delicious dinner. The evening concluded with Dr. Alan Weatherwax's keynote address about the Firefly Satellite Mission. It was exciting and amazing to learn what is happening right in this area and how local college and high school students are involved. The Eastern Section is arateful to the followina: Siena College for loaning us their idyllic campus for the afternoon and evening, Dr. Lucas Tucker of the Chemistry Department who is our liaison and does so much, the Sponsors who support the conference (see list), and the presenters who give so generously of their time and talents. If you missed this professional development opportunity, check back with this website for information on Lab Day, held at the College of St. Rose on March 5, 2011.

Save the Date! Eastern Section-STANYS Lab Day The College of Saint Rose Saturday, March 5, 2011 Thank you to the Sponsors of the 29th Annual Eastern Section of STANYS Siena Conference!



Especially Dr. Lucas Tucker

EASTERN STANYS



College of Saint Rose



SPRING LAB DAY 2011 PROPOSAL FORM



College of Saint Rose

Saturday, March 5, 2011 – College of St Rose, Albany, NY

Lab Day offers teachers the opportunity to try new hands-on laboratory activities in compliance with the latest NYS Standards. Every effort is made to have workshops for all science disciplines (biology, chemistry, earth science and physics) and all grade levels. Please fill out a proposal form if you are willing to present a workshop OR if you would like to suggest a workshop that should be presented.

Colette S. McCarthy 1178 Baker Ave. Schenectady, NY 12309 518-281-6991 mccarthyc@schenectady.k12.ny.us

Proposals must be returned by December 23, 2010 Mail to: Or download form from our website: www.eastern-stanys.org

Title of Workshop:___

Description of Workshop		
Discipline	Level: H.S.	M.S. Elem
Do you have a minimum and /or maximum number of participants?		
Do you have technology needs?		
Do you have a preference for when your Morning		No Preference
Name of Presenter:		
Name of School:		
Preferred Address: (Hm or School)		
Preferred Telephone Number: Preferred Email:		
Name(s) and School(s) of additional Presenter(s):		



College of Saint Rose





College of Saint Rose

Save the Date! Eastern Section-STANYS Lab Day The College of Saint Rose Saturday, March 5, 2011

*Hear a great presentation on what is new in the Atlantic. *Spend quality time in 2 hands- on laboratory activities. *Choose from labs in every content and discipline. *This year we are featuring a.m. & p.m NASA workshops *Enjoy Continental Breakfast & Lunch with your colleagues.

CALL FOR PRESENTERS:

We are looking for classroom teachers to present their engaging activities and lab experiences to our section members and pre-service teachers.

Full labs and electronic classrooms are available.

For a Presenter Proposal form or more information, contact: Colette S. McCarthy Lab Day Coordinator 1178 Baker Ave. Niskayuna, NY 12309 (518) 281-6991 mccarthyc@schenectady.k12.ny.us

Please watch the Eastern Section-STANYS Newsletter or check the STANYS website (<u>www.eastern-stanys.org</u>) for further information.

If you have any questions or concerns regarding your particular branch/level of science please feel free to contact your STANYS Eastern Section Subject Area Representatives:

Chemistry - Maria Russo - chemlady302@yahoo.com College/Pre-service - Pat Price - pprice2@nycap.rr.com Earth Science - Paul Nooney - nooneypa@gmail.com Elementary - Debbie Valerio - mom4agrev@gmail.com Env. Science/BaP - Arden Rauch - raucha@union.edu Intermediate - Elisabeth Milot - emilot@ichabodcrane.org Living Environment - Joyce Valenti - joyceevtoy@aol.com Physics - Paul Fedoroff - pafedoroff@BHBL.org Retirees - Larry Smith - Ifiziks@aol.com Lab Day – Christine Stankavich - ceanaczyk@aol.com Membership - Becky Remis - rremis@aol.com Newsletter - Nate Covert - NMC1205@yahoo.com Siena Conference - Theresa Newkirk - † Newkirk@saratogaschools.org Science Congress & Joseph Henry Science Fair - Amanda Parker - parkera@strose.edu Science/Engineering Fair - Joan Wagner - jsw2012@aol.com Science Olympiad - Scott Holdren - sholdren@rcscsd.org

Chair/DAL for Intermediate - Steve Fielman, - sfielman@verizon.net

Science Teachers Association of NYS Eastern Section 105 Mountainview Ave. Troy, NY 12180 NON-PROFIT ORG. U.S. POSTAGE PAID

PERMIT NO. 182 SCHENECTADY, NY