



The Science Explorer

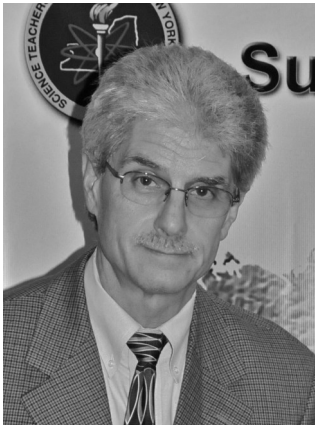
Suffolk Section: Science Teachers Association of New York State Newsletter

Volume 40

Number 1

Fall 2011

The Chairperson's Corner



Glen Cochrane

Welcome back to the start of another year. For most of us, our job in education renews every September, winds

through the seasons and is brought to a conclusion in June. This year will bring new students, changes in staff, and maybe different administrators. I wonder what other changes are in store for us in policy, curriculum, and the "big themes" of the season. One constant that I have experienced is that of change. There is always some new idea, theme, technique, tool we need to incorporate. As teachers, are constantly challenged to review all these

"new ideas" and adapt those components that help our students achieve success. In addition to whatever your principal, director, and superintendent have in mind, there are a few big things on the horizon. I believe the new Science Frameworks released this summer, 21st Century Skills, budgetary issues, and districts developing a new teacher evaluation system incor-

(Continued on page 3)

Special points of interest:

- **Atlantis Marine World: October 16, 2011**
- **MATEX - Islandia Marriott: October 27, 2011**
- **NYS Science Olympiad Coaches Clinic: October 28-29, 2011**
- **STANYS 116th Annual Conference - Rochester Convention Center: November 5 - 8, 2011.**
- **Suffolk STANYS Annual Conference: April 21, 2012 (Brookhaven Lab)**
- **Annual Awards Dinner: May 2012**

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Atlantis Marine World Aquarium

October 16, 2011 (Sunday)

Suffolk County Science Teachers and Atlantis Marine World are offering teachers and families a unique opportunity to visit Atlantis Marine World, the premiere marine facility of Long Island. Teachers and members of SCSTA are **free** and guests pay

group rates. The program will begin at 10:00 a.m. **Reservations are required.** If you would like to participate, make your reservation by October 11 at the *Eventbrite* website listed on page 5.

The following free guided tours will be available on a "first come" basis so be sure to sign up; you must sign up when you register.

- Two Behind-the-Scenes tours (15 max: not good for young children)
- Two Tours of Aquarium Exhibits (20 max)
- One Behind-the-Scenes Tour of the Riverhead Foundation (20 max, can't re-enter aquarium after tour).

(Continued on page 5)

Science Materials and Textbook Exhibit (MATEX)

Thursday, October 27, 2011 3:00—6:00 p.m.

3635

-232-3000

Postponed

As in the past, we expect to have a variety of exhibits, review books, lab equipment, and computer programs for science educators at the elementary, middle school and high school levels. The vendors are always generous with giveaways and we have many door prizes to be won!! Don't miss this opportunity to find out the latest innovations to be used in the science classroom.

WHO'S WHO IN STANYS SUFFOLK SECTION LEADERSHIP

The following people can provide information on membership, teacher workshops and other activities. The Subject Area Representatives (SARs) can provide current information on NY State Education Department Core Curricula and testing programs.

♦Indicates individuals who serve in more than one capacity and for whom contact information is listed only once.

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Chairperson's Corner *(continued from page 1)*

porating student results will contribute to changes in the future.

July 2011, the National Research Council released a prepublication copy of *"A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas"* which is available for download from National Academies Press. For those that don't remember, the National Research Council released *"National Science Education Standards"* in 1996 and that document among others served as the basis of our current science cores. Once finalized, this *Framework* may lead to an update of the science program in New York. It offers big challenges and should serve to improve our current standards. It is my hope that New York science teachers will be involved with the development of the standards for New York State. I encourage you to take a look at the Framework that has a goal that I believe we can all relate to. The introduction states:

"The overarching goal of our framework for K-12 science education is to ensure that by the end of 12th grade, all students have some appreciation of the beauty and wonder of science; possess sufficient knowledge of science and engineering to engage in public discussions on related issues; are careful consumers of scientific and technological information related to their everyday lives; are able to continue to learn about science outside school; and have the skills to enter careers of their choice, including (but not limited to) careers in science, engineering, and technology. Currently, K-12 science education in the United States fails to achieve these outcomes, in part because it is not organized systematically across multiple years of school, emphasizes discrete facts with a focus on breadth over depth, and does not provide students with engaging opportunities to experience how science is actually done. The framework is designed to directly address and overcome these weaknesses." (National Research Council, 2011).

For the past few years, 21st Century Learning Skills have been a "big theme" in my district. In addition to the core content of our program, teachers have been encouraged to provide opportunities to develop these skills. In our rapidly changing world with an overload with ever-expanding knowledge and communication paths, these are the skills that have been identified as important for our students. Tony Wagner in his book, *"The Global Achievement Gap,"* advocates a curriculum that is interdisciplinary, integrated, project-based and utilizes seven survival skills. Whether they are called 21st Century Skills or good teaching, I'd like

to think we have been incorporating these skills all along. In my building, we have had meetings modeling activities and tools that use these skills. I expect this emphasis to continue. Look for this "new package" of goals for your students and try lessons that encourage development of those skills.

"The overarching goal of our framework ...is to ensure that by the end of 12th grade, all students have some appreciation of the beauty and wonder of science..."

- Critical Thinking and Problem Solving
- Collaboration across Networks and Leading by Influence
- Agility and Adaptability
- Initiative and Entrepreneurialism
- Effective Oral and Written Communication
- Accessing and Analyzing Information
- Curiosity and Imagination

So as you jump into another year with your students, look to do something new, teach for depth, and include 21st century skills. The Suffolk Section of STANYS is here to help you implement these skills. We have a variety of great programs planned, including field trips, our science materials fair (MATEX), and our Spring Conference. Please try to take advantage of the many opportunities that STANYS and our Suffolk Section offer. I look forward to working with you and wish you all a successful year.

National Research Council. 2011. *A Framework for K- 12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. Board on Science Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

http://www.nap.edu/catalog.php?record_id=13165 ■



2011 Outstanding Senior Science Awards

Brian Vorwald, Awards Co-Chair

Each year the STANYS Suffolk Section invites high schools that are patrons of the *Suffolk STANYS District Member Services Program* to select an outstanding science student in their graduating class to be recognized at our Annual Awards dinner in May. The students are presented at the dinner by a science teacher of their choice and both are guests of the Suffolk Section. Last year 31 students were invited to the dinner which was held on May 23rd. It's always the highlight of our year to hear the outstanding achievements of these talented young people. Each student was presented with a plaque commemorating their award.

This year, each high school was presented with a perpetual plaque on which the student's name was inscribed and on which future awardees can be listed. The list of these students and the teachers invited to present them is shown below. Suffolk STANYS applauds these amazing students and wishes them well as they embark on their next adventure, their higher education careers.

High School	Student Awardee	Teacher Presenter
Bay Shore High School	Ethan Madigan	Joe Hanley
Bayport-Blue Point High School	Brandon O'Brien	Donna Edgar
Brentwood - Ross High School	Kendra Cornejo	Rebecca Grella
Brentwood - Sonderling High School	Norman Cao	John Fritz
Centereach High School	Mitchell Pang	Timothy Seif
Cold Spring Harbor High School	Elliot Jonathan Horlick	Robert Colascione
Commack High School	Erica Portnoy	Richard Kurtz
Connetquot High School	Shruti Parikh	Maria Catapano
Copiague - Walter G. O'Connell HS	Emily Hall	Renee Locker
Deer Park High School	Emma Rosenthal	Theodore Smirlis
East Islip High School	Julie Fishman	Kathleen Dinota
Half Hollow Hills High School East	Scott Dunaisky	Matthew DiPalmo
Half Hollow Hills High School West	Dianna Hu	Glen Cochrane
Harborfields High School	Pamela Wax	Nicole Rhodes
Hauppauge High School	Krystina Choinski	Brian Thulhamer
Huntington High School	Michael O'Connor	Dame Forbes
Islip High School	Alda Yuan	John Quackenbush
Miller Place High School	Suzanne Greene	Teal Vella
Mount Sinai High School	Kenneth Gunasekera	David Chase
North Babylon High School	Kevin Schmid	Annette Kuruc
Patchogue-Medford High School	Laura Shebroe	Robert Pearson
Riverhead High School	David McKillop	Kimberly Skinner
Sachem High School East	Dania Malik	Colleen Lohr
Sayville High School	Neha Kinariwalla	Maria Brown
Ward Melville High School	Ilana Scandariato	Marnie Kula
Westhampton Beach High School	Matthew E. Floyd	Ben Grodski
West Islip High School	Brittany Ciesluk	Melissa Morana
William Floyd High School	Frank Hackenburg	Christina Brazelli

The adjacent table lists the Outstanding Senior Science Students who were unable to attend the Awards Dinner. SCSTA congratulates them on their outstanding achievements.

High School	Student Awardee
Amityville High School	Phuong Tran
Longwood High School	Stephen Grant
Mattituck High School	Alex Scalia
Bellport High School	Gourav Khadge
Walt Whitman High School	Rubab Rehman



Suffolk STANYS Teacher Awards Program

At the annual dinner last May, teachers were recognized for their dedication and service as science educators. Awards in 2011 were given for *Elementary Science Teacher of the Year*, *Middle Level Science Teacher of the Year*, and *High School Science Teacher of the Year*. Each of these most deserving individuals has performed meritorious service to science education. They've been recognized as outstanding teachers who help students and other teachers both inside and outside the classroom. Each of these individuals received their awards before family, friends and colleagues. Their principals and superintendents were invited to the dinner as the guests of Suffolk STANYS. We once again congratulate each of these awardees and sincerely thank them for their contributions to science education. Each has been highlighted on pages 6 and 7.

(Continued from page 1)

An introductory meeting to illuminate what Atlantis can offer you and your students will be held at the beginning of the program. Tour times will be announced at the group meeting. Riverhead Foundation will be at the end of the program since participants may not re-enter the aquarium.

If you have questions, contact Glen Cochrane (SCSTA Chairperson) at 631 689 8027 (H) or email at gblink735@gmail.com

A Certificate of Participation will be available for teachers that can re-

ceive professional development credit from their districts.

Price: Free for teachers and group rate for family members

(Adults \$14.50; PreK-6th \$12.00)

Sign up at:

<http://scstaatlantis2011.eventbrite.com/>

Date: October 16, 2011(Sunday)

Time: 10:00 A.M.

Location: Atlantis Marine World
431 E. Main Street
Riverhead, NY 11901



Atlantis staff member teaches about horseshoe crabs.



Pamela Eglin has taught at Bay Shore High School for the past 10 years. She earned her B.S. in Chemistry from Florida Atlantic University and was awarded a Master of Arts in Teach Science - Chemistry from Stony Brook University. During the 2010 - 2011 school year she taught Honors Chemistry, International Baccalaureate (IB) Chemistry, and "Everyday" Chemistry. Her previous teaching assignments have included forensic science and regents-level chemistry. She has also

2011 High School Teacher of the Year

Pamela Eglin - Bay Shore High School

coached Bay Shore High School's JV softball team.

Pam's experience with curriculum development has included creating the IB Chemistry program. She created a laboratory manual with inquiry-based activities that is used by all of the Bay Shore HS chemistry classes and was instrumental in establishing an after-school AIS program that assists weaker students with meeting the New York State Education Department's (NYSED) laboratory requirement and reinforces their skills. Pam has also taken a leadership role in organizing after-school and evening review sessions for students as they prepare for chemistry exams (regents, SAT II, and IB). She also created a cyber textbook for topics covered in the NYSED Physical Setting/Chemistry Core Curriculum.

Pam has served as a mentor for new teachers and as a student teacher's cooperating teacher. She

has always been willing to have student observers in her classroom. She has conducted workshops for her elementary, middle level, and high school colleagues at which she has shared her cooperative learning strategies that facilitate increasing students' accountability and responsibility for their own learning.

Donna Bettinelli, Director of Science (K-12), wrote that, "Pam reflects the highest standards of professionalism" and Bay Shore High School Principal, Robert Pashkin, commented that, "Ms. Eglin is known to be a demanding, yet caring teacher who has high expectations for her students which results in their performing at an extraordinary level." Assistant Principal, Michelle Garrett, concluded her letter of support by stating that, "...she (Pam) is an inspiration to the teaching profession." ■



2011 Middle Level Teacher of the Year

Ashley Bloch - Islip Middle School

Ashley Bloch teaches accelerated 8th grade Earth Science and inclusion general science at Islip Middle School. She earned her B.S. in Biology from Stony Brook University and was awarded a M.S. in Science Education from Dowling College. Ashley has previously taught self-contained students eighth grade general science and in inclusion 7th grade general science.

Ashley is starting her third year working with the Brookhaven Na-

tional Laboratory's (BNL) science teacher partnership as a DOE-ACT fellow and is the first middle school teacher get have beam time on the National Synchrotron Light Source (NSLS). She is a member of the BNL Open Space Stewardship Program (OSSP) advisory panel. Ashley has shared her experiences and expertise by presenting workshops at the National Science Teachers

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Association conferences and at BNL. Newsday recently featured research Ashley's students performed regarding household water filters at the NSLS. She has served on an American Museum of Natural History panel that reviewed education materials and has written and shared inquiry-based curricula as an outgrowth of the Middle School Enhancement program

and Stony Brook University's Center for Science and Mathematics Education (CESAME)

Ashley clearly has the support and respect of her administration and colleagues. Islip Middle School Principal, Dr. Timothy P. Martin, wrote that, "Mrs. Bloch's willingness to 'go the extra mile' makes her a valued member of our middle school community . . ." and Assistant Principal Chad Walerstein commented that "Ashley is the epitome of a hard-

worker . . . and involves her students in rigorous and fun instruction in her classroom." Her colleague, science teacher Erica Rinear, further stated that, "Ashley's professionalism is surpassed by none."

The Suffolk Section's Executive Committee is pleased that Ashley has agreed to serve as the section's Intermediate Level Subject Area Representative (SAR). We welcome her to the STANYS SAR network and look forward to working with her.



Susan Turrini has taught fifth grade science at the Thomas J. Lahey Elementary School in the Harborfields Central School District for the last 17 years. She has brought a unique combination of experiences to the teaching profession from her previous careers as a Field Artillery Nuclear Missile Officer in the United States Army and with the Shell Oil Company and Nabisco Foods Group.

As the science teacher on a fifth grade team, Mrs. Turrini has strived to integrate all subjects together and to teach her students about the processes of science. She uses science as the vehicle for teaching language arts and mathematics. Her students are engaged in a problem-

2011 Elementary Teacher of the Year

Susan Turrini - Thomas J. Lahey Elementary School

solving and hands-on approach to the learning of science. Subjects included in her curriculum include many disciplines within the Earth and Space Sciences and living things and classification.

Susan is an active contributing member of work teams and committees and has hosted student teachers as a cooperating teacher. She has mentored teachers new to the school. One of her past mentees, colleague Deborah Hutzler, wrote in her letter of support that Susan, "...inspires students to ask questions, think, and dive into research and the science world around her." She fur-

ther stated that, "...being mentored by Susan helped to reignite my passion to continue to learn and add life to ordinary science lessons."

In her letter of support, Principal Florence Tuzzi articulated how Susan is an integral part of the school community. She stated that, "Mrs. Turrini creates a learning community in which students assume responsibility for themselves and one another..." and that "...she is a model teacher who helps students perform to capacity and beyond."

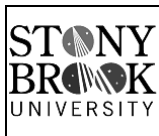


Awards Co-Chairs Brian Vorwald and Maria Brown with Sayville HS student winner Neha Kinariwalla.



James Ripka, 2010-11 Suffolk Section Chairperson, welcomes guests to the Awards program.

Opportunities for Teachers & Students



CESAME Programs for the 2011 – 2012 Academic Year

You and your students are invited to participate in a wide variety of activities that are offered at the **Center for Science and Mathematics Education (CESAME)** at Stony Brook University. With programs that vary from graduate classes to in-service, professional development courses, to school field trips, and much more, there are many opportunities to interest teachers and their students. A look at the CESAME web site (www.stonybrook.edu/cesame) will lead you to information about field trips appropriate for middle school students, as well as for students who are studying earth science, living environment, chemistry, and physics. There are different opportunities for Regents and AP level classes.

The Center for Science and Mathematics Education (CESAME) at Stony Brook University offers hands-on science **field trip experiences** for secondary school classes.

The **Biotechnology Teaching Laboratory** offers four different laboratories that meet the criteria for both Regents level Living Environment and AP Biology classes. Middle school students are welcome to participate in the Forensic laboratory. Options include Bacterial Transformation, Forensics, Polymerase Chain Reaction, and Restriction Enzyme Analysis.

The **Chemistry Teaching Laboratory** offers two different experiments to meet the needs of Regents and AP level students. Options include Copper Cycle Experiments and Separation of a Mixture (Green Chemistry- Cleaning Dirty Water).

The **Geosciences Teaching Laboratory** offers experiments to meet the needs of Regents level students. Offerings include Topography, Weather Variables and Microclimates, Porosity and Permeability Study and Stream Table Study.

The **Physics Teaching Laboratory** offers a laboratory to meet the needs of all levels of Physics classes as well as AP Chemistry classes. The lab offered is Charge to Mass Ratio of an Electron. Additional options will be added soon for middle school physical science classes.

The **Protein Modeling Competition** is scheduled for January 2012. Details will be posted on the CESAME web site. Those interested in competing are encouraged to check the web site for more information.

For additional information, visit the CESAME web site, www.stonybrook.edu/cesame. To reserve a spot for your classes, or if you have questions about the programs call the CESAME office, 631 632 9750, or send email to: cesame@stonybrook.edu. ■

Website & Facebook

Melissa Torre

Suffolk STANYS has its own website at www.SuffolkSTANYS.org. If you visit the website you will get up to date information about scheduled meetings, trips, and events. You will also get access to suggested links separated by subject area & contest your students might be interested. You can even find some of our newsletters on-line!

Join the 285 people who liked Science Teachers Association of New York State (STANYS) on facebook.com. Keep up with the president of STANYS, Fred Pidgeon, as well as other STANYS sections around the state.

Don't forget to utilize our state website as a resource: <http://www.stanys.org/>

Earth Science Laboratories for your students at Stony Brook University

Programs that give students hands-on learning experience are available through the Center for Science and Mathematics Education at Stony Brook University. Many of these programs can be performed at your school. Earth Science teachers Steve Dickson and Chris Marotta will teach your students about contours and topography, by having them take measurements in the field. In addition to the *Topography Lab*, there are other programs that will come to your school. *Microclimates* is a lab which focuses on the climates that we create in the design of our buildings and landscapes. The *Porosity and Permeability Lab* demonstrates the movement of liquid through different materials. The *Stream Table Lab* employs an "EMRiver System" professional grade stream table. Students will perform a variety of experiments ranging from developing glacial landforms to the spread of contamination in water and sediments. This program can be run together with the *Porosity and Permeability Lab* as described above, at the Stony Brook campus.

A Geologic Field Trip to Caumsett State Park in Lloyds Neck is also available. This visit explores the geologic processes along Long Island's North shore, its glacial and Cretaceous sediments and involves experiments and measurements performed by the students. A geologic field trip may alternatively be planned for the David Weld Sanctuary in Smithtown.

To schedule a program, please call (631) 632-9750 or email cesame@stonybrook.edu. Most labs are designed for up to 24 students. However, more students can be accommodated on the *Topography Lab* and the field trips. Times are flexible. Fees may be waived for "High Needs" districts. Join us in these authentic experiences for your students. ■



Chris Marotta (left) from Stony Brook teaches geologic processes at Caumsett State Park to 8th grade students from Three Village CSD.

Long Island Science Congress

The Long Island Science Congress (LISC) is an adjudicated exhibit of science projects by students of Nassau County and Suffolk County middle, junior high and senior high schools, sponsored by the Long Island Sections of the Science Teachers Association of New York State (STANYS). Each year, hundreds of students from nearly 100 schools participate in this science

competition. There are two divisions: Junior Division for students in grades 7-8 (including 9th graders taking their first regents science course), and Senior Division for high school students in grades 9-12. Students are allowed to work in groups. The Congress is traditionally held on two week days in April, with an Awards Ceremony in May. Each school may enter up to 10 projects. A teacher liaison may start

filing on December 1, 2011. Final deadline for registration is January 31, 2012. For more information go to the LISC website at: <http://www.liscicong.org/>



Professional Development Opportunities

Museum of Natural History Seminars on Science

Katie Rasmussen



For those of you looking for credits, registration is open for the 2nd session of **Seminars on Science** from the American Museum of Natural History. The courses are ONLINE and can be taken for up to 4 graduate credits each. Courses run Oct 24—Dec 4. Courses will also be run in the Spring and Summer (whichever works best for you). You can sign up now at learn.amnh.org.

Courses include: *Evolution; Earth: Inside and Out; The Ocean System; The Solar System, Genetics, Genomics, Genethics; Climate Change; The Link Between Dinosaurs and Birds; and Space, Time*

and Motion. Since the courses are fully web-based, there is no need to come to the museum at any time and all courses are led by both an experienced classroom teacher and a PhD scientist in the field.

Registration for Session 2 closes October 10, 2011. Early registration discount ends September 26, so sign up now!

Let us know if you have any questions—we're happy to talk about the program or the courses. Email or call for more information:

Phone: 800-649-6715

Email: seminfo@amnh.org

Web: <http://www.amnh.org/learn/> ■



Put **Earth Science Week, October 9-15**, on your calendar and go to the website for all sorts of resources and activities.



Ward Melville High School Science Olympiad team from East Setauket, placed 2nd in the 2011 New York State Tournament and competed in the National Tournament held at the University of Wisconsin. New York State has the most high school teams in the country, with over 300 teams from 47 states. (see article on page 19).

The Institute for the Development of Education in the Advanced Sciences (IDEAS) of Hofstra University Has Opportunities for You!

Jacqueline Grennon Brooks

IDEAS offers a number of workshops for teachers. Professional Development Credit or Hofstra University graduate credit is available. More information and registration information is available on the website. Enrollment may be limited. These workshops require registration and have fees. Please go to the IDEAS website to download a registration form: www.hofstra.edu/IDEAS

Contemporary Topics in Science

Various Dates

Professor: Jacqueline Grennon Brooks, Department of Teaching, Literacy and Leadership, Hofstra University

This workshop offers participants the opportunity to attend IDEAS lectures with a study group of citizen-scientists seeking to better understand the lecture topics within the framework of organizing science principles. Participants analyze the lecture topics using the unifying concepts described in the national science education standards as a backdrop. Students must attend eight hours of IDEAS lectures and/or workshops specified below, and complete assigned written coursework.

A choice of several of the following dates: October 6, November 8, November 16, and/or December 1, 2011.

Various locations, Hofstra University Campus

This workshop is appropriate for all teachers, grades K-12, and interested members of the public.

Geology of Metropolis: A One or Two Day Geology Workshop

**Saturday/Sunday, October 23-24
8:30a.m.-5:00 p.m.**

Professor: Charles Merguerian, Department of Geology, Hofstra University

Day 1: Saturday, 22 October 2011 – Lecture and Q&A seminar on the geology of the New York Metropolitan area (includes viewing of History Channel: How The Earth Was Made) with workshops on rock identification and geologic map interpretation.

Day 2: Sunday, 23 October 2011 – Boat ride around Manhattan via Circle Line Cruises. Excursion will focus on landforms with cross-sectional views of the region drawn during transit. Students will meet at boat terminal.

Locations:

Gittleston Hall, California Avenue,
Hofstra University South Campus
Circle Line, Manhattan (Sunday)

This workshop is limited to 20 students: enrollment preference will be given to students registering for Hofstra University credit.

Professional Development Day at Long Island Aquarium and Exhibition Center (formerly Atlantis Marine World)

**Tuesday, November 8, 2011
8:30 a.m.—2:30 p.m.**

IDEAS is offering an opportunity for science teachers of all levels to enhance their science content knowledge and examine how the new “*Framework for K-12 Science Education*” will impact their teaching practices. Opening and closing sessions will focus on the role of literacy and argument in science teaching and assessments, as described in the new science frameworks. The day will be held at the *Long Island Aquarium and Exhibition Center (Atlantis)*, and includes a range of topic and grade level specific workshops presented by aquarium educators plus free time to explore.

Location: Long Island Aquarium and Exhibition Center, 431 East Main Street, Riverhead, New York

This workshop is appropriate for all teachers of science, grades K-12.

Forensics in the Classroom: A Workshop for Teachers of Grades 5-12

**Wednesday, November 16
3:30-9:30 p.m.**

Professor: Scott Kovar, Senior Forensic Microscopist, Nassau County Police Department and Director, Forensic Science Program, Hofstra University

This six-hour professional development workshop includes several sessions on aspects of forensic science led by members of the Hofstra forensics faculty (a part of the Chemistry Department). Each session concludes with a brief dis-

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cussion that links the material of the workshop to the new "Framework for Science Education."

Location: Hofstra University Club, David S. Mack Hall, Hofstra University North Campus

This workshop is appropriate for teachers of science, grades 5-12.

Name That Rock

Saturday, January 21, 2012, 8:30 a.m. - 5 p.m

Speaker: Charles Merguerian, Department of Geology, Hofstra University

This eight hour mineral and rock identification workshop includes simple hand sample description, microscopic examination, and classification, assisting attendees in learning and teaching the basics of classification of geological materials.

Location: Gittleson Hall, California Avenue, Hofstra University South Campus

This workshop is appropriate for all teachers, grades K-12, and interested members of the public. ■



Long Island Geologists Programs



Each year the activities include field trips relevant to the geology of Long Island in June and October and in April there is a conference on the "Geology of Long Island and Metropolitan New York." The abstracts of past presentations at the conferences are on the Long Island Geology web site at www.geo.sunysb.edu/liq/. The next and Nineteenth Conference will be on Saturday April 14, 2012. Teachers and professional geologists can receive in-service credit for participating in these events.

Field Trip: "Geology of Wildwood State Park"

Saturday October 29, 2011 9:00 a.m. to 12 noon

led by Gil Hanson and Glenn Richard of Stony Brook University

Wildwood State Park in Wading River is on the remnants of the eroded Harbor Hill Moraine. The park comprises 600 acres of undeveloped hardwood forest terminating on the high bluff overlooking Long Island Sound. The beach area has many large boulders that were transported here by the glaciers. During this field trip we will characterize the different types of erratics and their sources, discuss the history of the bluffs, and consider the history and sources of the loess (wind-blown silt) in a kettle in the park.

Three contact hours toward in-service credit for teachers or professional geologists. More information regarding the field trip is available at www.geo.sunysb.edu/liq/ or contact Gill Hanson at: gilbert.hanson@stonybrook.edu



STANYS 116th Annual Conference

November 5-8, 2011

Rochester Riverside Convention Center

<http://www.stanys.org/>

Fall 2011 Science Evenings With IDEAS

These events are free and open to the public. Teachers attending these Science Evenings will receive certificates for one toward professional development credit. Each program is from 7:30 p.m.—9:00 p.m.

Thursday, October 6, 2011

Our Immune System Controls Us: When, Where and How

Autoimmune conditions are characterized by the presence of autoantibodies that affect multiple organs, including our brain and thus our behavior. Dr. Diamond unravels the mysteries of when, where and how these antibodies control us. She points to avenues for treatment or prevention of autoimmune conditions, specifically Lupus, a disease that currently afflicts the bodies and minds of 1 million Americans.

Dr. Betty Diamond, Director, Laboratory of Autoimmune Diseases and Musculoskeletal Disorders,
The Feinstein Institute for Medical Research, North Shore-LIJ Health System

Location: The Helene Fortunoff Theater (Monroe Lecture Center, California Avenue, South Campus)

Wednesday, November 16, 2011

“Crime is common. Logic is rare.” Using Scientific Data to Solve Crimes

Recently the forensic science field has come under attack, as many “traditional” forensic science disciplines are not supported by sound scientific research.

Come learn the difference between the Hollywood version of crime scene investigation and reality through examples from Scott Kovar’s extensive casework.

Scott Kovar, Senior Forensic Microscopist, Nassau County Police Department and
Forensic Science Program, Department of Chemistry, Hofstra University

Location: University Club (David S. Mack Hall, North Campus)

Thursday, December 1, 2011

Low Level Radiation: The Impact on Society and the Effects on YOU

Given the realities of the Fukushima nuclear reactor, cell phones, airport scanners, medical imaging, and threats of “dirty” bombs, we all need to better understand the significance of low level radiation.

Dr. Brenner discusses what we know and don’t know about the long-term health effects of low doses of radiation, from the perspective of risks to the individual and to the population.

Dr. David J. Brenner, Director, Center for Radiological Research, Columbia University Medical Center

Location: The Helene Fortunoff Theater (Monroe Lecture Center, California Avenue, South Campus)

For more details on these and other IDEAS events, visit hofstra.edu/IDEAS
And “friend” us on Facebook: “IDEAS Institute at Hofstra University”

Opportunities for Science Teachers at Stony Brook University Fall 2011

The Center for the Advancement of Earth and Space Science Education is offering three workshops this Fall on Saturdays from 9 AM to 12 Noon which provide 3 hours towards in-service credit. The workshops meet in room 137 of the Earth and Space Science Building at Stony Brook. Teachers may choose to stay after the workshops for a free lunch and an opportunity to network with your fellow educators.

Enrolment is limited. Contact Gill Hanson to register for each workshop at: gilbert.hanson@stonybrook.edu

More information is available at <http://www.geo.sunysb.edu/ess-workshops/>

Saturday September 17, 2011

Hands-on ground level ozone exercises in the classroom and in the field

Dina Zakaria science teacher at Long Beach Middle School

Ground level ozone results from the interaction of unburnt hydrocarbons and nitrogen oxides with sunlight. The American Lung Association regularly gives Suffolk County an F for the high levels of ground level ozone. The workshop will cover the chemistry behind ground level ozone synthesis and accumulation, its harmful effects on humans and inspect foliar injury to plants. The aim is to provide training for high school teachers in assessing a significant developing environmental problem, as well as using such environmental problems in engaging our young students in science. Training will, also, include activities to be used within the classroom to introduce this problem to students.

Saturday October 15, 2011

Environmental Impacts of Campus Landscaping and Storm Water Runoff

Gil Hanson professor of geology at Stony Brook University

During this workshop we will consider that different types of landscaping on campus and their environmental impacts. We will consider formal gardens, maintained lawns, a birch garden, a barely maintained lawn, and a forest environment. We will also look at how storm water runoff is handled on campus and consider whether rain gardens should be considered to reduce runoff. These are exercises that are easily transported to your school campus.

Saturday November 12, 2011

The Sources of Long Island's Erratics (Boulders)

Waldemar Pacholik science teacher at Central Islip High School

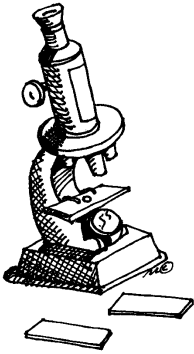
We will review the rock types among the basement rocks of Connecticut as possible sources of Long Island's erratics and the possible paths that the glaciers may have taken prior to delivering the erratics on Long Island. We will then characterize the shape, roundness and types of boulders on the Stony Brook campus evaluating their potential sources and the possible distances and paths that they may have traveled. This workshop will give you the opportunity to sharpen your skills at characterizing rock types found in Long Island's boulders and cobbles. ■

Energy Competition for Students

America's Home Energy Education Challenge, a competition sponsored by the U.S. Department of Energy, is designed to teach students in grades 3 through 8 and their families about energy, its use, and the link between saving energy and money. Participating schools compete for more than \$200,000 in prizes distributed at the regional and national levels. The deadline for registration is September 30, 2011. For more information go to

<http://www.homeenergychallenge.org/index.html>

Subject Area Representative (SAR) Reports



Did you ever want to check out an ultimate science field trip?

Maybe take classes a few days to an area loaded with science and historical opportunities. The week school ended, my wife decided to check out a company that organizes such trips. We joined 17 other Long Islander teachers and guests on the Curriculum Travel of America (CTA) Teachers Familiarization Trip to Cape Cod and Boston. The bus picked us up from the Bridgeport ferry terminal and we met our tour director, Linc Jivden. Several other CTA agents, tour leaders, and teachers from Pennsylvania and New Jersey filled the coach bus. Off we went for an educational experience with an exceptional tour director. The purpose of the tour was to show us the kind of experience we could have with our students.

Linc, a retired science teacher, seamlessly guided us through a tour of the Boston Science Museum, New England Aquarium, a meal at

Biology Whale Watching Trip to Cape Cod

Glen Cochrane, Biology SAR

Quincy Market and an amazing hike along the Freedom Trail. We boarded the bus and spent the night at the Radisson in Hyannis. After a buffet breakfast we took an oceanography nature cruise aboard a boat collecting samples and listening to a naturalist describe the natural history of Wellfleet Harbor. We then hiked with a naturalist through the shore and marsh of a 1200 acre Audubon preserve followed by a tour of Race Point Visitors Center. Lunch was in Provincetown where many a lobster was consumed and souvenirs purchased. We returned to the hotel for a meal and a nights sleep.

The following day was the highlight of the trip. From Provincetown we boarded a ship from Dolphin Fleet for a whale watch cruise. Within 45 minutes, we spotted 2 finbacks and soon we began seeing humpbacks. For 3 hours, the captain closed in on distant whale sightings. Many photos and videos were taken as we watched the humpbacks feed with bubble netting, dive and seem to ignore all the attention. All total, I counted 11 different whales. One of the teachers photographed the ven-

“The following day was the highlight of the trip... Within 45 minutes, we spotted 2 finbacks and soon we began seeing humpbacks. ... All total, I counted 11 different whales.”

tral side of the humpback’s flukes as they dove. Along with the naturalist on board we used a guide book to identify the specific whales he photographed. The researchers have compiled a book that documents with pictures the names of the humpbacks that frequent the Provincetown coast.

Based on our experience, I would recommend Curriculum Travel of America (CTA) for educational tours. They are lead by trained tour directors that are experienced teachers. CTA makes all arrangements for travel and tours for trips as large as an entire grade level. Our experience was science/ecological in focus with a bit of Boston history. Of course, they will work with the teachers to modify the program to meet your needs. ■



Fluke of a Humpback Whale



Participants collect marine life at the Audubon Preserve



Chemistry: Join The Biggest Chemistry Experiment Ever!

James Ripka, PhD., Chemistry SAR

2011 is the *International Year of Chemistry (IYC 2011)*.

It is a global celebration of the achievements of chemistry and its contributions to the well-being of humankind. Teachers and students from around the world are invited to explore one of Earth's most vital resources, water. Through the Global Chemistry Experiment 'Water: A Chemical Solution' students will explore the chemistry of water and the role of water in society and the environment. The results of their investigations will contribute to a Global Experiment, which will possibly become the biggest chemistry experiment ever. Students from around the world are participating in this Global Experiment, and the results of the investigations are tabulated,

mapped and available on line.

The Global Water Experiment consists of four component activities. First is the *pH of the Planet*. Students collect data measuring the pH of water using indicator solutions. Second is *Salty Waters*, wherein students explore the salinity of their local water. The third module is the *Solar Still Challenge*. Here students construct a solar still from household materials and experiment with its use to purify water. The final experiment is called *Water: No Dirt, No Germs*. Students will learn how chemistry is used to help provide safe drinking water.

Each downloadable activity includes a teacher's guide, a list of necessary material for carrying out the activities and explicit instructions on how to carry out the activities in class. There are several

ways to participate in the Global Water Experiment. Teachers may register themselves and their schools to join the project. In addition, teachers can share their stories and experiences using the open forums. Finally, data obtained by students carrying out the experiments can be uploaded to contribute to the global data collection. The results are already being posted online

A visualized world map with all the global data submitted on a local, regional and international level is now available. When you upload your results, your data is incorporated with all the global data reported so far. To register and for more information, please see the website:

<http://water.chemistry2011.org/web/iyc/participate> ■

Save the Date! April 21, 2012

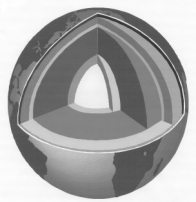
SCSTA Spring Conference

Glen Cochrane

The Suffolk STANYS Spring Conference will be held on Saturday, April 21, 2012 at Brookhaven National Lab in Upton (LIE exit 68S). The program will include a keynote speaker, a Share-A-thon and two sessions of a wide variety of workshops. Registration will be online. Look for upcoming details on the Suffolk Section website and on the online teacher discussion groups.

Registration will be done online at <http://scsta2011.eventbrite.com/>

If you would like to offer a workshop, share at our morning Share-A-Thon, or have suggestions for a workshop, contact me at gblink735@gmail.com



Earth Science

Melissa Torre (Montauk), Earth Science SAR

Welcome back Earth Science Teachers! I hope you had a great summer, but now it is time to get back to work. Here are a few ideas to start off the new school year, and even to be used again and again throughout the year .

1. **Why is Earth Science Important?** This is the most asked question you will probably get. Try starting out school with a video clip or a power point explaining what Earth Science entails. Check out the “Why Earth Science” video by AGI (American Geological Institute).

http://www.youtube.com/watch?v=_tvWDPBNiD4

2. **White board trivia:** If you don't have a class set of white boards, make them. Get sheet protectors and white cardstock and magically you have white boards that can be used again and again. Have the students work in groups or individually and ask questions about Earth Science. This is a great way to see what the students already know.
3. **Make a Mad Lib:** Write up a funny story using as many earth science ideas as possible. The one I made with a fellow teacher is about the students going on an adventure & discovering a “mineral” and a “fossil” than getting lost and trying to find his/her way back home to put their findings on display in a museum.
4. **People Search:** Get the students up and interacting. Make up a 10 question “People Search”. The students must use a different student for each question. Use questions like “Find someone who has been in an earthquake” (you will be surprised) or “Find someone who can name the three types of rocks”. Have fun with it.
5. **Carousel:** During the first week of school I break the students up into four groups and assign each group a different color marker. I write “Geology,” “Astronomy,” “Oceanography,” and “Meteorology” in different parts of the classroom. They have 2 minutes at each word to write down as many words that go with that topic. At the end we go through and define each topic & erase any words that don't go with that topic. The group with the most words at the end gets a prize.
6. **Phone Calls:** Try to make a GOOD phone call home to every student. The students and parents are very appreciative.
7. **Get to know your students:** strive to seek out a different student each day and get to know something about them. You can also make this into a game. Give each student an index card to write their name & something about themselves. Go through the room & have every student read their index card and collect the index cards. Than quiz time! Pull an index card, read it out loud and see who remembers what student said that.
8. **Word Games:** Go to <http://www.discoveryeducation.com/free-puzzlemaker> and make up a crossword, word search, cryptogram or my favorite letter tiles. With letter tiles I put up a question on the board. I give each group of three students a bag of “tiles” & they need to unscramble them to get the answer to the question.

I hope these ideas inspire you to try something new in your classroom this year or improve on something you already do. Please share your experiences or ideas on the Science Teachers Association of New York State (STANYS) facebook page. I look forward to hearing from you! ■

My new e-mail address is mtorre@levittownschools.com

College SAR Report

Linda Padwa, Stony Brook University

This September will usher in a new era for teachers – one in which “accountability” has taken on new meaning. Those who have recently completed teacher preparation programs are well aware that they are joining a profession that faces many challenges in the coming years, but they should be ready for the task. Best wishes for a successful start to your new careers!

The state has recently introduced an additional requirement for those seeking certification: a class that focuses on teaching students with special needs. While some candidates might not welcome another certification requirement, this addition addresses a reality that most new teachers will face sometime during their career – teaching in an inclusion/co-teaching situation.

Teachers who have not yet taken a class on teaching students with special needs may wish to take such a course at one of the local colleges or universities – there are

many from which to choose. In addition, the state now offers a Special Education extension to an existing certificate. Check the state’s **TEACH** web site for more information:

<http://www.highered.nysed.gov/tcert/teach/>

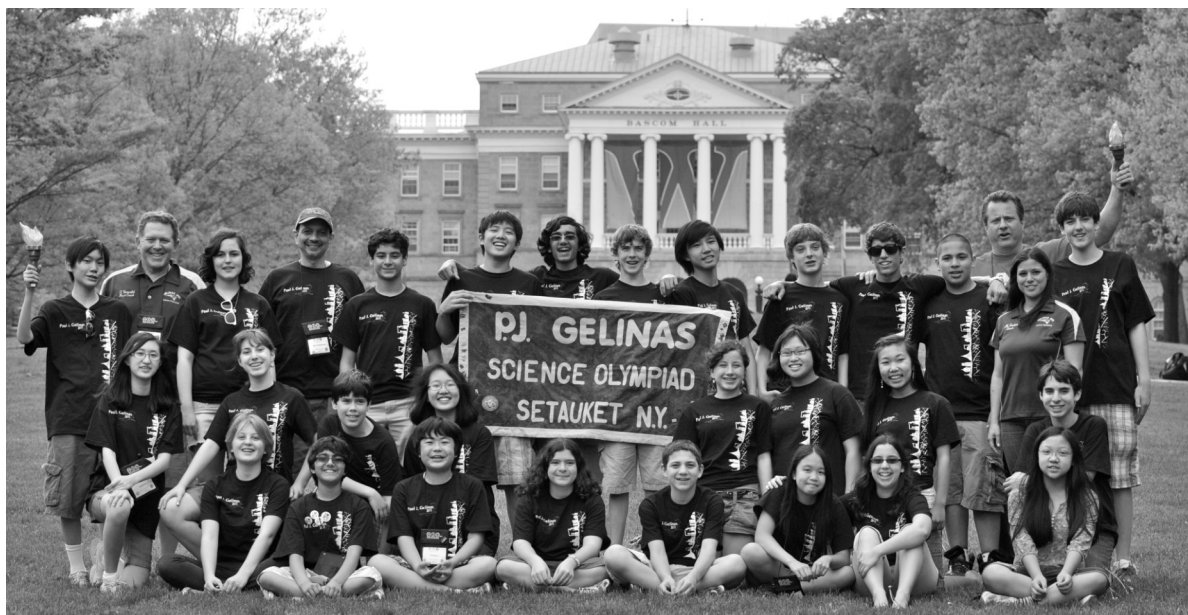
A reminder about STANYS Membership for those in teacher preparation programs – if you know of a candidate studying to become a science teacher, please encourage him/her to become a member of STANYS. Using the Membership form that can be found in this newsletter, teacher candidates can apply for a one-year free membership. This free membership is renewable while a candidate is completing a program. Membership brings many advantages, including reduced admission to the STANYS Spring Conference and other programs, along with the opportunity to network with teachers from many schools on Long Island.

“Using the Membership form that can be found in this newsletter, teacher candidates can apply for a one-year free membership.”

It has been suggested that teacher candidates might be interested in a STANYS program that would offer the opportunity for candidates in different programs to meet and share experiences. Those interested in such programs should contact me by email:

Linda.Padwa@stonybrook.edu. Please write “STANYS pre-service programs” in the subject line.

As we all get started with the school year ahead, I would like to take this opportunity to thank those of you who are kind enough to take on a student teacher or welcome student observers into your classes. You are helping to prepare the next generation of teachers by sharing your experiences and insights about teaching. We really appreciate your assistance. ■



Gelinis JHS, East Setauket, represented NYS and placed 7th in the Middle School Level at the National Tournament

Suffolk Science Olympiad Teams Score at National Tournament



Two Science Olympiad teams from Suffolk County represented New York State at the National Tournament held at the University of Wisconsin on May 21, 2011. New York State is one of the most competitive states with the greatest number of high school teams (over 300) and over 220 middle school teams. In order to qualify for the national tournament, the teams had to place 1st or 2nd in the NYS tournament. Paul J. Gelinus JHS and Ward Melville HS, both from the Three Village CSD in Setauket joined the NYS 1st place teams Eagle Hill MS and Fayetteville-Manlius HS from the Syracuse region and traveled to Madison, Wisconsin to compete against teams from 46 other states. (See photos on pages 10 and 18).

An after-school team activity, Science Olympiad is one of the nation's most distinguished and rigorous competitions of science, technology, engineering and math. The national tournament in Wisconsin drew 3,000 students on 120 winning middle and high school teams from 47 U.S. states. Gelinus and Ward Melville advanced to the national tournament after placing 2nd in the New York State Tournament last spring. Awards are given for the best overall team score and individual scores in each event. The young scientists competed in a variety of events based on principles of physics, chemistry, biology and geology, among other fields of study. Engineering skills were employed in the building events, which included designing and constructing model towers, "Rube Goldberg" machines, robots, and catapults.

The New York teams performed exceptionally well with both middle

level teams in the top 10, and both high school teams in the top 20 in the nation. The Gelinus Science Olympiad team placed an amazing seventh. This marks the 5th time since 2006 that Gelinus finished in the top 10 at the annual science competition. Ward Melville High School finished 18th in the high school division at this prestigious tournament. Eagle Hill was 10th and Fayetteville-Manlius was 11th.

Gelinus captured 7th place overall by scoring at the top in a range of events. Medals were awarded for 1st – 6th place in the 23 national events. Gelinus won medals in nine: two 2nd Place, three 4th place, and three 6th place Ward Melville also earned medals in three events, including two 4th Place and one 5th place.

To the students, Science Olympiad is more than just an after school activity. Stephanie Chen commented "I will definitely remember SciO for years to come.... It's like a second family to me. Placing seventh at the National Tournament and earning individual medals are only a tangible result of our team's unity; what really matters are the bonds that we form within SciO." Nevena Marinkovic added "Sci-O may be over for this year, but I know that the friends we made and the lessons we learned, not just our through our events, will stay with us for a long time to come."

Gary Vorwald, who has served as head coach since 2000, is very proud of the team for their hard work, dedication, and achievements. More than just winning medals and trophies, Science Olympiad motivates students to reach their potential and work as a team. He stated "this group of kids is among the best I have ever worked with, not just from their academic achievements, but also from their per-

severance, determination, and compassion for each other. I am also thrilled that the high school team accompanied us to nationals. It is so rewarding to see the Ward Melville kids continue their journey in SciO, and I appreciate the help that many have given to their younger peers through the year."

The national competition was part of a weekend of trial events, scientific demonstrations and celebrations for the competitors and their parents and coaches. Friday featured an Olympic-style parade of states and an opening ceremony that played like an athletic pep rally. The University of Wisconsin Marching Band stirred the audience with inspiring music and the chicken dance. Two university professors awed the crowd with amazing chemistry and physics demonstrations, and President Obama's assistant and Education Department sent video messages to the teams welcoming them to the National Tournament and praising them for their accomplishments in science and technology. The official events on Saturday were scattered around the sprawling University of Wisconsin campus. A formal banquet dinner with an Academy Awards-style medal presentation ceremony in the Kohl Center followed the competition.

The teams would like to thank STANYS for their generous support. ■

Grant Opportunities

Funder: Toshiba America Foundation

Program: Classroom teaching of science and mathematics

Summary: Our grants fund the projects ideas and materials teachers need to innovate in their math and science classrooms. TAF is interested in funding projects designed by teachers or small teams of teachers for use in their own schools. Our grants support public and nonprofit private schools throughout the United States. Grade K-5 applications are accepted once a year on October 1st. Grade 6-12 applications for \$5,000 or less are accepted on a rolling basis, throughout the calendar year. Grant requests of more than \$5,000 are reviewed twice a year. Applications for grants of more than \$5,000 are due February 1st and August 1st each year.

Deadline: Open

Contact: 212-596-0620

URL: <http://www.toshiba.com/taf/>

Funder: American Honda Foundation [CA]

Program: Youth education

Summary: Funding priorities are youth education, specifically in the areas of science, technology, engineering, mathematics, the environment, job training and literacy. Eligible organizations are nonprofit charitable organizations classified as a 501(c)(3) public charity by the Internal Revenue Service, or a public school district, private/public elementary and secondary schools as listed by the U.S. Department of Education's National Center for Education Statistics (NCES). In addition, qualifying organizations must have a minimum of two years of audited financial statements. Awards range from \$20,000 to \$60,000 over a one-year period.

Deadline: Open

Contact: (310) 781-4090

URL: <http://corporate.honda.com/america/philanthropy.aspx?id=ahf>

Funder: Target Department Stores

Program: Field Trip Grants

Summary: Target will award 5,000 grants of up to \$700 each for the upcoming school year. Types of eligible field trips include art, science, and cultural museum visits; community service and civic projects; and career enrichment opportunities. Funds may be used to cover trip-related costs such as transportation, ticket fees, resource materials, and supplies.

Deadline: 3 October 2011

URL: <http://sites.target.com/site/en/company/page.jsp?contentId=WCMP04-031880>



Register Now for 2011 Science Olympiad Competitions

Register your school now for the 2011 NYS Science Olympiad tournaments, which will be held this Winter and Spring. There are two divisions, B for middle level and C for High Schools. Teams of 15 students from each school compete in 16-20 events at regional tournaments. The goal of Science Olympiad is to nurture and encourage excitement about science and engineering. The 2011 Eastern Long Island C Division Regional Tournament will take place in February 2012 at Half Hollow Hills East HS. The B Division tournament will be held in March 2012 at Candlewood Middle School. **The dates will be announced shortly on the state website.** For a complete list of events and the registration form, see the New York State Science Olympiad webpage: <http://newyorkscioly.org>

The annual Coach's Workshop is an exciting opportunity for new coaches and seasoned coaches to learn about the competition and events. This year the workshop will be held on October 28 and 29 in Fishkill. Visit the NYS website for more a schedule of activities and registration information. ■

Science Matters to all Teachers and Students!

Nancy Ridenour

Science Matters, formerly *Building a Presence* (BaP), is an electronic network initiated by the National Science Teachers Association (NSTA). STANYS is the lead organization in NYS. The purpose of Science Matters/BaP is to reduce isolation of teachers of science, K-16, and to keep them informed about professional development in their region, the state, and nationally. Points of Contact can sign themselves up as PoC's. The Point of Contact for his/her school receives digital information that will then be shared with colleagues. At present, there can be more than one PoC per school. It is important that you be a part of this network to receive information about grant opportunities and professional

development.

Please consider being a Point of Contact (PoC) for your school. The success of this network requires all buildings to be represented. Easy step by step directions can be found at:

<http://www.stanys.org/progbap.htm>

The **Science Matters** website is:

<http://bap.nsta.org/Content/Home/BecomeAContact/Default.aspx>

There are three options as a Point of Contact:

a. If you are representing all the teachers of science in your building, be sure to include all the grades, and all science subjects for teachers whom you are representing, not just

what you teach.

b. If you are representing a subset of teachers in your building, be sure to include just those grades and subjects of teachers you represent, not just what you teach.

c. If you are representing just yourself, include just the grade(s) and subject(s) that you teach.

Please consider volunteering as a PoC. You will be a great resource for your colleagues and students. If you have any questions, contact Nancy Ridenour at: nridenour@twcny.rr.com ■

New Earth and Space Science Courses at SUNY Stony Brook

Gill Hanson, SUNY Stony Brook



SUNY Stony Brook is now offering a Master of Science in Geosciences with a concentration in Earth and Space Science.. This program is intended for science teachers and a set of graduate courses have been specifically designed to cover in detail and depth the material taught in the New York State earth science curriculum. The courses will be taught in the evenings to accommodate the working teacher. This Master's degree program and the new set of courses are intended for:

- Earth Science teachers who have initial certification in Earth Science but need a Master's degree to become fully certified,
- Teachers in science or other disciplines, who need a master's degree and want to be certified in Earth Science,

The new set of courses are also intended for:

- Teachers in other disciplines with a Master's degree who would like to be dually certified.

- Science teachers with a Master's degree who need graduate courses to meet their continuing education or professional development requirements.

More information regarding the MS program and descriptions of the ESS courses are available at www.geo.sunysb.edu/ms-ess/ ■



SBU Professor Gil Hansen leads a group of science teachers on a geology walk through campus during the SCSTA Spring Conference last April.

There Couldn't Be a Better Time to Be A STANYS Member

Michael Jabot, Ph.D., STANYS Vice President

As this publication reaches you, a conversation about science education has begun across the country based on the recently released *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas* by the National Research Council challenging each of us to embrace changes in the way we approach the teaching of science. Its goal is to help our students see the interconnectedness of the science disciplines, as well as the way that these core science concepts help to shape the world around us. Never has there been a more important time for our students to see these connections as a way to seek answers to some of the most pressing challenges we have faced as a society.

STANYS membership helps to expand our horizons and to become the best science teachers we can be. I urge all who are members to continue their membership. If you are not yet a member or if your membership has lapsed, I invite you to join and become a part of New York's oldest and most respected professional association of science educators as we embark on a very exciting journey. Now don't you agree? – "There Couldn't Be a Better Time to Be A STANYS Member!"

STANYS supports its membership through:

Networking, Friendships, and Collaboration; Professional Development Workshops; STANYS' Annual State Conference; Updates on what is Happening in Education throughout the State; State Science Congress and Science Olympiad Information; Access to the STANYS DALs and SARs; Section Meetings and Updates; The STANYS Newsletter; E-Blasts; The Science Teachers Bulletin; Opportunities for Leadership

Suffolk STANYS publishes several newsletters each year. Each issue includes SAR articles disseminating current information in each discipline, a Chairperson's report which addresses state updates and other issues in science education, details about local science contests, workshops, and field trips, and other items of interest specifically to Suffolk educators.

Suffolk STANYS provides Conferences and Workshops throughout the year, offering information directly pertaining to teaching on Long Island, presented by local experts -- classroom teachers just like you! These gatherings provide opportunities to learn more about your discipline, get information about local activities, and provide the chance for networking with colleagues. Lab activities, innovative teaching strategies and demonstrations are just part of what's offered!

Suffolk STANYS offers Professional Development Hours close to home, and directly related to teaching on Long Island.

Suffolk STANYS hosts MATEX (Materials and Textbook Exhibit) each October. Vendors display and discuss the latest textbooks, science equipment, and field trip opportunities. Give-aways are always a part of the program!!

Suffolk STANYS holds an Awards Dinner each May honoring outstanding high school seniors and exemplary teachers.

Suffolk STANYS provides Local Leadership Opportunities and the chance to share experiences with your colleagues in districts throughout Suffolk. You have an open invitation to each monthly Section planning meeting.

(Continued on page 23)

(Continued from page 22) Membership

Your membership in STANYS includes membership in the Suffolk Section –two for the price of one!

But most importantly, the STANYS Suffolk Section provides us, the Science Educators of Long Island, the Opportunity to Make a Difference in Education in Suffolk County!

Be a part of your professional organization - JOIN US TODAY!

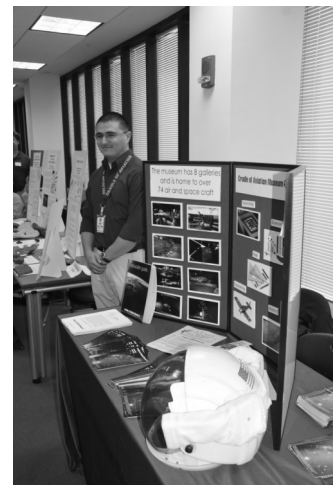
Use the membership form in this Newsletter, or join electronically using the form at the

STANYS website: <http://www.stanys.org>

For more information, email Sheila Schumann, Vice-Chairperson, Membership at: sheilah_s@yahoo.com

Scenes from the 2011 Suffolk STANYS Spring Conference

Right: Table-top displays from the Center for Science & Mathematics Education (CESAME) and the Cradle of Aviation Museum (far right).



Above: Earth Science SAR Melissa Torre with friend.



Right: Over 100 Suffolk Science teachers attended the event.

Join us for our monthly meetings. This year we will alternate between the first Thursday & Wednesday of the month.

Dates for 2010-11 are :
 Sept 8, Oct 5, Nov 3,
 Dec 7, Feb 1, Mar 7,
 April 4, May 2, June 7

Meetings are at 7:00 p.m. at BOCES II on Deer Park Ave., Dix Hills

Science Teachers Association of New York State, Inc.
 Suffolk Section
 P.O. Box 5101
 Hauppauge, NY 11788-0611

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County _____

Home Phone (_____) _____

School/Organization _____

Street Address _____

City _____ State _____ Zip _____

Business Phone (_____) _____

Subjects taught or position _____

Last year of membership _____

Section to which you wish to belong _____

Email _____

Payment: Check Payable to STANYS OR Credit Card: Visa Master Card

Membership \$ _____

Donation \$ _____

Total \$ _____

_____ Card Number _____ Expiration Date _____
 CVV2 Code _____ (Last three digits from signature panel on back of card)

_____ Cardholder's Signature

Mail Membership Form to STANYS, PO Box 2121, Liverpool, NY 13089-2121

	Dues	Check One	
Rolling Membership*		1-year	2-year
Elementary	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$80.00
Intermediate/Jr.HS	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$80.00
High School	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$80.00
College	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$80.00
Associate	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$42.00	<input type="checkbox"/> \$80.00
Retired	<input type="checkbox"/> \$21.00	<input type="checkbox"/> \$21.00	<input type="checkbox"/> \$40.00
Student	<input type="checkbox"/> \$21.00		n/a
Free Student Membership	<input type="checkbox"/> College senior		n/a

(ONE TIME ONLY; Individual faculty recommendation letter required)

Enclosed is my tax-deductible contribution of \$ _____

To: STANY Foundation Fellows Conference Award fund

Membership dues are not refundable. You may join one STANYS Section of your choice.

***Membership begins the month you join and ends one year later on the last day of the month.**