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South Carolina Earth Science Teachers Association Newsletter

Highlights from the Annual SCESTA Meeting at SC²

On November 14, 2003 we had our annual meeting at the SC² Conference held this year at the Charleston Convention Center. 21 members were in attendance. V.P. Dina Ledford conducted the meeting in the absence of Carla Keasler.

Treasurer Leslie Sanford reported we had \$1,074.14 in our account before (SC)² expenses.

Most of the business portion of the meeting centered on how to improve the SCESTA Share-a-thon.

S.C. Mining Association Awards

Chris Smith from the S.C. Mining Association had earlier, at the SC² business meeting, awarded The Mining Association of South Carolina Award for Innovative Teaching of The South Carolina Earth Science Curriculum Standards to Dr. Carolyn H. Murphy of Blythewood Middle School in Columbia, S.C. The Mining Association of South Carolina annually presents an Innovative Earth Science Teacher Award in recognition of a teacher who has significantly advanced the teaching of earth sciences in South Carolina. To be eligible for the \$5000.00

award, a teacher must design a lesson, a module, or another teaching instrument that addresses instruction in geology, mining, minerals, rock, soils, or related environmental issues in a creative and effective manner. The materials can be an original design or an innovative revision or creative modification of existing teaching materials. Her unit consisted of 18 lessons, two per chapter, to accompany her book *Carolina Rocks!* Realizing that her book was one of the few texts available for K-12 teachers to use to address the S.C. geology portion of the State Science Standards, Dr. Murphy developed activities for 7th and 8th grade teachers to use along with her book. The activities use SCMAPS, language arts, and other resources to address the various aspects of S.C. Geology. She has made this unit available online at:

http://home.usit.net/~carolina_rocks/

Outstanding Earth Science Teacher of the Year Award

Donna M. Petty



Petty Wins OEST Award

The winner of the Outstanding Earth Science Teacher Award for 2003 is Donna M. Petty, an 8th grade teacher at Dent Middle School in Richland School District #2, Columbia, SC. In addition to her twelve years of classroom teaching experience, she has been active in developing and promoting local and statewide curriculum initiatives, especially those involving technology. She has also developed test items for the statewide achievement test and was awarded National Board Certification in 2002. She recently completed a five year project to correlate the PBS "NatureScene" program to classroom lessons and the state science curriculum standards through an interactive web site.

She received a plaque from the National Association of Geoscience Teachers (the group that sponsors the award), \$100 and a set of beautiful bookends (made of polished rock – of course) from the Carolinas Section of the Society of Mining Engineers, \$100 from the Mining Association of South Carolina, and a "gold" pick from SCESTA to use on her next rockhounding adventure.

Nominations for the Outstanding Earth Science Teacher for 2004 are now being accepted. The nomination form can be accessed on the web at <<http://www.nagt.org>> and will soon be posted on the SCESTA website. You can also request a nomination form from Dr. John Wagner at Clemson University irwgnr@clemson.edu.

Share-a-Thon – Teachers Helping Teachers

Almost one hundred teachers benefited from the activities, lessons and other resources offered by approximately a dozen of our teacher members at our SCESTA Share-A-Thon on Friday at the Convention. Everyone agreed we need to do this again next year!

Dr. Wagner collected a copy of everyone's lesson for the web site. Our sincere thanks goes to Tom Littlejohn for coordinating this effort again this year.

Our Favorite Way to Adjourn the Meeting – Door Prizes!

It was evident that Dr. Wagner worked hard again to get us some great door prizes, which was a wonderful end to our annual meeting. Thanks a bunch Dr. Wagner!

Need to Contact Officers?

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Upcoming Teacher Awards & Grants

[Toyota TAPESTRY Grant Program](#)

(Deadline Jan. 16, 2004)

The 2003 Toyota TAPESTRY program will award 50 grants of up to \$10,000 each and a minimum of 20 "mini-grants" of \$2,500 each to K-12 science teachers. Interested teachers should propose innovative

science projects that can be implemented in their school or school district over a one-year period. Toyota TAPESTRY projects demonstrate creativity, involve risk-taking, possess a visionary quality, and model a novel way of presenting science. If you have a great way to make science come alive, apply for a Toyota TAPESTRY grant.

Student Opportunities

Craftsman/NSTA Young Inventors Awards

<http://www.nsta.org/programs/craftsman/>

(Deadline March 16, 2004) The Craftsman/NSTA Young Inventors Awards Program challenges students to use creativity and imagination along with science, technology, and mechanical ability to invent or modify a tool.

ExploraVision Awards

<http://www.toshiba.com/tai/explora/avision/>

(Deadline Feb. 3, 2004)

ExploraVision is a competition for students of all interest, skill, and ability levels in grades K-12. Entrants must be United States or Canadian citizens or legal residents, living within the United States, U.S. Territories, or Canada. The purpose of the competition is to encourage students to combine their imaginations with the tools of science to create and explore a vision of a future technology.

Share Your Best Practices!

Don't ya just despise seeing lessons or activities that sound like they would never work with your students? You have the voice of experience and we need your expertise. We'd like every member of SCESTA to share one of their favorite lessons, activities, or other tips through the newsletter. Please send anything – demos, tips, or full lessons to dpetty@usit.net.

Thanks !

Volunteer Newsletter Editor and Webmaster Needs Your Help

Any news? Do you have your own class website? Do you know of good links or other resources we can pass on? Please drop us a line! Both the website and the newsletter are only as good as you make them by letting us know what is important to you. Together we can be a strong force for Earth Science education in South Carolina! Please send your news, as it happens, to:

dpetty@usit.net and/or
amie@clermson.edu Thanks!
Donna & Amie

SPECIAL NOTE: The SCESTA newsletter is now delivered electronically through e-mail. If we do not have your e-mail address on file, please notify the SCESTA Secretary/Treasurer. Only those members who have paid their \$5 dues will receive the newsletter. To receive a hard copy, you must request one from the newsletter editor (contact info on front page)

Upcoming Courses and Workshops of Interest to Earth Science Teachers

If you know of any courses or workshops we can post here, please send the info to dpetty@usit.net. We'd love to pass it on to teachers, etc.

Check with the following Colleges and University Geology Departments to find courses of interest to you!

[Charleston Southern University](#)
[The Citadel](#)
[Clemson University](#)
[Coastal Carolina University](#)
[Coker College](#)
[College of Charleston](#)
[Erskine College](#)
[Francis Marion University](#)
[Furman University](#)
[Lander University](#)
[Newberry College](#)
[Presbyterian College](#)
[South Carolina State University](#)
University of South Carolina
[Columbia campus](#)
[Aiken campus](#)
[Beaufort campus](#)
[Lancaster campus](#)

[Salkehatchie campus](#)
[Spartanburg campus](#)
[Winthrop University](#)
[Wofford College](#)

The SC MAPS and SC LIFE programs at Clemson University offer a series of discounted courses and workshops each semester. For information, check this web page <<http://www.clemson.edu/scmaps>>

Check Out These Sites for Freebies (or almost free stuff)!

- **Moments of Discovery**
www.aip.org/history/mod
This new audiovisual exhibit uses the actual voices of leading scientists to explore how major discoveries are made, teaching some science along the way. The material is designed for classroom use and for individual study at high school or beginning college levels. To encourage use in the classroom, 2000–2001 NSTA President Arthur Eisenkraft has provided lesson plans, discussion questions, and exercises. The exhibit is mounted on the website of the Center for History of Physics at the American Institute of Physics. Students can also compare these moments of discovery with ones described elsewhere in the Center for History of Physics website (www.aip.org/history/exhibit.htm).
- **NEF – Natural Gas Teaching Materials**
<http://www.nef1.org/ngfm.html>
There are several packets for different grade levels available. These materials are related to natural gas safety, energy sources, energy conservation, transportation, and other topics. Supplies are limited.
- **NASA** has two new posters available:
A Key to Discovery at
<http://spacelink.nasa.gov/Instrunctional.Materials/NASA.Educational.Products/A.Key.to.Discovery/A.Key.to.Discovery.pdf>

AND

Build it with Spacewalks at
<http://spacelink.nasa.gov/Instrunctional.Materials/NASA.Educational.Products/Build.It.With.Spacewalks/Build.It.With.Spacewalks.pdf>

Past Offerings Still Ongoing:

http://www.engr.ncsu.edu/mrl/frees_tuf.html

http://www.tufts.edu/as/wright_center/svl/posters/posts.html

<http://www.flinnsci.com/homepage/free/freeform.html>

<http://www.mii.org/posterpackets.php>

<http://topex-www.jpl.nasa.gov/education/poster.html>

<http://ourworld.compuserve.com/homepages/CVisco/free.htm>

Hey! Let us know if you've heard of any great freebies we don't have here or on the web site!

Web Sites for Your Class

- **Science News for Kids**
www.sciencenewsforkids.org
This online publication is devoted to science news for children ages 9–13 and is provided by Science Service, Inc. The site gives students opportunities to comment on the subject matter, ask questions of scientists featured in articles, try out mathematical puzzles, and submit their own work for possible web publication, while offering teachers creative ways of using science news in their classrooms.
- **Science Section of the Teacher Resource Center of Scholastic's Website**
The science section, located at teacher.scholastic.com/ilp/index.asp?SubjectID=4, offers

activities that preK–8 teachers can do with their students to incorporate science into their lessons. Topics covered include earth and space science, life science, physical science, and the scientific process. The main website at www.teacher.scholastic.com also contains an Online Activities Center for students.

- **Windows into Wonderland Electronic Field Trips to Yellowstone National Park**
www.windowsintowonderland.org

Experience Yellowstone through "Windows into Wonderland" on the National Park Service website. Each field trip is designed with a corresponding curriculum, written to meet National Science Education Standards for middle school science students. Both the field trips and the curriculum are available free.

- **Grand Canyon Flood!**
kuat.org/gcf

Middle level and high school students can explore the 1996 controlled flood of the Grand Canyon at this companion website to the KUAT-TV documentary (). They'll meet the scientists behind the project; click through a map

that details the discoveries, outcomes, and future implications of the project; test their knowledge with a scavenger hunt; and more.

- **Molecular Workbench**
<http://workbench.concord.org>

The Concord Consortium, supported by National Science Foundation offers a "molecular simulation engine"—a set of tools that can be used to compute and visualize the motion of atoms and molecules. Five units draw on molecular models generated by the simulation engine to help students learn about kinetic energy, states of matter; aquatic solutions in and around cells; monomers and polymers; and protein shaping. Thirty-five activities include how hot air balloons work, and how superballs are like atoms.

- **ISS EarthKAM**
<http://www.earthkam.ucsd.edu/index.shtml>

NASA offers thousands of images of Earth and guides for using them to support instruction in Earth science, space science, geography, social studies, math, and other subjects. Images can be searched by country or geographic feature (island, archipelago, peninsula, canyon, and others). Photos were taken by a digital camera mounted on the International Space Station (ISS) under the direction and control of students.

- **Science Data**
<http://www.sciencedata.net>

This site offers dozens of simulations and story boards of everything from Asteroid Impacts to River Erosion. Help your students visualize these processes through scientifically accurate models.

Call for Papers – Get Published!

The NSTA is looking for Earth Science teaching or lesson articles for their magazines. Please send your submission to:

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Geneva, FL 32732
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Fax: (407)349-9094
jgerking@nsta.org

APOLOGIES FROM
CLEMSON FOR THE
DELAY IN PUTTING OUT
THIS NEWSLETTER.
OUR SECRETARY HAS
BEEN ON EXTENDED
MEDICAL LEAVE

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