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# South Carolina Earth Science Teachers Association Newsletter

## Nominations for the Outstanding Earth Science Teacher for 2005 are now being accepted through April.

The nomination form will soon be posted on the SCESTA website. In the meantime, you can get a nomination form from Dr. John Wagner at Clemson University [jrwqnr@clemson.edu](mailto:jrwqnr@clemson.edu) or the NAGT website <http://www.nagt.org/OEST.pdf>

## 'Need to Contact an Officer?'

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## April 22, 2005 is the 35th Anniversary of Earth Day

Earth Day, which occurs annually on **April 22**, involves tens of thousands of events, from rallies and teach-outs to concerts and earth fairs. Earth Day events happen everywhere: in Kasbahs, capitals, villages, schools and temples. Together, we send a message that our planet is precious, perishable, and belongs to all of us. For information on national Earth Day events see: <http://www.earthday.org/> and <http://earthday.envirolink.org>.

To find out about events in S.C. check out the following website: <http://www.scdhec.net/earthtoday/>

Also available are lesson activities:

<http://www.scdhec.net/earthtoday/html/etcurriculum.html>

## Upcoming Teacher Awards & Grants

The **Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) Program** was established in 1983 by The White House and is sponsored by the [National Science Foundation \(NSF\)](http://www.nsf.gov). The program identifies outstanding mathematics and science teachers, kindergarten through

12th grade, in each state and the four U.S. jurisdictions. These teachers will serve as models for their colleagues and will be leaders in the improvement of science and mathematics education. The competition will award a teacher of grades 7-12 for **2005**.

#### **Nomination and Application**

<http://www.paemst.org/applicationselection.cfm>

#### **(SC)<sup>2</sup> Teacher Grants**

<http://www.scscience.org/tgrants.html>

(SC)<sup>2</sup> offers its members a teacher grant for up to \$1,000 to support classroom innovations and projects. If you have a special project or program in working with your students that requires funding outside of your normal school resources, consider applying for this grant. It will support materials, equipment, purchased services, substitutes or consultants and travel costs associated with your project. **Applications are due by May 30 for the following school year. Winners will be notified by June 15.**

#### **EIA Teacher Grants**

<http://www.myschools.com/offices/cso/eia/>

The EIA Competitive Teacher Grant program supports the improvement of classroom instructional practices and procedures. The funds may be used to:

- To implement the South Carolina curriculum standards
- To devise innovative teaching strategies, activities, and materials for students.
- To implement performance assessments
- To expand the use of technology to enhance instruction
- To develop instructional activities for parental reinforcement at home
- To implement techniques for motivating and rewarding achievement

**The 2005–06 EIA Teacher Grants must be received by the Office of Curriculum and Standards before 4:00 PM on April 22, 2005.**

#### **Melinda Gray Ardia Environmental Curriculum Development Grants**

<http://www.mgaef.org/grants.html>

1-2 \$1000 grants, designed to assist educators in the design and implementation of holistic environmental curricula. They are open to anyone, but they give preference to grants that benefit public school students, a policy based on Melinda's commitment to public school education. Funds will be administered through the recipient's school district office. Multi-disciplinary curricula that encourages work with several school districts is preferred. **Deadline April 9<sup>th</sup>, 2005**

#### **NWA Sol Hirsch Education Fund Grants**

<http://www.nwas.org/solhirsch.html>

National Weather Association. The \$500 grants are awarded annually to teachers in grades K-12 to help improve the education of their students in meteorology. The teachers selected will be able to use the funds to take an accredited course in atmospheric sciences, attend a relevant workshop or conference, or purchase scientific materials or equipment for the classroom. **Deadline for application is August 1 each year.**

#### **Oracle**

<http://www.oracle.com/corporate/giving/community/index.html>

Oracle considers each completed and signed application received. Successful applications provide all information requested and demonstrate tangibly and specifically how Oracle's support furthers the mission of the organization. Most of Oracle's grants are in the five to ten thousand dollar range. **Annual deadlines for application are June 1 and December 1.**

## Grants with Rolling Deadlines

#### **American Honda Foundation**

<http://www.scscience.org/tgrants.html>

American Honda Foundation supports various programs within youth education. Projects that have been funded include a focus on job training, math, science and environmental education. Eligibility includes: nonprofits, including K-12 schools and school districts involved with curriculum development that encourage innovative education methods and techniques. **Honda's deadlines are Feb. 1, May 1, Aug. 1, and Nov. 1.** If the staff receives preliminary proposals a month before the deadline, they can provide feedback in time for applicants to make changes and still meet the deadline. For guidelines, send a SASE to: American Honda Foundation, PO Box 2205, Torrance, CA 90509.

#### **American Institute of Aeronautics and Astronautics**

<http://www.aiaa.org/content.cfm?pageid=208>

The Foundation has established a Classroom Grant program specifically for use by AIAA Educator Associates or those who will become one. If you are a K-12 teacher interested in the development or application of science, mathematics, and technology within your educational curriculum, you may qualify for a grant of up to \$200 per individual request to supplement your learning program. Each school is limited to up to \$1,000 per calendar year. Use your grant for classroom demonstration kits, classroom science supplies, or other materials to enhance the teaching-and learning-of science, mathematics, and related technology. Submit your proposal for review at least 9 weeks before your intended purchase date and at least 30 days before their quarterly consideration of grant proposals in January, March, June, and September. They also have an [Educator Achievement Award](#) with a September deadline for nomination.

#### **Captain Planet Foundation**

<http://www.scscience.org/tgrants.html>

The Captain Planet Foundation provides grants for projects promoting the understanding of environmental issues and focusing on hands-on experiences for students ages 6-18. Due to some recent changes the Captain Planet Foundation is temporarily limiting grant awards to \$500. **Complete the online form. Deadlines are Mar. 31, June 30, Sept. 30, and Dec. 31.**

**Champions of the Environment Monthly Grant Program** rewards projects that protect the environment and increase environmental

knowledge. S. C.'s teachers, students and environmental educators are eligible to apply. The Champions partnership is made up of representatives from International Paper, INVISTA, SC DHEC and WIS-TV. This partnership chooses one project to receive a \$500 grant each month. At the end of the school year, monthly winners may be chosen as an Overall winner and win up to \$5000 in additional funds. Please visit the Champions of the Environment web page for more information: [www.scdhec.gov/champions](http://www.scdhec.gov/champions). You may also call Lynne LaSalle at (803)898-4394

#### **RGK Foundation**

<http://www.rgkfoundation.org/guidelines.php>

The Foundation's primary interests within education include programs that focus on formal K-12 education (particularly mathematics, science and reading), integrating technology into curriculum, teacher development, literacy, and higher education. The Foundation is also interested in programs that attract female and minority students into the fields of mathematics, science, and technology. **All applicants must complete an electronic Letter of Inquiry from the Web site as the first step. There is no deadline for submitting the Letter.** The Foundation reviews Letters on an ongoing basis. Within three weeks, the Foundation will send an e-mail message either declining your request or inviting you to submit a formal application packet for further consideration.

#### **Toshiba America Foundation**

<http://www.toshiba.com/taf/apply.html>

The Foundation awards grants for programs and activities that improve the classroom teaching of science, mathematics, and technology for middle and high school students. U.S. Public schools Deadlines for: K-6 programs: October 1; Grades 7-12 under \$5,000: accepted all year; Requests for over \$5,000: Feb. 1 and Aug. 1.

#### **Waste Management**

<http://www.wm.com/WM/community/Giving.asp>

Waste Management focuses its giving on the following priority areas: Environment, Education and Community Impact. **A committee considers requests to the corporate office quarterly, usually during January, April, July and October.**

## Student Opportunities

### **Robotic Design Competitions (All Grade Levels)**

<http://www.usfirst.org/robotics/>

[Palmetto Regional](#)

The Colonial Center, USC

Columbia, SC USA

Dates: Mar 31-Apr 2, 2005

### **First Lego League 2005 Ocean Odyssey Challenge**

<http://www.firstlegoleague.org/default.aspx?pid=70>

In the 2005 Ocean Odyssey Challenge, FLL teams will use science and technology to better understand the world's oceans. The importance of enhancing such understanding

has been underlined tragically by the terrible loss associated with the recent tsunami in the Indian Ocean. **Local Competition Event Place and Date for the 2005-06 School Year Not Yet Posted.**

## 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](mailto:dpetty@usit.net) and/or  
[amie@clemson.edu](mailto:amie@clemson.edu) Thanks!  
*Donna & Amie*

## Course Offerings 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](mailto: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>

**Roper Mountain Science P.L.U.S.**  
Visit this web site for this summer's course offerings and an application: <http://www.ropermountain.org/PLUS/coursedescriptions.shtml>

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

**ESB Unit Conversion Freeware**  
<http://www.esbconsult.com/esbunitconv.zip>

Utility to easily convert between units of measurement. Includes Units for Temperature, Distance, Mass, Area, Volume, Pressure, Velocity, Acceleration, Force, Energy, Power, Fuel Consumption, Flow, Torque, Angles, Luminous Intensity, Illumination, Time & Radioactivity. (733KB)

**Webmizzle Freeware**  
<http://www.webmizzle2.republika.pl/wmsetup.exe>

Access to current satellite images, weather conditions and forecasts charts. (640KB)

**Cyber-Ed Plato Science Education** FREE CD Sampler Pack & Posters  
<http://www.cybered.net/content.asp?contentid=806>

**Free FEMA Publications and Materials of Interest to Teachers**  
<http://www.fema.gov/kids/femapub.htm>

**Science Posters**  
[http://www.tufts.edu/as/wright\\_center/svl/posters/posts.html](http://www.tufts.edu/as/wright_center/svl/posters/posts.html)

Beautiful, full color posters include: The Human Genome, Electromagnetic Spectrum, Earth Anatomy, Cosmic Evolution, Vernal Pool Life, Scale and Size, and the Science of Change

**Water Resources Posters**  
<http://water.usgs.gov/outreach/OutReach.html>

**How Stuff Works**  
<http://www.howstuffworks.com/express-form.htm>

Magazine for middle school. 60 copies free.

**Bureau of Land Management: Teacher Resources**  
<http://www.blm.gov/education/LearningLandscapes/teachers/activities.html>

**Fossils, Rocks, and Time Free Booklet from the USGS (24 pgs.)**  
<http://pubs.usgs.gov/gip/fossils/>  
Explains the use of fossils and rocks to decipher the geologic history of an area and the development of the relative and radiometric time scales.

**Dinosaurs: Facts and Fiction Free Booklet from the USGS (10 pgs.)**  
<http://pubs.usgs.gov/gip/dinosaurs/>  
Contains answers to some frequently asked questions about dinosaurs with current ideas and evidence to correct some long-lived popular misconceptions.

New from **Mineral Information Institute – Poster Packets**  
<http://www.mii.org/posterpackets.html> (5-6 posters for \$2 ea.)

## Web Sites for Teaching

**T-Rex -- Draw T-Rex**  
<http://www.uky.edu/KGS/education/trex.html>

**Weather Dude**  
<http://www.wxduke.com>  
Nick Walker's fun weather site for kids, parents and teachers. Teachers: check out the \$500 weather grants.

**Weather Maps... How to Read Them**  
[http://ww2010.atmos.uiuc.edu/\(Gh\)/guides/maps/home.xml](http://ww2010.atmos.uiuc.edu/(Gh)/guides/maps/home.xml)

**Weather Watch**  
<http://www.cyberbee.com/weatherwatch/> Pairs up classes to study weather in different places.

## Weather Wiz Kids

<http://www.weatherwizkids.com/>

## Online Earth Science Activities

Tasa Graphic Arts, Inc., offers these online Earth science activities:

- Tasa GeoCube. Are you geologically challenged? To find out, go to [www.TasaGraphicArts.com/activities/TasaGeoCube.html](http://www.TasaGraphicArts.com/activities/TasaGeoCube.html).
- Those Puzzling Plates. Can you assemble the plate tectonics puzzle? To try the activity, visit [www.TasaGraphicArts.com/activities/index.html](http://www.TasaGraphicArts.com/activities/index.html).

## Teaching Theme for This Edition – Karst

### Educational Resources for Karst -

from the National Speleological Society, find sections on Bats, Cave Animals, Cave Archeology, Cave Biology, Cave Ecology, Cave Geology, Cave Hydrology, Cave Life, and Virtual Cave Tours. [http://www.caves.org/committee/education/table\\_of\\_contents.htm](http://www.caves.org/committee/education/table_of_contents.htm)

### Mammoth Cave National Park -

from the National Park Service, find activities, glossary, and fact sheets related to the park. <http://www.nps.gov/mac/home.htm>

## National Speleological Society -

from The National Speleological Society, the site has numerous educational resources and sections on cave art, preserves, and more. The site also allows you to mail karst postcards and listen to cave songs like `Caving Mother Blues` by Dell Talent. <http://www.caves.org/>

**Showcaves** - from Jochen Duckeck, German karst specialist, an extremely comprehensive site with resources relating to speleology, geology, geology, mines, subterranea, terminology, caving, caving-gear, cave-life speleothems, archaeology, historic caves, people, and literature. <http://www.showcaves.com/>

**Virtual Cave** - from Dave Bunnell, this premier site includes many beautiful and interesting pictures of caves. The site is organized into four main sections, Solution, Lava Tube, Sea, and Erosional caves. Go to the Solution Page section for images and descriptions of on over 40 cave terms ranging from the common, Stalagmites to the unusual Baldacchino Canopies. A Virtual Cave Image Map on this same page allows the user to learn more about specific speleothems by pointing and clicking. <http://www.goodearthgraphics.com/virtcave/index.html>

**Cave Formation Animation** - from Earth Explored Series, observe an animation of cave formation.

[http://www.classzone.com/books/earth\\_science/terc/content/visualization/es1405/es1405page01.cfm?chapter\\_no=visualization](http://www.classzone.com/books/earth_science/terc/content/visualization/es1405/es1405page01.cfm?chapter_no=visualization)

**Exploring Caves** - This packet for kindergarten through 3rd grade covers geology, cartography, and hydrology in a lighthearted story of Bat who teaches two lost children various lessons as he guides them out of the cave to safety. Poster is available for a nominal sum, call 1-888-ASK-USGS for more information.

<http://erg.usgs.gov/isb/pubs/teachers-packets/exploringcaves/pdfindex.html>

**More Than Skin Deep, A Teacher's Guide to Caves And Groundwater** (grades 2-8) from the Ozark National Scenic Riverways, Missouri <http://www.nps.gov/ozar/skindeep.htm>

## Call for Papers – Get Published!

The NSTA is looking for Earth Science teaching or lesson articles for their magazines. Please send your submission to: Janet Gerking, NSTA Editor  
443 Valley Stream Dr.  
Geneva, FL 32732  
Phone: (407)349-9093  
Fax: (407)349-9094  
[jgerking@nsta.org](mailto:jgerking@nsta.org)

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