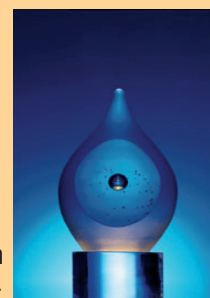




2008 U.S. Stockholm Junior Water Prize (www.stockholmjuniorwaterprize.org)



What is the SJWP?

The International Stockholm Junior Water Prize (SJWP) is the most prestigious youth award for a high school water science research project. Its purpose is to increase youth attention toward the water environment, and to sensitize them – as future leaders - to local and global water challenges. HRH Crown Princess Victoria is the patron of the prize. In a royal ceremony, during World Water Week, the international winner receives \$5,000 USD and a blue crystal sculpture.

The SJWP was founded by the Stockholm Water Foundation and is administered by the Stockholm International Water Institute (SIWI). ITT

Industries is the global sponsor. In the United States, the Water Environment Federation (WEF), and its member associations, sponsor and organize the state and national competition with support from ITT Industries and The Coca-Cola Company.

For more information go to the Water Environment Federation website: <http://www.wef.org/LearnAboutWater/ForStudents/SJWP/CompetitionInformation.htm> or go to:

www.stockholmjuniorwaterprize.org

The deadline for entry is April 15, 2008, or as indicated on State Competition Deadlines and Special Awards.

Innovative Ways to Educate Elementary School Children

Curious George Takes on Civil Engineering

That's right! With help from ASCE, Curious George is bringing civil engineering to students in grades K-1, and we're not monkey-ing around! ASCE has joined Universal Studios and Scholastic Inc. in developing educational materials that introduce engineering design concepts to students in grades K-1. Engineers and educators now have access to reproducible lesson plans that supplement a series of televised Curious George shows. Activities have been designed to reinforce objects and concepts familiar to little ones who want to "Become a Builder" just like George. To qualify for a free copy of the Curious George Let's Build teaching guide and poster, email outreach@asce.org with information about your upcoming outreach event. ASCE has also made it possible for educators across the country to invite a civil engineer to their classroom to spread the excitement of engineering. To register a civil engineer or educator for this program, visit the Scholastic Web site.

CYBERCHASE

Kids and families can team up with the Cyberchase gang to explore math and engineering problem-solving activities

through a new traveling exhibit. Based on the award winning PBS cartoon, Cyberchase, the exhibit was developed by the Children's Museum of Houston and is currently on display at the New York Hall of Science, Flushing Meadows Park, NY from September 2007 - January 2008. If you would like a free copy of the Cyberchase Inventive Innovations hands-on activity guide which is suitable for children ages 8-11, go to outreach@asce.org.

Mighty Microbe Trading Cards

The Team Mighty Micro Trading Cards are a great complement for water and wastewater science curriculum and can help meet state science content standards. The trading cards are designed for grades 4-7. The cards are illustrated with a colorful picture of a microbe on one side and facts and a description of the role each microbe plays in wastewater treatment. Please visit www.teammightymicrobe.com for more information.

NYWEA Scholarships (continued from p. 1)

The faculty advisors at the NYWEA student chapters are as follows:

Manhattan College -	Richard Carbonaro - 718-862-7171
Clarkson University -	Stefan Grimberg - 315-268-6490
RPI -	Simeon Komisar - 518-276-4893
SUNY - ESF	Jim Hassett - 315-470-6637
NY Institute of Technology -	Stanley Greenwald - 516-686-7969
Hofstra -	Margaret Hunter - 516-463-6021
Polytechnic University -	Konstantinos Kostarelos - 718-260-3260
Stonybrook -	Lawrence Swanson - 631-632-8704
City College -	John Fillos - 212-650-8010
Brooklyn College -	Martin Schreiberman - 718-951-5631
Cooper Union -	Constantine Yapijakis - 212-353-4296
University of Buffalo -	James Jensen - 716-645-2114

Innovative Ways to Educate Middle School and High School Students

Tech Valley High School, Troy, NY

Tech Valley High School is a new, innovative 9-12 educational program. It serves as a model in the region, the state and beyond of innovative public education that is based in strong partnerships and focuses on educating and inspiring students to embrace the increasingly important world of math and science. Students enrolled in Tech Valley High School will attend the school for a full day and take all core academic subjects within a project-based learning environment that will emphasize an integrated math and science curriculum and will focus on the region's emerging technologies (biotechnology, nanotechnology, advanced materials, alternative energies and information technology).

For more information please contact Mr. Dan Liebert, Principal and Chief Academic Officer:
dliebert@techvalleyhigh.org
Tel. 518-862-4960
Fax. 518-283-3053



Girl Scouts

As educators, either teachers, parents or mentors, we try to find innovative and creative ways to motivate students. One organization – The Girl Scouts – has found a way. This organization has always encouraged girls to explore engineering, science and math is now reaching out to girls through support of a new PBS show called "Design Squad." Another way they are reaching out is through a program initiated in 2001 called "Fair Play: Design & Discovery." This program offers girls an opportunity to take part in residential or day camps, leadership institutes and after school programs. The program follows a curriculum of engineering fundamentals and hands-on activities. Made possible through grants from Intel and the U.S. Department of Education, these Fair Play programs are aimed at

showing girls ages 12 to 16 how a career in engineering or technology can be attainable and fun. –Lynn Shallcross (Prism Magazine, February 2007).

The State of Massachusetts

While 37 states include some form of engineering or technology education in their curriculum standards, only Massachusetts has designed a statewide assessment in technology/engineering similar to exams now administered in biology, chemistry, and introduction to physics. Beginning with the class of 2010, all Bay State students must pass one of the four science or engineering competency tests to graduate. Early results seem to suggest that these programs are helping boost interest in engineering careers. – Jeffrey Selingo (Prism Magazine, April 2007).



Los Angeles

Los Angeles has created the ISEE (I'm a Student Exploring Excellence Program) which rallies construction, architecture, and engineering professionals to give high school level students an in depth introduction to building careers. It is a mutually beneficial program. It exposes young people to a new industry before they go to college and they may even be hired by the company full time. For more information, go to <http://www.laschools.org/contractor/sbop/isee>. –ENR 8/31/07

Websites



www.nywea.org – This is the Metropolitan chapter website of the New York Water Environment Federation.

www.epa.gov/teachers This is EPA's newly revised and improved environmental education website for teachers. One new feature is the addition of grade levels for the cited classroom materials.

www.teachengineering.com Teach Engineering is a multi-university partnership that has developed K-12 engineering education curriculum modules that are standards-based, free and available over the internet. It aims to equip teachers with lessons in science, math and engineering that are creative and exciting.

[Http://science.nsta.org](http://science.nsta.org) National Science Teachers Association newsletter. Each issue is filled with informative articles.

[Http://www.wef.org/LearnAboutWater/ForEducators/CurriculumMaterials/](http://www.wef.org/LearnAboutWater/ForEducators/CurriculumMaterials/). The Water Environment Federation has many children's publications including Water the Amazing Journey "Go With The Flow, and World-wide Waste, It's not a Load of Rubbish.

www.engineeringk12.org Go Engineering's e-newsletter is for K-12 educators. Its purpose is to promote the importance of engineering and technology education and explore the many ways that engineering and technology can help teachers meet the challenge of making mathematics and science come alive for students.

www.pbs.org/journeytoplanetearth Funded by the National Science Foundation, Journey To Planet Earth is a video series that helps students and adults understand the most critical and timely issues facing the natural sciences in the 21st century.

Things to Do — Pass the Word!

Go Green

The EPA is offering a new monthly email newsletter, *GO Green!*



The newsletter will provide “what you can do” information on activities and events that everyone can use to make a difference just about anywhere – in homes, workplaces, schools and communities. The newsletter will include information on such issues as how to calculate individual energy use, upcoming environmental activities. For more information, go to www.epa.gov

NG Kaul Memorial Scholarship

\$2500 is being offered in scholarships to students pursuing graduate or doctoral degrees in environmental/civil engineering or environmental science concentrating on water quality who show a commitment to government service. Deadline for application is 2/29/08. See www.nywea.org

Calling all Middle and High School Artists and Environmentalists



Win Prizes and Get Awards!

Show how wastewater treatment plants must protect our waters! For more information visit the NYWEA website at www.nywea.org.

Deadline is May 1, 2008.

Get in on ‘The Importance of Wastewater Treatment’ Poster Contest

Sponsored by NYS Department of Environmental Conservation and the New York Water Environment Association

Clay Boats

To make a boat that will float in a tub of water, each student uses a small quantity of modeling clay. The object is to build a boat that will hold as much weight as possible without sinking. In the process of designing and testing their boats, students discover some



of the basic principles of boat design and gain first-hand experience with concepts such as buoyancy and density. For more information on this activity go to <http://blgos.asee.org/goengineering/>

— from the September 20, 2007 Go Engineering Newsletter

Public Educational Materials Available Through Water Environment Federation (WEF)

- Grades 9-12
- Wastewater Treatment
 - Water Careers
 - Biography of a River
 - Groundwater Basics
 - From Ground to Water
 - What’s the Level?
 - What Goes On Down Under?
 - Leaking Underground Storage Tanks

- Do You Drink It?
 - Hydraulic Head
 - Flow Nets
 - Groundwater: Cleaning Up
 - What is Groundwater Pollution Doing to the Neighborhood?
 - Landfills and the Potential for Groundwater Contamination
- For more information or to order any one of these, visit: [WEF.org](http://www.wef.org)

Upcoming Events — Mark your Calendar!

NYWEA 80th Annual Winter Meeting
February 3- 6, 2008 at the Marriott Marquis in New York City

The NYWEA thanks Malcolm Pirnie, Inc. for assistance with design and printing of this newsletter.



EnviroEd

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www.nywea.org



Message From the Chair and Vice Chair

The NYWEA Public Education Committee publishes this newsletter twice a year to engage young people in careers related to water quality such as engineers, biologists, chemists, treatment plant operators and managers, laboratory technicians, government officials and many others. This issue contains great information on websites existing educational programs, NYWEA scholarship opportunities, current legislative initiatives, contests, and educational games. We are certain that you will enjoy the newsletter and hope that you will share the information with others!

Please contact Beth Petrillo, Vice-Chair at bpetrillo@dep.nyc.gov if you would like previous newsletters emailed to you or if you have any suggestions on how we can improve the newsletter.

Donna Potorti, Chair

Beth Petrillo, Vice Chair

President Signs \$43 Billion Science Authorization Bill to Promote Innovation and Competitiveness

August 9, 2007 - President Bush today signed into law a massive bill that authorizes \$43 billion over the next three years for a plethora of research and science education programs. “The bill I will sign today will help ensure that we do remain the most competitive and innovative nation in the world,” Bush said before signing the bill.

The America COMPETES Act, or the “America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Act,” embodies recommendations in recent innovation and competitiveness reports, especially *Rising Above the Gathering Storm* by the National Academies.

The America COMPETES Act authorizes \$22 billion for the National Science Foundation (NSF) over fiscal years 2008 - 2010, putting it on a path to double its budget in approximately 7 years. Particularly strong increases are authorized in fiscal year 2008 for K-12 education programs at NSF.

The bill authorizes nearly \$17 billion to Department for Energy (DOE) programs over fiscal years 2008 – 2010, keeping DOE’s Office of Science on a seven-year doubling path. It also establishes an Advanced Research Projects Agency for Energy, or ARPA-E, which is designed to engage in high-risk, high reward research under the Department of Energy.

For more information contact:

Craig Schiffries, Ph.D.
Director of Science Policy and Senior Scientist
National Council for Science and the Environment
1707 H Street, NW, Suite 200
Washington, D.C. 20006
Tel: 202-530-5810

NYWEA Offers \$19,000 in Scholarships!

In 2008, the New York Water Environment Association will be offering a total of six \$1,500 scholarships and one \$10,000 scholarship.

Application deadline for all scholarships: January 23, 2008.

In order to be eligible for the 2008 \$10,000 Environmental Career Scholarship (paid out over four years), the recipient must be:

- A qualifying high school senior
- A New York State resident
- Enrolled full-time in a B.S. or B.E. degree program with an environmental emphasis.

These are the criteria for the six 2008 \$1,500 Scholarship Application Packages:

- Two(2) are granted to children of members
- Two (2) are granted to students enrolled at a college or university where there is a NYWEA student chapter, and
- Two (2) are granted to high school students who will be enrolled in an environmentally related program in a four year college or university.

Want to Win a Prize?

Be the fifth person to respond to the newsletter survey and you will receive a set of 30 *Give Water a 2nd Chance* workbooks for upper elementary school students absolutely free! To complete the survey, go to www.nywea.org. Thank you for your support.

If you have any comments or suggestions, please contact Beth Petrillo at bpetrillo@dep.nyc.gov.