



- **CITIZEN ASTRONAUTS, NEW ENERGY SOURCES AND BATS TOP THE EDITORIAL ROSTER FOR SCIENCE SCREEN REPORT® IN 2011/12.**
- **2011 SURVEY CONFIRMS SCIENCE SCREEN REPORT HELPS IMPROVE SCIENCE LITERACY**
- **SCIENCE SCREEN REPORT WELCOMES OUR 2012/13 ADVISORY BOARD MEMBERS**
- **THE VIRTUAL SCIENTIST GUEST LECTURE SERIES**
- **2011/12 PROGRAM DESCRIPTIONS**
- **EDUCATOR RESOURCES**

Dear Educator:

Welcome to the start of another exciting school year and with it a new volume of grade-appropriate SCIENCE SCREEN REPORT® or SCIENCE SCREEN REPORT FOR KIDS® which will be shipped to you shortly on DVD (depending upon your sponsorship).

This year's programs showcase dynamic new innovations: a "tilting" bridge, new fuels from biomass and solar, the next generation of space transport and a visit to the "dark-side" to study the world of bats and the crucial role they play in our environment. Younger students will learn about advances in solar energy, inter-galactic activity in our solar system, environmental programs about agriculture, waste recycling and meet some interesting terrestrial creatures with which we share our planet. Scroll down to the end for a complete list of titles for both SCIENCE SCREEN REPORT and SCIENCE SCREEN REPORT FOR KIDS.

SCIENCE SCREEN REPORT (or SCIENCE SCREEN REPORT FOR KIDS) DVDs are yours to keep as a permanent resource in your library and we're sure you will find dozens of ways to integrate these valuable programs into your science classes. But all of this would not be possible without the generous support of our more than 100 corporate and foundation sponsors, therefore to ensure that your receipt of SSR or SSR for Kids remains uninterrupted we encourage you to acknowledge your sponsor's support with a letter of thanks.

We wish you much success during the 2011/12 school year and, as always, look forward to receiving your feedback and ideas. Watch for our blogs, bulletins and updates over the coming months or visit our website at: [www.ssrvideo.com](http://www.ssrvideo.com).

**Scott Forman**  
**President**

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## WHO TO CALL IF YOU HAVE QUESTIONS:

Advisory panel: Jon Glassman at 1-800-233-2133 ext 233; email: [jon@ssrvideo.com](mailto:jon@ssrvideo.com)  
Sponsorship: Glenn Forman at 1-800-233-2133 ext 202; email: [Glenn@ssrvideo.com](mailto:Glenn@ssrvideo.com)  
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## **2011 SURVEY CONFIRMS SCIENCE SCREEN REPORT HELPS IMPROVE SCIENCE LITERACY:**

The annual survey of educators receiving SSR or SSR for Kids reaffirmed the academic value of these award-winning science news programs:

- 89% indicated SSR programs “Mostly Meet,” “Meet” or “Exceed” state science benchmarks.
- 89% rated the overall content of SSR programs as “Very Good” (43%) to “Excellent” (46%).
- 83% indicated that SSR programs enhance instruction by providing a broader perspective on the lesson topic.
- 77% indicated that instructional videos like SSR “Improve Test Scores” and “Science Literacy Rates”.

**Rate this year’s programs. Click on the following links and give us your feedback on individual programs and suggest ideas for future releases!**

- For **SCIENCE SCREEN REPORT** use this link:  
<http://www.zoomerang.com/Survey/WEB22CUN5SDBGB/>
- For **SCIENCE SCREEN REPORT FOR KIDS** use this link:  
<http://www.zoomerang.com/Survey/WEB22CUP27DUTB/>

## **SCIENCE SCREEN REPORT WELCOMES OUR 2012/13 ADVISORY BOARD MEMBERS:**

Each edition of SSR and SSR for Kids is carefully reviewed for editorial integrity and science accuracy by an advisory panel of educators. For 2012 we look forward to working with the following Advisory Board members on next year’s program content:

- Erica Everett, Science Dept Chair, Manchester Essex Regional HS, Manchester, MA
- Don Pringle, Science Dept Chair, Ferndale High School, Ferndale, WA
- Cathy Hughes, Librarian, Decatur HS, Decatur, AL
- Ron Persin, (retired) Physics Teacher, Boca Raton, FL
- Dan Sitzman, Curriculum Specialist, Omaha North High School, Omaha, NE
- Martina Marrone, Lead Science Teacher, Frederick W. Cook Elementary School, Plainfield, NJ
- John Murnan, Biology Teacher, Etowah High School, Woodstock, GA
- Debra Murnan, Math/Science Teacher, Bascomb Elementary School, Woodstock, GA

If you or any of your colleagues would like to participate in future advisory panels please contact: Jon Glassman at [jon@ssrvideo.com](mailto:jon@ssrvideo.com) or call toll free: 1-800-223-2133 ext 233.

## **THE VIRTUAL SCIENTIST GUEST LECTURE SERIES**

The Virtual Scientist Guest Lecture Series extends the educational scope of the SCIENCE SCREEN REPORT providing a forum through which scientists and students experience an interactive dialogue that inspires and engages students about dynamic technologies and cutting edge research. Technology requirements are minimal, requiring only that each participant have a computer with high speed internet access, a high quality monitor, webcam, speakers and microphone. Skype software is downloaded from [www.skype.com](http://www.skype.com) free of charge. "Virtual visits" are appropriate for all grade levels and moderated by the classroom teacher. They typically last about 30 minutes in order to fit within a standard class period. To preview a "virtual visit" or to register your school go to: [http://www.ssrvideo.com/Virtual\\_Scientist\\_Video1.html](http://www.ssrvideo.com/Virtual_Scientist_Video1.html).

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## **2011/12 PROGRAM DESCRIPTIONS**

### **SCIENCE SCREEN REPORT® -- VOLUME 41**

#### **ENGINEERING – BRIDGES BY DESIGN**

Some of the most elegantly expressed engineering technology is found in bridges, both ancient and modern. Four case studies of cutting-edge bridge design are showcased in this program including the U.K's remarkable 'tilting' bridge. *17 mins.*

#### **ECOLOGY – BATS: CREATURES OF THE NIGHT**

Texas is the site of a wild night time spectacle. Annually from May through October, some 40 million Mexican free-tailed bats migrate to their breeding home in Bracken Cave, San Antonio. This program examines the importance of bats to the overall health of the environment. *17 mins.*

#### **SPACE SCIENCE – EVERYDAY ASTRONAUTS**

As America bid a fond farewell to the Space Shuttle this summer, speculation about the future trajectory of the country's space exploration initiative revealed a myriad of entrepreneurs lining up to enter the new space-race, and with it new opportunities for private space travel. From conception to reality, sub-orbital vehicles are taking flight for research, education and general transport. New generations of space vehicles will transport researchers, educators and average citizens, not only around the planet, but also to the International Space Station, fast closing the gap between science fiction and science fact. *16 mins.*

#### **ELECTRONICS – THE SCIENCE OF CIRCUIT BOARDS \***

Increasingly complex computerized systems are speeding up all elements of society. This program illustrates how circuit boards are made, starting with the customers' needs translated to computer design, the various steps of manufacturing and implementation in a variety of settings. *16 mins.*

#### **ENERGY - UNDERSTANDING HYDROELECTRIC POWER**

Harnessing the energy produced by the Earth's water systems accounts for a significant source of electricity generated by turbines. The search is on to find ways to capture ocean wave and ocean current energy. The field requires the expertise of a variety of scientists and engineers: from mechanical engineers specializing in fluid mechanics to hydro-mechanical and hydraulic-mechanical engineers. *15 mins.*

#### **ENVIRONMENT – SCIENCE FOR A HEALTHY PLANET**

Testing and monitoring the health of the land, ocean and atmosphere requires multi-disciplinary and international scientific cooperation. This program explores the various technologies and some of the experiments that tell us about the human impact on the planet and in the atmosphere. *12 mins.*

#### **ENERGY – TRANSFORMING RENEWABLE RESOURCES: PART 1**

Learning to incorporate a variety of eco-friendly energy sources into our businesses and homes will make Earth a better place to live. Part one of Transforming Energy explores photovoltaics, the design behind wind turbine technology, and the creative processes behind vehicles in the American Solar Car Race. Zero energy houses of the future will use many of these technologies to produce more energy than they consume. *18 mins.*

#### **ENERGY – TRANSFORMING RENEWABLE RESOURCES: PART 2**

This program stresses the importance of caring for our environment and provides an overview of the multiple renewable energy sources such as biomass and solar energy. This second part of Transforming Energy documents how some states are trying to enact laws that require local power plants to increase their power provided by renewable energy. To preserve our planet's health, scientists explore green projects involving ecologically friendly architecture and sustainable communities with solar homes and green housing developments. *18 mins.*

### **SCIENCE SCREEN REPORT FOR KIDS® -- VOLUME 21**

#### **AGRICULTURE – FARMING TODAY AND TOMORROW**

Research scientists throughout the world are helping farmers implement sustainable food production systems. Key concepts that underline this research are ecosystem, preservation and natural resource conservation. Food production systems touch nearly every aspect of life; from farms and industrial processing plants to markets, grocery stores and the dinner table. Students will learn about various sustainable 'food cycle' systems. *15 mins.*

#### **SOLAR POWER – CLEAN ENERGY FROM THE SUN**

The Sun is our primary source of renewable energy and the driver behind all of Earth's terrestrial and oceanic organic processes. Scientists worldwide are exploring how businesses and individuals can reduce the human carbon footprint by incorporating solar power. From solar-powered radios, telephones, heating systems to automobiles and cargo ships, new inventions that work without the direct use of fossil fuel are implemented daily. *13 mins.*

#### **SPACE SCIENCE – STUDYING DISTANT PLUTO**

Since its identification in 1930 by Clyde Tombaugh, astronomers have been debating the status of this tiny world at the farthest reaches of our solar system. In this program, students are given a firsthand look at the scientific process that initially classified Pluto as a planet and then reclassified it in 2006 as a dwarf planet. *10 mins.*

#### **ENGINEERING – FUELING A GREENER PLANET**

An alphabet of new terminology has evolved over the past decade to describe the gasoline inventions fueling the next generation of land and ocean travel. DNGVs (dedicated natural gas vehicles) are already on the road, along with vehicles with Flexible-Fuel tank design for blended fuels. HEVs (hybrid electric vehicle) utilize two different energy sources for efficiency. The invention of the fuel cell, an electrochemical engine, has revolutionized our concept of how we can ecologically and economically travel in the near future. *14 mins.*

#### **ECOLOGY – THE SCIENCE OF RECYCLING**

Waste-management systems are incorporating new recycling processes. Transforming waste into energy and new products is fuelling major research and inventions today. For example, inside the eponymous 'rotting

boxes', organic waste is recycled into re-usable products by material-eating micro-organisms. Understanding the environmental necessity of recycling, and how it is changing the world in which we live, is the core of this program. *14 mins.*

#### **ACID CAVES – A LIVING LABORATORY**

Deep in Southern Mexico's jungle, the Villa Luz limestone caves support an ecosystem that thrives in a highly acidic environment. This rare type of karst cave is found in few spots on Earth. Geologists and biologists wear gas masks, oxygen tanks and protective outerwear to explore sections of the caves. All life forms, from extremophilic microbial colonies to fish and bats, are interdependent upon the toxic soup of water, sulphur-oxide and hydrogen monoxide for survival. *17 mins.*

#### **ZOOLOGY – RED CRAB MIGRATION**

Christmas Island, discovered December 25, 1643, is just a speck of land in the Indian Ocean. But the annual red crab migration, a wonder of the natural world, at the beginning of the rainy season is so massive it can be seen from the air. In this program students will follow the terrestrial arthropods from the rainforest, across dangerous terrain to the ocean to mate and then back into their forest underground burrows. *12 mins.*

#### **COMET - VISITORS FROM SPACE**

Comets orbiting the Sun in the Kuiper Belt and the Oort Cloud, sometimes come a little too close to Earth's gravitational pull. In this program students learn about comets, objects of varying size that formed from the earliest galactic activity. *10 mins.*

#### **EDUCATOR RESOURCES**

**Target Accepting Applications for K-12 Field Trip Grants Program. DEADLINE: October 3, 2011.**

Over five thousand grants of up to \$700 are available to education professionals employed by K-12 schools in the United States to bring students to museums, historical sites, and cultural organizations.

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

#### **Siemens Foundation and Discovery Education Launch Fourth Annual Siemens We Can Change the World Challenge for K-12 Students**

Teams of K-12 students and their teachers/mentors in the U.S. are invited to enter their innovative ideas to solve environmental problems and compete for more than \$250,000 in total prizes....

**Deadline:** March 15, 2012

**Posted:** September 11, 2011

#### **ABOUT US**

SCIENCE SCREEN REPORT and SCIENCE SCREEN REPORT FOR KIDS are produced by Florida-based Allegro Productions, Inc. in association with the Accreditation Board for Engineering & Technology (ABET), the Junior Engineering Technical Society (JETS), and the National Museum of Education™(NMOE), and has served as a trusted resource of objective science news reporting for more than 40 years. The programs are designed to help students understand the vital role that science plays as an economic driver and to address some of the most critical issues facing our society today, as well as the myriad of opportunities in a science-based career. The programs are **provided to schools free of charge** through the support of local corporations who sponsor the DVD series on behalf of school districts in their plant communities as part of their education outreach initiatives. SCIENCE SCREEN REPORT® is endorsed as an exemplary resource by the Smithsonian Institute's Teacher Resource Center, the Eisenhower National Clearinghouse and MIT's prestigious Haystack Observatory. SCIENCE SCREEN REPORT programs are appropriate for grades 8 through 12; SCIENCE SCREEN REPORT FOR KIDS are for grades 4 through 7. They are actively used in about 7,000 schools districts nationwide and seen by more than seven million students in grades 3-12 annually. For program previews and to learn more visit: [www.ssrvideo.com](http://www.ssrvideo.com) or call toll free: 1-800-233-2133 ext 201.