





April/May 2024 NEWSLETTER

Upcoming Events

For Teachers & Students

TEP

Future U: STEM in the Classroom June 5th; 5:00-6:15 PM (EST) Click here to register!

STEM Lyceums

Wild Insights: Exploring Careers in Wildlife Sciences
May 22nd; 5:00 – 6:00 PM (EST)
Click here to register!

Congressional STEM Education Caucus
Webinar on Artificial Intelligence (AI)
May 14th, 1:30 PM (EST)
Click here to register!

STEM News

11-year-old's beach find was likely largest known marine reptile to swim Earth's oceans.

Summary:

A massive jawbone discovered by a father-daughter team in Somerset, UK belonged to a newfound species of ichthyosaur, potentially rivaling the blue whale in size. Named Ichthyotitan severnensis, the reptile's jawbone measured over 6.5 feet. Additional fragments found on the beach completed the puzzle, shedding light on its role in evolutionary history.

The fossil's quality surpasses previous finds, suggesting it was still growing at the time of death. The discovery, soon to be displayed at the Bristol Museum, underscores the importance of citizen science in paleontology.

STEM Spotlight

Sharon Smoot



Sharon Smoot, the newest member of CEE's Board of Trustees and former president of BWXT's Nuclear Operations Group, Inc., headquartered in Lynchburg, Virginia, has devoted more than 30 years of her civilian career to the U.S. Navy. She has served as executive director for logistics, maintenance, and industrial operations at the Naval Sea Systems Command, Smoot capped off a career marked by growth and accomplishment. She navigated through positions of increasing responsibility in prominent naval commands, including the Office of the Chief of Naval Operations, U.S. Fleet Forces Command, and Norfolk Naval Shipyard. Recognition for her contributions came in the form of prestigious awards such as the Department of the Navy Civilian Distinguished Service Award, NAVSEA Meritorious Unit Commendation, and the Presidential Rank Award. Her academic credentials include a master's degree in engineering management from Old Dominion University and a bachelor's degree in electrical engineering from Virginia Tech.

Teacher Enrichment Program

Teachers invited to Virtual Bite of Science and College & Career Panels to learn about new cutting-edge research and technology.

STEM Lyceums

Students can join the virtual Lyceum club to build STEM communities and engage in discussions and explorations of STEM concepts and STEM career pathways.

USABO

Students and teachers register their school for the opportunity to be a part of the premier biology competition open to all schools in the United States.

Partner Opportunities

TC Energy

TC Energy, formerly TransCanada Corporation, is a leading North American energy infrastructure company. It operates a vast network of natural gas and oil pipelines, as well as power generation assets. TC Energy plays a crucial role in delivering energy reliably and sustainably across the continent.

TC Energy demonstrates its commitment to education and diversity through scholarship programs. These initiatives support students pursuing STEM fields, Indigenous students, and those mastering trades like mechanical and electrical work. By investing in education, TC Energy fosters talent development, promotes inclusivity, and contributes to the advancement of diverse industries critical to the energy sector's future. Find out more about what TC Energy has to offer here.



STEM Activities

Cool STEM

Biology:

When did humans stop evolving?

Earth Science:

What makes the soil in tropical rainforests so rich?

Physics:

How can glass produce glare without reflecting light?

STEM Scholarships/Internships

Students

The Gates Scholarship

GE-Reagan Foundation Scholarship Program

Ron Brown Scholarship

Minority Women in STEM Financial Need Scholarship

Amazon Future Engineer Scholarship Program

Foot Locker Scholar Athletes Program

<u>Asian – American Architects and Engineers Foundation</u> <u>Scholarship</u>

United States Senate Youth Program

Teachers

Albert Einstein Distinguished Educator Fellowship (AEF)
Program

Javits-Frasier Scholarship (nagc.org)

McCarthey Dressman Teacher Development Grants

NEA Foundation Learning and Leadership Grants

NEA Foundation Envision Equity Grants

Dancing spiders inspired biologist to teach others.

Sebastian Echeverri, initially drawn to animals, found fascination in spiders after seeing a captivating display of the fiery-haired paradise jumping spider's mating ritual. These arachnids, with their vibrant red faces and green legs, use ground vibrations to communicate and perform a choreographed dance to attract mates. Echeverri, intrigued by their behavior, delved into studying them as part of his research on sensory ecology. Despite facing challenges due to undiagnosed autism and ADHD, and feeling unsupported in academia, Echeverri pursued his passion. Inspired by his research, he transitioned into science communication, sharing his love for spiders with others. Learn more about Echeverri's journey here!



Classroom Activities

Greywater Gadgetry

Reaction Rates: When Surface Area Matters!

<u>Using Green Chemistry to Understand Types of</u> Chemical Reactions

Control the Reaction Rate of a Foaming Reaction

Rapid Trash Assessment