

Fall 2021 TEP Events

Educators are encouraged to register for all events of interest regardless of location. Click [here](#) for additional event and speaker information.

Virtual Bite of Science

Join for presentations by STEM professionals from industry, academia, and/or government.

Events from 5—6:30 pm, ET

Event	Date
Richmond/Petersburg	Oct 6
Hampton Roads	Oct 7

Virtual STEM College & Career Panels

Help your students to find their place in STEM. Join to hear local STEM industry professionals and colleges share information and insights about STEM careers and educational pathways in your area.

Event	Date	Time
Texas	Sept 30	5-6:15, CT
Central Florida	Oct 26	5-6:15, ET
Panhandle Florida & Alabama	Oct 28	5-6:15, ET
California	Nov 4	5-6:15, PT
Maryland	Nov 16	5-6:15, ET



Learn more about the interdisciplinary nature of STEM, the real-world applications of STEM skills and how STEM intersects with our daily lives. Events from 5—6:15 pm, ET.

Event	Date
Super Snouts: The Olfactory Excellence of Man's Best Friend	Oct 12
Changing the Game: The Technological Revolution of Sports	Nov 9
To Infinity & Beyond: The Implications of Civilian Space Travel	Dec 14

STEM News

October 23 is Mole Day

Science

[Children's dislike of cauliflower, broccoli could be written in their microbiome](#)

In the mouth, enzymes from these vegetables and from bacteria in saliva can produce unpleasant, sulfurous odors. High levels of these volatile compounds cause children to dislike the vegetables.

Technology

[Combining sunlight and wastewater nitrate to make the world's No. 2 chemical](#)

Engineers convert nitrates to ammonia in sustainable electrochemical reaction with high solar-to-fuel efficiency.

Engineering

[A more efficient way to find a more efficient battery](#)

Research has the potential to speed up development of high-capacity storage batteries while spending less time in a lab.

Mathematics

[New AI tool accelerates discovery of truly new materials](#)

The new artificial intelligence tool has already led to the discovery of four new materials.

RSI & USABO Deadlines

The Center for Excellence in Education offers two STEM programs at no cost to high-performing high school students: the Research Science Institute ([RSI](#)) & United States Biolympiad ([USABO](#)).

Research Science Institute (RSI)

The application for RSI opens mid-November. Dates and additional information to be announced.

United States Biolympiad (USABO)

The USABO is the nation's largest biology education and testing program. Explore the world of Biology through the USABO. Registration for the USABO opened September 10, 2021.

For more information about programs and how to register or apply, visit program websites ([RSI](#) & [USABO](#)).

A Lesson to Learn

STEM Rising is your go-to resource for all-things-STEM at the U.S. Department of Energy.

Kindergarten—High School

Offerings for K-12 for educational online content, events, internships, workshops, and more.

Teachers

Digital content and virtual learning for classroom use, teacher workshops and research opportunities, grants, and more.

Workforce

STEM resources for people currently in the STEM workforce and energy sector career maps.

CEE Partner's teacher opportunities

Illumina events open to all teachers:

- **October 11: 1-2pm ET - [Women in Biotech](#)**
- **October 20: 7-8pm ET - [Using Genomics in Agriculture to Advance Sustainable Solutions](#)** (part of Illumina Genomic Discoveries Industry Speaker Series)

US Dept. of Energy's Albert Einstein Distinguished Educator Fellowship Program is accepting applications for the 2022-2023 Fellowship.

- **Deadline: Nov. 18, 2021 at 8:00 PM, ET**
- This program provides a unique opportunity for accomplished K-12 STEM educators to spend eleven months working in Federal agencies or in U.S. Congressional offices, applying their extensive knowledge and classroom experiences to national education program and/or education policy efforts.
- **[Find out more here](#)**

Celebrate Chemistry! Lloyd N. Ferguson

Dr. Lloyd Noel Ferguson was a brilliant chemist, a dedicated teacher and mentor, and an ardent supporter of young Black people entering the fields of chemical engineering and chemistry. Dr. Ferguson was the first Black person to earn a chemistry Ph.D. from the University of California, Berkeley, only three years after earning his undergraduate degree.



*Lloyd Noel Ferguson, 1984
(Photo: Cal State LA)*

Dr. Ferguson's interest in chemistry began when he was a child. He built a shed in his backyard so that he could conduct experiments away from his house. By the time he finished high school at the age of 16, he had developed a moth repellent, spot remover, a lemonade mix and silver polish. A budding entrepreneur, he sold some of his inventions to his neighbors.

While at Berkeley, Dr. Ferguson worked with Dr. Melvin Calvin on a national defense project, the purpose of which was to find a material that would release oxygen for use in a submarine if it was ever needed.

In 1945, Dr. Ferguson received an offer to join the faculty of Howard University and was promoted to department head in 1958. During his tenure, Dr. Ferguson was instrumental in building the first doctoral program in chemistry at a historically black college or university. Dr. Ferguson left Howard University to join the chemistry department at California State University Los Angeles in 1965, serving as department chair from 1968 to 1971, retiring in 1985.

Dr. Ferguson authored more than 50 journal articles and seven textbooks. His research included the investigation of the structure of carbon-based molecules, the relationship between structure and biological activity, and cancer chemotherapy. Over a span of 20 years, he also explored the function of the human sense of taste and was particularly interested in the molecular differences between substances that taste sour and those that taste sweet -- and tried to find out why some molecules of very similar structure do not produce any taste.

Dr. Ferguson was relentless in creating opportunities for Black people interested in chemistry and biochemistry. Find out more about Dr. Ferguson through the following links:

[UC Berkely](#) & [History Makers](#)