## SPECTROSCOPY SOCIETY OF PITTSBURGH



IN EDUCATIONAL PARTNERSHIP WITH THE



NATIONAL ENERGY TECHNOLOGY LABORATORY (United States Department of Energy)

invite elementary and middle school teachers to attend the

## HERBERT L. RETCOFSKY MEMORIAL "LIGHT, COLOR, AND SPECTROSCOPY FOR KIDS" WORKSHOP

## TO BE HELD AT THE

National Energy Technology Center
(South Park – about 12 miles south of Pittsburgh – specific directions will be sent)
Thursday, March 30, 2017
8:30 AM – 3:00 PM

Fee: \$20.00 (includes lunch)

PA TEACHERS ATTENDING THE WORKSHOP WILL RECEIVE 5 HOURS OF CREDIT TOWARD THEIR ACT 48 REQUIREMENTS

Mail to:	John A. Varine, SSP Spectroscopy Workshop, 198 Myers Road,
	Vandargrift DA 15600 before March 17 2017 Engless your

Vandergrift, PA 15690 before March 17, 2017. Enclose your \$20 check payable to the SSP. (724-845-8779, varine@pittcon.org)



Please register me for the SSP "Light, Color and Spectroscopy for Kids" Workshop for Elementary/Middle School Teachers to be held at the National Energy Technology Laboratory on Thursday, March 30, 2017, at 8:30 AM.

Name	School
School Address	School District
City, State, Zip	
Telephone Number	(circle - home or school?)
E-Mail Address	
Grade Level & Subjects Taught	

## "SSP LIGHT, COLOR AND SPECTROSCOPY FOR KIDS" A Workshop For Elementary & Middle School Teachers

The Spectroscopy Society of Pittsburgh (SSP) will again offer its annual "Light, Color and Spectroscopy for Kids" workshop to elementary and middle school teachers. Using the materials provided by the SSP, workshop participants will be able to project a large and very bright visible spectrum (rainbow?) in their own classrooms. They will use that spectrum together with other materials to demonstrate color addition & subtraction and why colors appear the way they do.

Spectral excitation will introduce the concept of atomic energy levels in a novel way. Later in the workshop, participants will view the beautiful colors and spectra of excited gases and use their observations to perform an experiment in qualitative chemical analysis. To make science a little more interesting to students that profess little or no interest in science, workshop participants will be introduced to a new concept - "spectroscopy as an art form".

The teaching method used is that of the student-assistant lecture-demonstration approach with emphasis on deductive reasoning. Workshop activities correlate well with the Pennsylvania Science Standards. Teachers will take home most of the materials used at the workshop for use in their own classrooms, including a *SpectroClick Kit* (www.spectroclick.com/spectroclick-kit) which can be used at all grade levels, K – 12. The workshop will be presented at the National Energy Technology Laboratory (NETL - a US Department of Energy National Laboratory) in South Park, just a few miles from Pittsburgh. Conference rooms for the workshop are provided by NETL through an Educational Partnership Agreement between the national laboratory and the SSP and its sister society the Society for Analytical Chemists of Pittsburgh (SACP). Early registration is encouraged, as seating is limited. The final date for registration is March 16, 2017. Late registrations will be considered if space is still available. Please let us know if financial assistance is required for your attendance at this workshop.

For information on other valuable SSP AND SACP ELEMENTARY/MIDDLE SCHOOL PROGRAMS

(Equipment Grants, Excellence in Teaching Awards, Essay Contest, Support for Science Olympiads, and more)
Visit the Society Websites at - www.ssp-pgh.org and www.sacp.org