## **SSPLOGO2THE**

###### 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, April 5, 2018

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,**

**Vandergrift, PA 15690 by March 26, 2018. Enclose your**

 **$20 check payable to the SSP. (724-845-8779,** **varine@pittcon.org)**

 ↑ Keep the above part for reference ↑

**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, April 5, 2018, 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)**](http://www.spectroclick.com/spectroclick-kit%29) **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 26, 2018. 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 about 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**](http://www.ssp-pgh.org) **and** [**www.sacp.org**](http://www.sacp.org)