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Dear Educator:

Brookhaven National Laboratory is hosting a teacher training, ***Exploring Life Science with a New Light***, from June 27 to July 1, 2016. The training is centered on the use, applications and development of student research projects at the National Synchrotron Light Source-II (NSLS-II). Participants will pay a fee of \$150, which includes daily lunch and refreshments. Upon completion of the week-long training, participants will receive 40 in-service credit hours.

High school biology, chemistry, physics and research teachers are invited to apply. Teachers will be selected from a pool of applicants as space is limited to 20 participants. Selected teachers will receive additional information regarding payment and training.

Exploring Life Science with a New Light

Dates: June 27 through July 1, 2016

Time: 8:30 a.m. – 5:00 p.m. (Friday ends after lunch)

Audience: High School science teachers with a passion for research, biology, chemistry, and physics

Professional Development Credit: 40 hours

Fee: \$150

Application deadline: May 23, 2016

Notification of selection: May 27, 2016

Learn what is happening at the new source of light at Brookhaven National Laboratory. At the National Synchrotron Light Source-II, light allows us to explore the fascinating world of atoms, molecules and cells. Lectures and hands-on laboratory activities will introduce participants to sample preparation, data collection, and data analysis methods. Participants will have the opportunity to carry out experiments at different experimental stations including macromolecular crystallography and X-ray imaging. One of the aims is that teachers participating in this workshop will be able to lead their students to conduct experiments at this new source of light, the National Synchrotron Light Source II.

Agenda Overview:

Lecture topics include cell structure, macromolecules, crystals, principles of synchrotron radiation, crystallography and imaging techniques, data analysis, and developing a proposal for research at the NSLS II.

Participants will gain firsthand knowledge through hands-on laboratory activities in sample preparation, protein crystallization, imaging, data collection, and data analysis.

Sincerely,

Office of Educational Programs
Brookhaven National Laboratory