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managed by Brookhaven Science Associates for the U.S. Department of Energy

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Dear Educator:

Brookhaven National Laboratory is hosting a virtual educator training, **"Biogeochemical Multimodal Imaging"**, June 27– June 30, 2022. The training is centered on applications in biogeochemical imaging and the development of student research projects at the National Synchrotron Light Source-II (NSLS-II) and Center for Nanomaterials (CFN). There is no cost to participate in the workshop. Upon completion of the training, teachers will receive in-service credits.

High school biology, chemistry, earth science, environmental science and research teachers are invited to apply. Educators may register a maximum of 2 students to participate in the training sessions. Students must have completed biology and/or chemistry and must be no younger than 15 years old at the start of the workshop. Alternately, teachers may participate with a colleague from their school.

A maximum of 6 teams (18 participants) will be accepted with priority given to teacher/student teams. The application must be completed by the lead teacher. The workshop is planned to be hybrid, with potential for teachers and student to come on-site at specificized dates if conditions permit.

To participate in the workshop, the school district must have a signed user agreement with BNL. Many <u>school districts</u> have user agreements in place. For a sample user agreement please follow this link: <u>https://www.bnl.gov/guv/agreements/files/pdf/NPUA-Watermark-Sample.pdf</u>.

Dates: June 27 to June 30, 2022 Audience: High School biology, chemistry, and research teachers Professional Development Credit: 16 hours Fee: none

Agenda Overview:

Learn what is happening at Brookhaven National Laboratory Users Facilities. At the National Synchrotron Light Source-II, light allows us to explore the fascinating world of atoms, molecules, and cells. At the Center for Functional Nanomaterials, explore the fascinating world where materials span only billionths of a meter in size. To see them requires specialized instruments like electron microscopes, which use electrons instead of light for imaging. Lectures and laboratory activities will introduce participants to sample preparation, data collection and data analysis in microscopy, imaging, and X-ray powder diffraction. One of the aims is that teachers participating in this workshop will be able to lead their students to conduct experiments at the National Synchrotron Light Source II and Center for Functional Nanomaterials. Participants will be introduced to the process of becoming a user and submitting user proposals.

Sincerely, Office of Educational Programs Brookhaven National Laboratory