2022 NSLS-II & CFN Annual Users’ Meeting  
May 23-26, 2022

Workshop Schedule

Monday, May 23

10 a.m. – 5 p.m. **Workshop 1** – NSLS-II and CFN 101: Techniques, Applications, and Access in Energy Sciences  
*Organizers: Priscilla Antunez (BNL), Lisa Miller (BNL), and Aleida Perez (BNL)*

**Workshop 2** - Electronic structure of nanomaterials: A special symposium in honor of Dr. Mark Hybertsen  
*Organizers: Deyu Lu (BNL), Qin Wu (BNL), Alexei Tkachenko (BNL), and Xiaohui Qu (BNL)*

**Workshop 3** - Correlated Topological Materials for Quantum Information Sciences  
*Organizers: Mingda Li (MIT), Miao Hu (ORNL), Christie Nelson (BNL), and Xiaqian Chen (BNL)*

**Workshop 4** - Magneto-Optical-Electronic Properties of Nanomaterials and Their Applications  
*Organizers: Mingxing Li (BNL), Mircea Cotlet (BNL), Deep Jariwalla (UPenn), and Don DiMarzio (NGC Next)*

10 a.m. – 2:00 p.m. **Workshop 5** – Understanding 3-D printing of soft matter at the molecular level Instruments  
*Organizers: Marcia Simon and Miriam Rafailovich*

1:00 – 5:00 p.m. **Workshop 6** – Data Access and Machine Learning at NSLS-II – A Tutorial (Part 1)  
*Organizers: Stuart Campbell, Dan Allan, Phillip Maffettone, Dan Olds, and Andi Barbour*

Wednesday, May 25

8:00 – 12:00 p.m. **Workshop 7** - Beyond 2 Dimensional Materials: Perspectives for International Collaboration (Part 1)  
*Organizers: Dr. Jurek Sadowski (CFN/BNL), Dr. Yukiko Yamada-Takamura (JAIST, Japan), Dr. Elio Vescovo (NSLS-II/BNL), and Dr. Turgut Yilmaz (NSLS-II/BNL)*

10:00 – 2:00 p.m. **Workshop 8** – SPM user community meetup: “hands on open” source SPM software virtual “Hack a day” learning session and future outlook on artificial intelligence driven autonomous SPM (Part 1)  
*Organizer: Percy Zahl (CFN, BNL), Thorsten Wagner (Johannes Kepler University Linz, Austria)*

**Workshop 9** - Advanced Metrology Needs for Addressing Critical Microelectronics Challenges  
*Organizers: Chang-Yong Nam (CFN/BNL), Yong Chu (NSLS-II/BNL), and Gabriella Carini (Instrumentation Division/BNL)*
1:00 – 5:00 p.m. **Workshop 6** - Data Access and Machine Learning at NSLS-II – A Tutorial (Part 2)
Organizers: Stuart Campbell, Dan Allan, Phillip Maffettone, Dan Olds, Andi Barbour

**Workshop 10** - Electron Backscattered Diffraction (EBSD) Tutorial: Fundamentals, Basic Data Acquisition and Analysis (Part 1)
Organizers: Fernando Camino (BNL) and Glenn Kinneer (Oxford Instruments)

**Workshop 11** - Solvation structure, electrical double layer, and interphases—solving the unsolvable
Organizers: Huolin Xin (UC Irvine), Ashley Head (CFN/BNL), Lu Ma (NSLS-II/BNL), Ira Waluyo (NSLS-II/BNL), Adrian Hunt (NSLS-II/BNL), Yonghua Du (NSLS-II/BNL) and Xiaojing Huang (NSLS-II/BNL)

**Workshop 12** - Correlating Soft-X ray tomography with Cryo-Electron Tomography for high resolution analysis of cellular structure
Organizers: Stavros Lomvardas (Columbia) and Carolyn Larabell (UC-SF)

Thursday, May 26

8:00 – 12:00 p.m. **Workshop 7** - Beyond 2 Dimensional Materials: Perspectives for International Collaboration (Part 2)
Organizers: Dr. Jurek Sadowski (CFN/BNL), Yukiko Yamada-Takamura (JAIST, Japan), Elio Vescovo (NSLS-II/BNL) and Turgut Yilmaz (NSLS-II/BNL)

**Workshop 8** – SPM user community meetup: “hands on open” source SPM software virtual “Hack a day” learning session and future outlook on artificial intelligence driven autonomous SPM (Part 2)
Organizer: Percy Zahl (CFN/BNL), Thorsten Wagner (Johannes Kepler University Linz, Austria)

10:00 – 5:00 p.m. **Workshop 13** - Data-driven Multiscale and Multimodal Characterization for Accelerating Battery Materials Development and Manufacturing
Organizers: Yong Chu (NSLS-II/BNL), Shinjae Yoo (CSI/BNL), Deyu Lu, Sooyeon Hwang (CFN/BNL) and Mingyan Ge

**Workshop 14** - What is BEST for atmospheric sciences?
Organizers: Allison McComiskey (BNL), Juergen Thieme (BNL) and Daniel Knopf (SBU)

**Workshop 15** - Diagnosing microscopic sources of qubit decoherence by multimodal materials analysis
Organizers: Andi Barbour (NSLS-II), Robert Cava (Princeton), Nathalie de Leon (Princeton), Steven Hulbert (NSLS-II), Mingzhao Liu (CFN), Dario Stacchiola (CFN), Andrew Walter (NSLS-II)

1:00 – 5:00 p.m. **Workshop 10** - Electron Backscattered Diffraction (EBSD) Tutorial: Fundamentals, Basic Data Acquisition and Analysis (Part 2)
Organizers: Fernando Camino (BNL) and Glenn Kinneer (Oxford Instruments)