

Northrop Grumman/Brookhaven Lab Workshop

Building Collaborations with National Labs



Day 1: Tuesday, May 4, 2021

All times are in Eastern Standard Time (EST)

| Start | End | Duration | Topic | Speaker(s) |
|---|----------|----------|--|---|
| Day 1: Tuesday, May 4, 2021 - Talks (15 min and 5 min for Q&A) | | | | |
| Overview | | | | Session Chair: Don Di Marzio, NGC |
| 12:30 PM EST | 12:45 PM | 0:15 | Opening Remarks | Oleg Gang , CFN at Brookhaven Lab Don Di Marzio , NGC |
| 12:45 PM | 1:05 PM | 0:20 | US DOE Technologist in Residence Program | Ethan Rogers , DOE Technology Manager |
| 1:05 PM | 1:25 PM | 0:20 | NGSS Overview | David Steffy , NGC |
| 1:25 PM | 1:50 PM | 0:25 | Nanoscience at the Center for Functional Nanomaterials: a DOE Scientific User Facility | Charles Black , Director, CFN at Brookhaven Lab |
| 1:50 PM | 2:15 PM | 0:25 | Panel/Open Discussion Session & Break | Guest Panelist: Gabriella Carini , Director, Instrumentation at Brookhaven Lab |
| Optical and Electronic Nanomaterials | | | | Session Chair: Mircea Cotlet, BNL/CFN |
| 2:20 PM | 2:40 PM | 0:20 | Ultrafast Studies of 2D Heterostructures | Mircea Cotlet , CFN at Brookhaven Lab |
| 2:40 PM | 3:00 PM | 0:20 | Atomic-scale Investigations of Optically-active Nanoscale Systems | Jefferey Guest , CNM at Argonne National Lab |
| 3:00 PM | 3:20 PM | 0:20 | Perfectly Absorbing Metasurfaces for Ultrafast Photodetection | Igal Brener , CINT at Los Alamos & Sandia National Labs |
| 3:20 PM | 3:40 PM | 0:20 | Advanced Quantum Emitters: Chemistry, Photophysics, Integration and Application | Jennifer Hollingsworth , CINT at Los Alamos & Sandia National Labs |
| 3:40 PM | 4:00 PM | 0:20 | Nanoscale Engineering of High-temperature Superconductors | Ivan Bozović , CMPMSD at Brookhaven Lab |
| 4:00 PM | 4:20 PM | 0:20 | Vapor-phase Infiltration for Microelectronics Applications | Chang-Yong Nam , CFN at Brookhaven Lab |
| 4:20 PM | 4:40 PM | 0:20 | Panel/Open Discussion Session | Guest Panelist: Elspeth McSweeney , Director, EPSP Growth Office at Brookhaven Lab |

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Day 2: Wednesday, May 5, 2021

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| Start | End | Duration | Topic | Speaker(s) |
|---|----------|----------|--|--|
| Day 2: Wednesday, May 5, 2021 - Talks (15 min and 5 min for Q&A) | | | | |
| Synthesis and Fabrication of Nanomaterials and Devices | | | | Session Chairs: Priscilla Antunez , CFN at Brookhaven Lab Elspeth McSweeney , EPSC at Brookhaven Lab |
| 12:30 PM EST | 12:50 PM | 0:20 | NGMS Overview | Jonathan Green , NGC |
| 12:50 PM | 1:10 PM | 0:20 | Nanofab at a User Facility for Process Development | Aaron Stein , CFN at Brookhaven Lab |
| 1:10 PM | 1:30 PM | 0:20 | Ion Beam Implantation for Nanofabrication and Modification | Ed Bielejec , CINT at Los Alamos & Sandia National Labs |
| 1:30 PM | 1:50 PM | 0:20 | Towards Designed Nanoscale Fabrication via Molecularly Programmable Self-assembly | Oleg Gang , CFN at Brookhaven Lab |
| 1:50 PM | 2:10 PM | 0:20 | Tailoring the Optoelectronic Functionality of 2D Materials by Non-Equilibrium Synthesis and Processing | Kai Xiao , CNMS at Oak Ridge National Lab |
| 2:10 PM | 2:25 PM | 0:15 | Panel/Open Discussion Session & Break | Guest Panelist: Poorni Upadhy , Manager, Technology Commercialization and Strategic Partnerships at Brookhaven Lab |
| Advanced Nanoscale Characterization | | | | Session Chair: Jurek Sadowski , CFN at Brookhaven Lab |
| 2:30 PM | 2:50 PM | 0:20 | NGAS Overview | John Spargo , NGC |
| 2:50 PM | 3:10 PM | 0:20 | X-ray Scattering for Materials Characterization and Discovery | Kevin Yager , CFN at Brookhaven Lab |
| 3:10 PM | 3:30 PM | 0:20 | Investigating Advanced Manufacturing Processes of Polymeric Materials with X-ray Scattering Techniques | Lutz Wiegart , NSLS-II at Brookhaven Lab |
| 3:30 PM | 3:50 PM | 0:20 | Applications of Electron Spectro-microscopy to Investigations of Chemistry and Electronic Structure of 2D Materials and Surfaces | Jurek Sadowski , CFN at Brookhaven Lab |
| 3:50 PM | 4:10 PM | 0:20 | Scanning Hard X-ray Microscopy: Toward Nanometer Resolution, Three-dimensional and Multimodal Imaging Capabilities | Hanfei Yan , NSLS-II at Brookhaven Lab |
| 4:10 PM | 4:25 PM | 0:15 | Panel/Open Discussion Session | Guest Panelist: Jun Wang , Industrial Liaison Officer - EPSC at Brookhaven Lab |
| Concluding Remarks & Discussion | | | | |
| 4:30 PM | 4:35 PM | 0:05 | Thank You Address | Oleg Gang , CFN at Brookhaven Lab |
| 4:35 PM | 4:45 PM | 0:10 | Concluding Remarks | Jim Misewich , Associate Laboratory Director for Energy and Photon Sciences at Brookhaven Lab |
| 4:45 PM | 5:00 PM | 0:15 | Open Discussion | |