# The National Academies of

## SCIENCES · ENGINEERING · MEDICINE

Division on Engineering and Physical Sciences Laboratory Assessment Board

#### Meeting of the

National Academies Panel on Assessment of the National Institute of Standards and Technology (NIST) Center for Neutron Research (NCNR)

Gaithersburg, MD June 21-23, 2023

**PUBLIC AGENDA** (All Times Eastern)

Wednesday, June 21, 2023

#### **DATA GATHERING SESSION (OPEN TO THE PUBLIC)**

Location: Building 235, Room K04

8:45 – 9:00 a.m.	<b>Welcome</b> , Laurie Locascio, <i>Under Secretary of Commerce for Standards and Technology and NIST Director</i>
9:00 – 10:10 a.m.	<b>Overview of the NIST Center for Neutron Research</b> , Jim Adams, <i>Acting Director, NIST Center for Neutron Research</i>
10:10 – 10:50 a.m.	Overview of the Neutron Condensed Matter Science Group at the NCNR, Ron Jones, Group Leader for Neutron Condensed Matter Science
10:50 – 11:10 a.m.	Break
11:10 a.m. – 11:35 a.m.	<b>The Center for High Resolution Neutron Scattering (CHRNS)</b> , Dan Neumann, <i>Director of the Center for High Resolution Neutron Scattering and Associate Director for Neutron Science and Technology</i>
11:35 a.m. – 12:00 noon	<b>Industrial Engagement at the NCNR</b> , Ron Jones, <i>Director of nSoft and Group Leader for Neutron Condensed Matter Science</i>
12:00 noon – 1:00 p.m.	Working lunch with User Group Executive Committee
1:00 – 1:40 p.m.	NCNR Facility Developments, Brian Kirby, Group Leader for Research Facility Operations
1:40 – 1:55 p.m.	Upgrade of the CHRNS Neutron Spin Echo (NSE) Spectrometer at

NIST, Michihiro Nagao, CHRNS NSE Instrument Scientist

1:55 – 2:10 p.m.	Chromatic Analysis Neutron Diffractometer or Reflectometer (CANDOR), Alex Grutter, CHRNS CANDOR Instrument Scientist
2:10 – 3:30 p.m.	<b>Tour of NCNR</b> , Brian Kirby, <i>Group Leader for Research Facility Operations</i>
3:30 – 3:45 p.m.	Break
3:45 – 4:20 p.m.	<b>Overview of the Structure and Dynamics of Materials Team</b> , Craig Brown, <i>Team Leader for Structure and Dynamics of Materials, and NIST Fellow</i>
4:20 – 4:35 p.m.	Neutron Diffraction: A Unique Method to Study Gas Adsorption in Metal-Organic Frameworks, Hui Wu, Powder Diffraction Instrument Scientist
4:35 – 4:50 p.m.	Novel Methods To Understand Toughness and Impact Resistance in Polymeric Materials, Chris Soles, Group Leader for Functional Polymers, Materials Science and Engineering Division

### Thursday, June 22, 2023

#### **DATA GATHERING SESSION (OPEN TO THE PUBLIC)**

Location: Building 235, Room K04

8:00 a.m. – 8:25 a.m.	<b>Neutron Physics at the NCNR</b> , Jeff Nico, Group Leader for Neutron Physics, Radiation Physics Division
8:25 – 8:45 a.m.	Computational Science and Neutron Scattering – An Overview, Taner Yildirim, Team Leader for Computational Neutron Scattering and NIST Fellow
8:45 – 9:10 a.m.	<b>User Laboratories and Sample Environments</b> , Yamali Hernandez, <i>Team Leader for User Services</i>
9:10 – 10:00 a.m.	<b>Overview of Reactor Operations and Engineering</b> , Tom Newton, Group Leader for Reactor Operations and Engineering and Deputy Director, NCNR
10:00 a.m. – 12:00 noon	<b>Poster Session</b> (E-Wing and K-Wing hallways), Susana Teixeira, Small Angle Neutron Scattering (SANS) Instrument Scientist

#### **DATA GATHERING SESSION (OPEN TO THE PUBLIC)**

Location: Building 235, Room K04

1:00 – 1:30 p.m. **Small Angle Neutron Scattering (SANS) Overview**, Paul Butler, *Team Leader for Macromolecules and Microstructures* 

1:30 – 1:45 p.m.	A New Scattering Approach to Measure Protein-Protein Interactions, Yun Liu, CHRNS Very Small Angle Neutron Scattering (vSANS) Instrument Scientist
1:45 – 2:10 p.m.	Planning for a New Neutron Source at NIST, Dan Neumann, Director of the Center for High Resolution Neutron Scattering and Associate Director for Neutron Science and Technology

### Friday, June 23, 2023

#### **DATA GATHERING SESSION (OPEN TO THE PUBLIC)**

Location: Building 235, Room K04

Full Panel Meets with Laboratory Leadership, Division Chiefs, and Others Invited by NIST to Clarify Impressions and Facts (Working 12:00 noon – 1:00 p.m.

Lunch)

1:00 p.m. Adjourn