

Beamline Engineering Meeting at BNL

March 25-26, 2019

PURPOSE

The purposes of this meeting are to (i) describe, show, and discuss NSLS-II beamline-related engineering accomplishments and capabilities, and (ii) learn about and discuss the beamline engineering needs of the visiting laboratories: SLAC, LBNL, and ANL. Currently, each of the visiting laboratories is engaged in a major DOE construction project that involves beamline development: L2SI at SLAC, ALS-U at LBNL, and APS-U at ANL.

SUMMARY

The communication purposes of this meeting were accomplished. See the meeting website: https://www.bnl.gov/nsls2/project/reviews/190325_BeamlineEngMtg/, which includes copies of the presentations and a list of attendees with email addresses. The informal portions of the agenda provided opportunities for attendees to meet and discuss beamline capabilities and opportunities. These informal communications facilitated discussion of future work between light source facilities.

Outcomes. From an overall perspective, the following outcomes from this meeting were realized:

- (1) Specific technical issues were raised and discussed. Most will lead to follow-on discussions and actions. Examples include: mitigation of carbon contamination of optical surfaces and sample environments and handling.
- (2) Feedback from visitors and attendees is that this meeting was worthwhile. Many stated that this should be the first in a series of such meetings, which could serve as national versions of the SRI and MEDSI conferences for staff from the five US DOE light source facilities.
 - a. For future such meetings, it is recommended that the agenda be organized around specific topics of current engineering interest. This would focus attention on the current “hot” topics.
 - b. It is also recommended to hold internal meetings of this type at each facility, to communicate and discuss engineering/design advances associated with the various beamlines and to share lessons learned.
- (3) New work-for-others proposals will likely emerge following this meeting, beyond those already discussed.