National Synchrotron Light Source-II

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Memo

Date: April 28, 2017

To: Paul Zschack, Photon Science Division Director

From: Steve Hulbert, NEXT Project Manager

Subject: Acceptance of ESM Beamline by NSLS-II Facility Operations

Construction of the ESM beamline at 21-ID, one of five insertion device beamlines delivered by the NEXT Project, is complete and light has been delivered to its endstation. The milestones achieved during the transition from construction to operation for this beamline are provided below. Successful achievement of these milestones is evidence that the ESM beamline is ready for operational status in the NSLS-II Facility:

- ESM Photon Delivery System complete and ESM IRR complete (29-Jun-2016)
- Authorization from the NSLS-II Director to Start ESM Commissioning (22-Jul-2016)
- ESM First Light (25-Jul-2016)
- ESM Flux verified (15-Aug-2016)
- ESM Endstation construction complete (26-Apr-2017)

The angle-resolved photoemission spectroscopy (ARPES) endstation for ESM features a sample chamber with static and micro-scanning stage sample manipulation capabilities as well as heating/cooling and sample preparation and characterization tools. Electron detection is provided by a high resolution multi-channel (energy and angle) hemispherical electron energy analyzer.

ESM beamline scope was verified at the NEXT Scope Verification Review held 27-28 February 2017 and completion has been documented via WBS Closeout Acknowledgments.

The purpose of this memo is to report this status and request your acknowledgment that the NSLS-II Facility has accepted the ESM photon delivery system and endstation into its operating portfolio.

Steven L. Hulbert
Steve Hulbert, NEXT Project Manager

28 April 2017
Date

Cc: E. Johnson, J. Hill