NCNR Data Management Plan

PURPOSE

The purpose of this Data Management Plan (DMP) is to articulate the NCNR approach to data preservation and access.

SUMMARY

The NIST Center for Neutron Research is a national user facility that builds and develops new neutron instrumentation to serve national needs in measurements and standards and provides access to those instruments to thousands of researchers from industry, academia, and government agencies. Products of the NCNR include neutron measurement data created using NCNR neutron measurement instruments and data that are presented in figures and tables in publications.

The NCNR defines "raw data" as raw measurement counts collected using the data acquisition system for a neutron scattering instrument at the NCNR, written in the standard format for that instrument. This does not include raw event streams which are temporarily stored during time-resolved measurements, prior to final processing.

The NCNR defines "published data" as data that is presented in figures or tables in publications in which a NIST author or co-author is responsible for creating those figures or tables.

SCOPE

The scope of this data management plan includes *raw data* and *published data*. The scope of this DMP does not include data files collected under the auspices of an NCNR Facility Use Agreement for Proprietary Use, or other agreements that specify a need and authority to protect sensitive or controlled data such as Interagency or Cooperative Research And Development Agreements (CRADA).

DATA TYPES AND CLASSIFICATION

Data produced by the NCNR neutron measurement instruments are in electronic form and they are machine-readable.

PRESERVATION

All NCNR *raw data* within the scope stated above are archived automatically by the NCNR. The responsibility for preserving *published data* (i.e. the means by which the data is preserved) resides with the individual NCNR researcher and will be performed consistent with NIST policy.

DISCOVERABILITY & ACCESS

All NCNR *raw data* within the scope stated above are made available to the public following an experiment unless the researcher who collected the *raw data* opts out. In those cases

when the researcher opts out, the *raw data* will be made available after 18 months from the creation date. The data files are made available to the public via external web server, https://www.ncnr.nist.gov/pub/ncnrdata This repository is listed in the NIST Enterprise Data Inventory, with a persistent digital object identifier (DOI): 10.18434/t4201b

All NCNR *published data* within the scope stated above are made available upon request of the NCNR scientist.

Policies for Re-Use, Re-Distribution, and Production of Derivatives

Permission is granted to all for unrestricted use and distribution of all NCNR *raw data* and *published data* within the scope stated above, subject to the following conditions:

Publications and presentations that use the *raw data* must cite or acknowledge the researchers who generated the *raw data* and the NCNR must be acknowledged for the use of its facilities in generating the *raw data*.

In addition, if the *raw data* is taken on an instrument that has support from any external grant, all supporting grants for that instrument must be acknowledged for the instrument access provided along with the grant name and grant number.