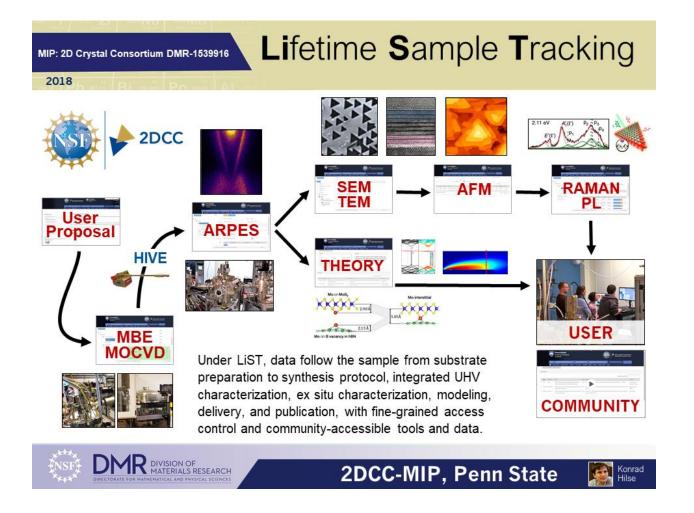




The Pennsylvania State University, N-338 Millennium Science Complex, University Park, PA 16802



What Has Been Achieved: An integrated system for acquiring and tracking synthesis and characterization data (and publications, reporting) associated with all samples produced at the 2DCC-MIP (both locally and, through web access, remotely at user institutions), in an extensible framework with differing levels of access to staff, users, and the wider community.

Importance of Achievement: Capturing this data in a unified framework will facilitate and enable new data-centric research approaches in 2D materials.

Unique Features of the MIP That Enabled Project: Ability to support professional IT staff who work closely coupled with 2DCC researchers in a trans-disciplinary setting; orientation towards user support and overall scale of effort, highly integrated vacuum environment enabling sample transfer between tools without breaking UHV. Platform mission. Next steps would include development of automated data acquisition from high-throughput instruments (e.g. hyperspectral Raman/PL) and the design and implementation of computational tools and user interface to access and analyze the data at scale.