The Materials Data Facility

Data publishing for materials science

a pilot project of the National Data Service
www.nationaldataservice.org/mdf

search publish link access cite

Get a sneak-peek

Today, digital data is driving materials science, whether it's flowing from particle beams, electron microscopes, or computational simulations. Broad sharing and access to that data will be key to accelerating the development of new materials as called for by the White House's Material Genome Initiative.

As a piloting project of the National Data Services Consortium, the Materials Data Facility (MDF) will point the way for data science in the 21st century. The MDF will provide material scientists **a scalable repository for lab and computational data** alike, a place to **publish data with links to associated literature**,

The MDF will leverage a national infrastructure for data sharing and reuse to connect to a variety of resources for materials science research, including specialized databases and analysis capabilities.

See reverse for more information about the National Data Service, a vision for advancing data-driven science.

See a demonstration of the MDF Publishing Services at any of the following booths:

NCSA (booth #1621)

Monday, Nov. 17	7-9pm
Tuesday, Nov. 18	10-11am
	1-2pm
	4-5pm
Wednesday, Nov. 19	10-11am
	2-3pm

Globus (booth #3649)

On request

TACC (booth #2915)

Tuesday, Nov. 18	10am-12pm
	4-6pm
Wednesday, Nov. 19	10am-12pm

SDSC (booth #1333)

Tuesday, Nov. 18
Wednesday, Nov. 19

globus NCSA SDSC TACC

The Materials Data Facility is a collaboration between the Globus Project, the National Center for Supercomputing Applications and the University of Illinois Urbana-Champaign, the San Diego Supercomputing Center, and the Texas Advanced Computing Center

The US National Data Service

national infrastructure for sharing, publishing, discovering and reusing data

The National Data Service (NDS) is an emerging vision for how scientists and researchers across all disciplines can find, re-use, and publish data. It builds on the data archiving and sharing efforts already underway within specific communities and links them together with a common set of tools designed around on the following capabilities:

Search

The NDS will allow users to easily search for data across disciplinary boundaries. As users hone in on data of interest, they can easily switch to discipline-specific tools

Publish

The NDS will connect users to tools for building and sharing collections of data. It will help users find and deliver data to the best repository for data-publishing.

Link

The NDS will create robust connections between data and published articles. When researchers reference an article, they have ready access to the underlying data.

Reuse

The NDS will not only provide access to data for download, it will provide tools for transferring data to processing platforms or allow analysis to attached to the data.

The National Data Services Consortium

A broad assembly of data providers, data aggregators, community-specific federations, publishers, and cyberinfrastructure providers has come together to guide the development and operation of the NDS.

Get Involved

Visit the NDS website to learn about

- Joining the consortium
- Discussion lists
- Developer resources in NDS Labs

Join us at the Birds-of-a-feather session:

From big data to the long tail: Publishing computational data

Tuesday, Nov. 18 5:30-7:00pm Room 286-87

We will explore requirements, issues, and barriers for publishing computational data products.

Get a sneak-peek at NDS Labs,

a platform for developing data sharing capabilities.
For a demo, stop by the NCSA booth (#1621)
Tues. Nov. 18, 3-4pm or Wed. Nov.19, 10-11am

www.nationaldataservice.org