

NFDI4Ing Seed funds

Seed funds

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DataCite Open Hours



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The aim of the national research data infrastructure (NFDI) is to systematically manage scientific and research data, provide long-term data storage, backup and accessibility, and network the data both nationally and internationally. The NFDI will bring multiple stakeholders together in a coordinated network of consortia tasked with providing science-driven data services to research communities.



In the first round, nine consortia were selected for funding, which started in October 2020.

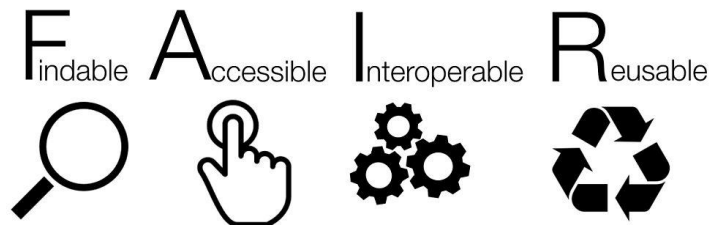
- [DataPLANT](#): Plant research data
- [GHGA](#): German Human Genome–Phenome Archive
- [KonsortSWD](#): Consortium for the Social, Educational, Behavioural and Economic Sciences
- [NFDI4Biodiversity](#): Biodiversity, Ecology and Environmental Data
- [NFDI4Cat](#): NFDI for sciences related to catalysis
- [NFDI4Chem](#): Chemistry consortium for the NFDI
- [NFDI4Culture](#): Consortium for Research Data on Material and Immaterial Cultural Heritage
- [NFDI4Health](#): NFDI personal health data
- [NFDI4Ing](#): NFDI for Engineering Sciences

Funding for a further ten consortia in the second round was announced in July 2021.

- [BERD@NFDI](#): NFDI for Business, Economic and Related Data
- [DAPHNE4NFDI](#): Data from PHoton and Neutron Experiments for NFDI
- [FAIRmat](#): FAIR Data Infrastructure for Condensed-Matter Physics and the Chemical Physics of Solids
- [MaRDI](#): Mathematical Research Data Initiative
- [NFDI4DataScience](#): NFDI for Data Science and Artificial Intelligence
- [NFDI4Earth](#): NFDI Consortium Earth System Sciences
- [NFDI4Microbiota](#): NFDI for Microbiota Research
- [NFDI-MatWerk](#): National Research Data Infrastructure for Materials Science and Materials Engineering
- [PUNCH4NFDI](#): Particles, Universe, NuClei and Hadrons for the NFDI
- [Text+](#): Language and text-based research data infrastructure

NFDI4Ing consortium

The consortium aims to develop, disseminate, standardise and provide methods and services to make engineering research data FAIR. As one of the first consortia funded as part of the NFDI, NFDI4Ing has actively engaged engineers across all engineering research areas as well as experienced infrastructure providers since 2017. It now has more than 50 active members and participants and continues to grow.



Goals of NFDI4Ing

Seed funds

1. Address the need to enable and support the **use of PIDs and metadata within NFDI4Ing** as an essential component for the implementation of the **FAIR principles** for research data.
2. build interactive dashboards on the consortium output, show links and data reuse via event data and the PID graph.

03/2022-12/2022

Work Packages

Focussing on Metadata

WP 1 Specification defining the **mapping to the DataCite metadata schema**, possibly identify modifications to the domain agnostic DataCite schema. Best practice documentation for engineering sciences

WP2 **Supporting PID registration** across research assets (DMPs, datasets etc.)

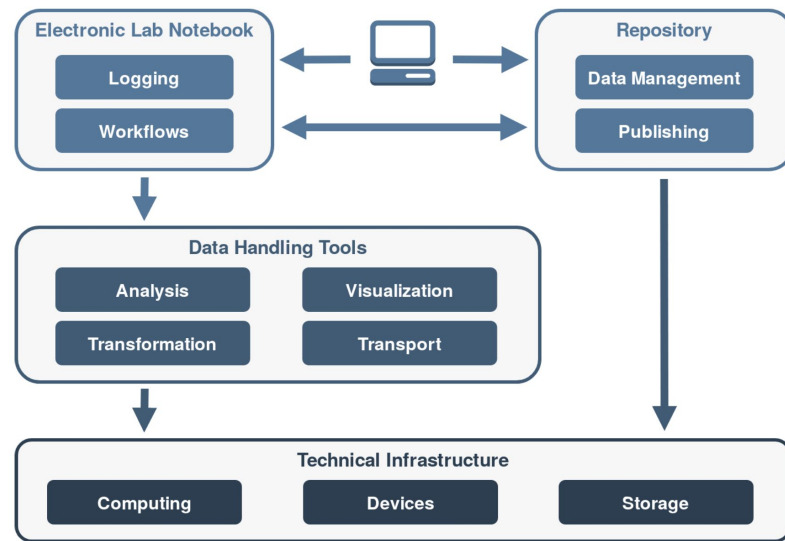
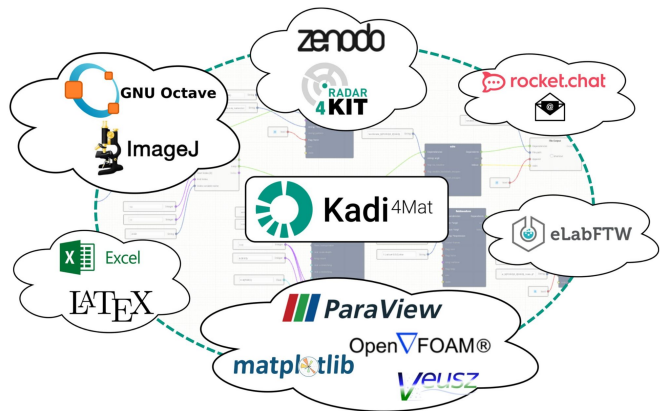
WP 3 **define use cases in engineering sciences utilizing the PID Graph** as map of relationships

WP 4 Develop various **Jupyter Notebooks providing programmatic access to the metadata in the PID Graph** and associated machine readable subject specific metadata e.g. on dataset landing pages based on the use cases defined in WP3.

Kadi4Mat

Best Practice

Kadi4Mat is the Karlsruhe Data Infrastructure for Materials Science, a software for managing research data with the aim of combining new concepts with established technologies and existing solutions.



Kadi4Mat Objects



Q Search

Sort by Relevance

Search extras

Create new record

Select a record template

microscopy

No results found

10 100

☐ Hide public records

Filter by collection

Select collections

☐ Include child collections

Filter by type

Select types

Filter by tag

Select tags

Filter by MIME type

49 results found

Microscopy
@microscopy

Created 2 months ago
Last modified 10 days ago

Microscopy is the technical field of using microscopes to view objects and areas of objects that cannot be seen with the naked eye (objects that are not within the resolution range of the normal eye). There are three well-known branches of microscopy: optical, electron, and scanning probe microscopy...

Created by Lutong Lu

Electron Microscopy
@em

Created 2 months ago

Electron microscopy (EM) is a technique for obtaining high-resolution images of biological specimens. It is used in biomedical research to study cells, organelles and macromolecular complexes. The high-resolution images are obtained by scanning the specimen with a focused beam of electrons.

Created by Lutong Lu

EDX
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No description.

Created by Matthias Mail

Scanning Electron Microscopy
@sem

A scanning electron microscope (SEM) is a type of electron microscope that produces high-resolution images of a sample by scanning the surface with a focused beam of electrons. The electrons interact with the sample, producing various signals that contain information about the sample's surface.

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Record Add files Edit record Manage links Manage permissions

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membrane_80_11.stl

17.3 MB application/sla

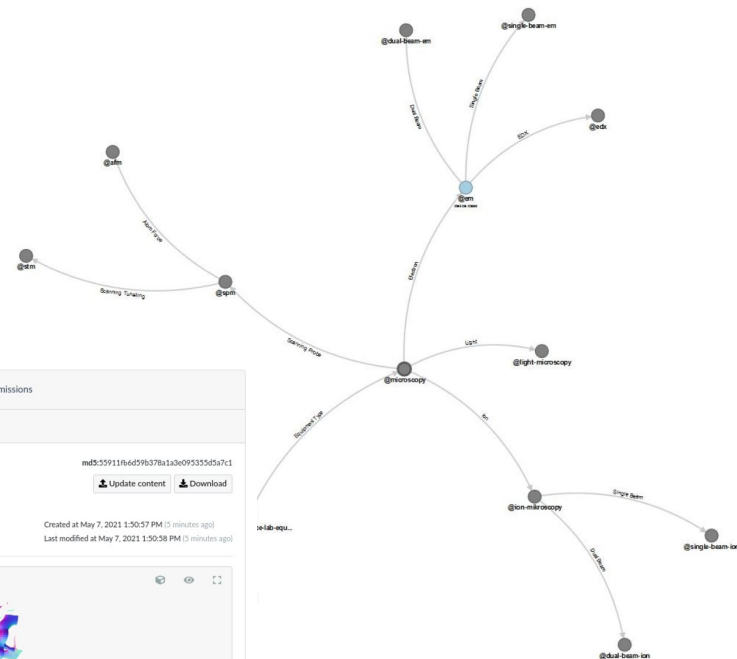
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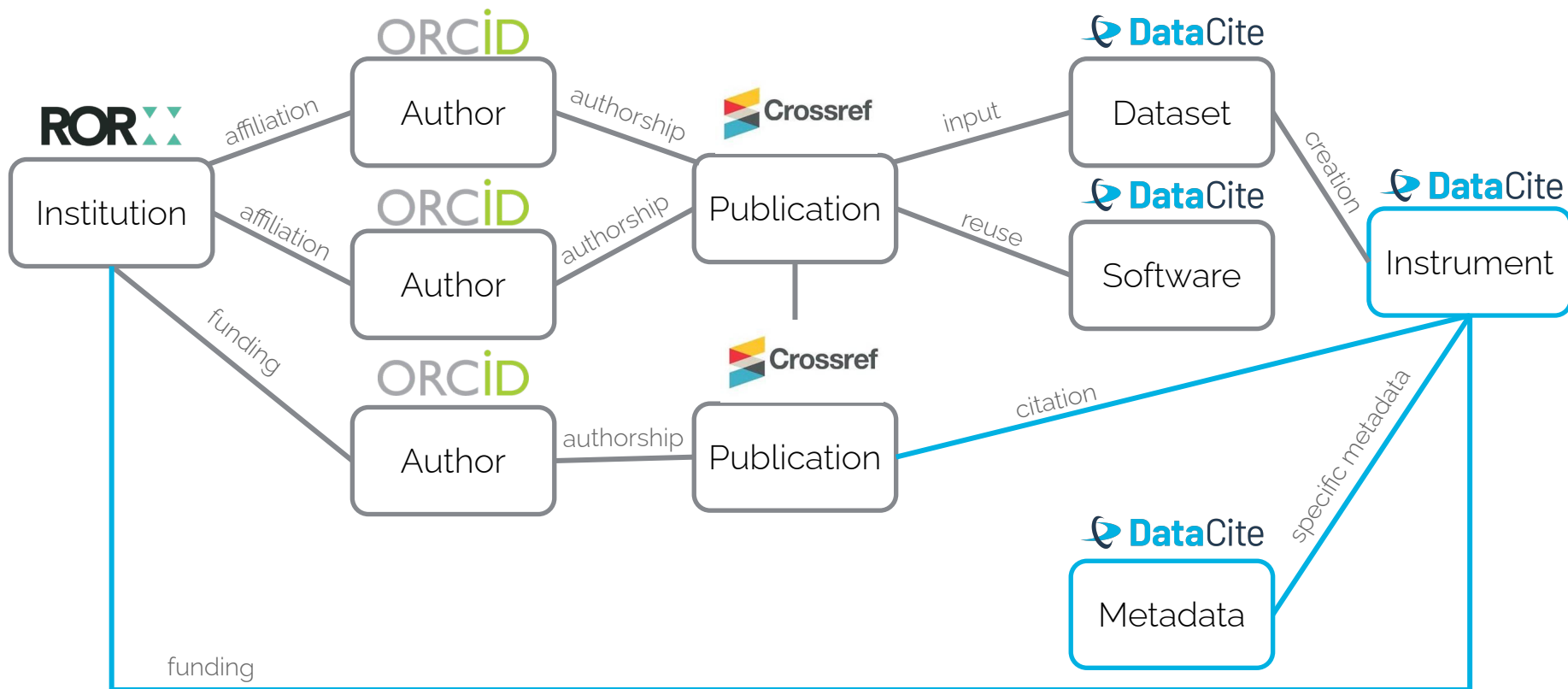
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Created at May 7, 2021 1:50:57 PM (5 minutes ago)
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Resource Types And Relations





CONNECTING RESEARCH,
IDENTIFYING KNOWLEDGE



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