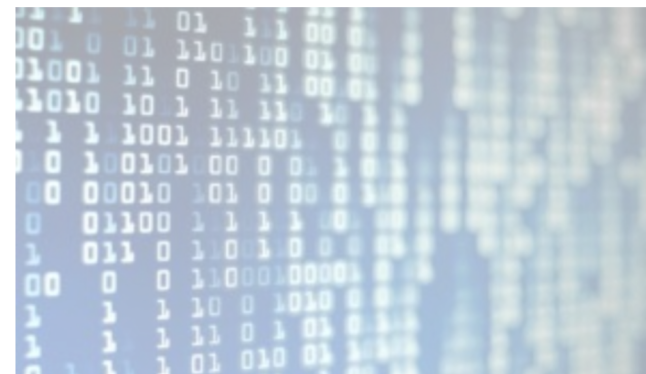




by Marek Cebecauer

Department of Biophysical Chemistry
J. Heyrovsky Institute of Physical Chemistry of the Czech Academy of Sciences



Material Sciences and Engineering (MSE) Domain

- Highly diverse domain
- Includes experimentalists and computer scientists
- General statement: MSE domain lags behind in the engagement in EOSC and RDM practices



Find Materials Data

This system allows for the registration of materials resources, bridging the gap between existing resources and the end users. The Registry functions as a centrally located service, making the registered information available for research to the materials community.

This is being developed at the National Institute of Standards and Technology and is made available to solicit comments from the Material Science community. Please do not enter any proprietary data into the system.

Login Register

Resources Type



Organization

Click here to explore the Organization.



Data Collection

Click here to explore the Data Collection.



Dataset

Click here to explore the Dataset.



Materials Commons 2.0

A site for Materials Scientists to collaborate, store and publish research.

Give your research a boost with Materials Commons. Store your results and workflow. Easily share with colleagues or publish online.

Getting Started

Upload and Publish Data

Browse Published Data

Materials Commons has an extensive CLI and API. Learn more about:

- Using Jupyter Notebooks with Materials Commons
- Getting Started with the Materials Commons CLI
- Materials Commons Python API Documentation



Access Anywhere

The Materials Commons website gives you access to your research anywhere you have an internet connection.

Store. Share. Publish.

Storing your data on Materials Commons gives you access to tools for annotating your data, sharing it with others, and publishing datasets the community can easily find.



DICE is a data platform for all experts offering quality data and applications for materials science

NEWS

2022.11.09

News

Service suspension due to electrical inspection (11/17-22, JST)

2022.11.02

News

New data collection for HAXPES spectra now available on MDR

2022.11.01

News

To all who have applied for MatNavi from 10/31 to 11/1

2022.10.24

News

InterChemBond can now handle nearly 20 oxides.

MDR

MatNavi

InterChemBond

MatNavi

IG

RDA/CODATA Materials Data, Infrastructure & Interoperability IG
 Taxonomy: Engineering and Technology, Engineering and Technology/Materials engineering

Posts

Wiki

Events

Repository

Outputs

Charter

Plenaries

Members

create new content

Join Group

Group Status: IG Established

Please make sure the group follows the new **RDA Groups Policy**, which came into effect on 1 April 2021. Please contact enquiries[at]rd-alliance.org if you have any questions.

IG

Research Data Management in Engineering IG
 Taxonomy: Engineering and Technology

Posts

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create new content

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Please make sure the group follows the new **RDA Groups Policy**, which came into effect on 1 April 2021. Please contact enquiries[at]rd-alliance.org if you have any questions.

Status: Recognised & Endorsed
Chair (s): Daniela Hausen, Gretchen Greene, Kevin Logan
Secretariat Liaison: contact enquiries[at]rd-alliance.org
TAB Liaison: Helen Glaves

NFDI-MatWerk

Aims

NFDI consortium NFDI4MSE defended the proposal at DFG

The spokespersons of the NFDI consortium NFDI4MSE defended the proposal of the same name for the Materials Science and Engineering (MSE) community.

The spokespersons of the NFDI consortium NFDI4MSE defended the proposal of the same name for the Materials Science and Engineering (MSE) community at a colloquium at the DFG in Bonn on 17 and 18 December.

Within their presentation, they particularly addressed the great importance of MSE in the past and future, the complex since multiparametric, data-based work within the discipline, as well as the planned type of data structure formation in the form of ontologies. Organisationally, the strong support of the community and the self-organisation of the planned project, consisting of both MSE researchers and experts in the field of technology infrastructure, were emphasised.

The participants reported a pleasant atmosphere and constructive discussions. After a phase of further review, the consortium is encouraged to respond to specific queries.

NATIONALE FORSCHUNGSDATENINFRASTRUKTUR FÜR MATERIALWISSENSCHAFT & WERKSTOFFTECHNIK

NFDI-MatWerk

On the route towards a National Research Data Infrastructure for Materials Science & Engineering.

Learn more

FAIRmat

is building a FAIR data infrastructure for condensed-matter physics and the chemical physics of solids

SUBSCRIBE

Review of the NFDI Physical Sciences Joint Colloquium 2022 in Berlin
Numerous participants accepted NFDI-MatWerk's invitation to a hybrid...
Read more

"NFDI-MatWerk" structures decently hosted data collections
Expand and facilitate data access for materials researchers - The...
Read more

NFDI-MatWerk - digitalisation survey
Community urgently for digital collaboration

NFDI-MatWerk - an overview and discussion of the next steps
The MaterialsWeek's...

NFDI4ing

12/18/2019

ABOUT

AREAS

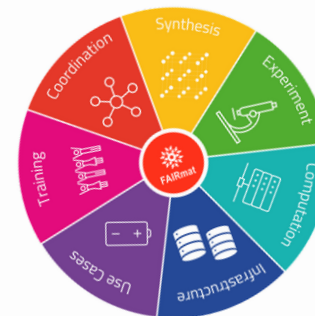
OUTREACH

NEWS

EVENTS

CONNECTIONS

WE ARE HIRING!



Events

FAIRmat hosts a variety of events for the whole materials-science community including tutorials, workshops, and courses. See what's coming up next.

Outreach

In order to foster awareness of FAIR-data issues, FAIRmat reaches out to the community in a variety of ways. Keep with our newsletter, videos, media, and training materials here.

SHOW OUTREACH PROJECTS

SHOW ALL EVENTS

Community Hub

Ne|

The community hub is your first point of contact!
Find useful tools and means to connect, communicate and participate.

for everybody

These features are available for everybody!
Contact an archetype or community cluster, subscribe to our newsletters, participate in open Gitlab projects or create a ticket to discuss a question that has been always bothering you!
Click here to get to tiles relevant to NFDI4ing members only.

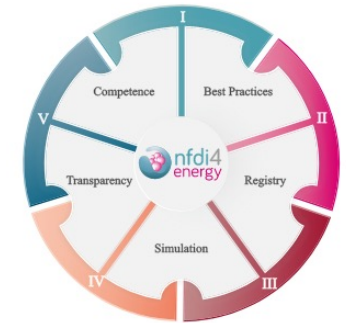
... and new are coming.



nfdi4energy

National Research Data Infrastructure for the
Interdisciplinary Energy System Research

[Learn more](#)



News

04.11.2022 nfdi4energy will be funded!

We are happy that the GWK decided to fund nfdi4energy. Our consortia will support energy system research by improving the handling of research data and research software. We officially start on 01.03.2022!

Metadata4Ing: An ontology for describing the generation of research data within a scientific activity.

Release 2022-02-22

This version:

<https://w3id.org/nfdi4ing/metadata4ing/1.0.0/>

Latest version:

<https://w3id.org/nfdi4ing/metadata4ing/1.0.0/>

Revision:

v1.0.0

Authors:

Metadata4Ing Workgroup

Contributors:

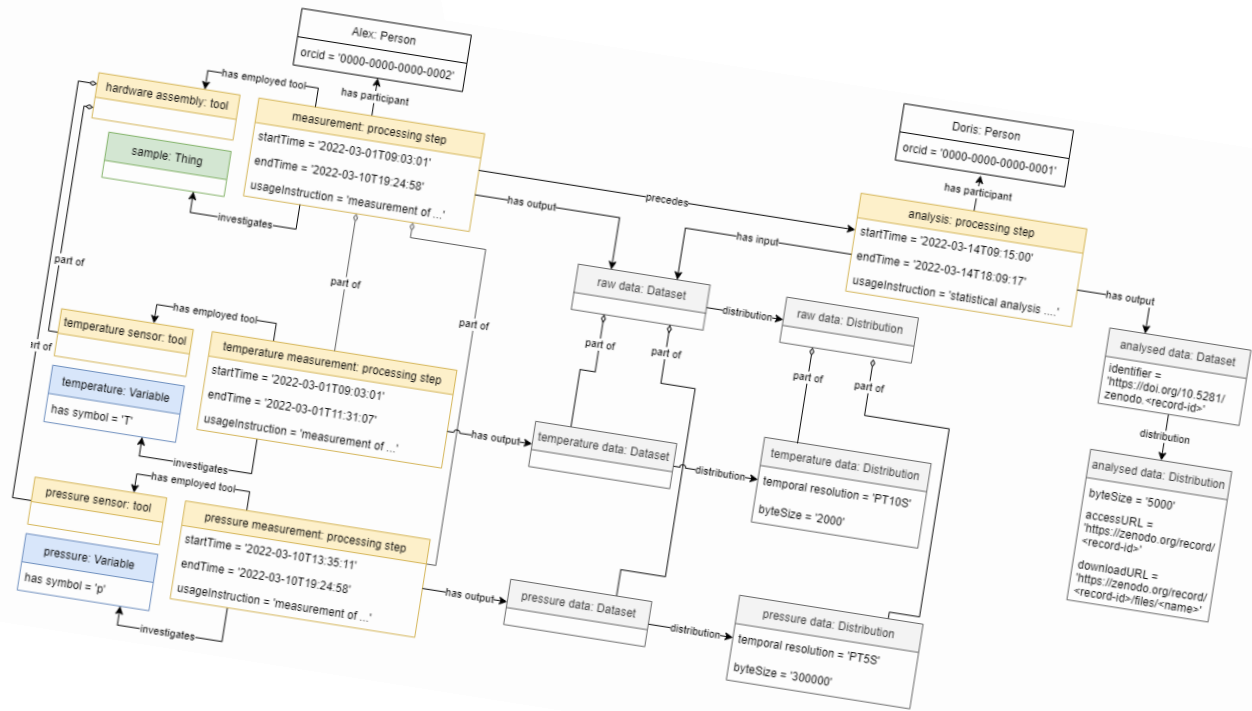
Ashish Karmacharya, (Technische Universität Darmstadt)
Benjamin Farnbacher, (Technische Universität München (TUM))
Cord Wilkes, (Universität Stuttgart)
Dorothea Iglezakis, (Karlsruher Institut für Technologie (KIT))
Džulija Terzijska, (Karlsruher Institut für Technologie (KIT))
Giacomo Lanza, (Physikalisch-Technische Bundesanstalt (PTB))
Johannes Hickmann, (RWTH Aachen University)
Johannes Theissen-Lipp, (RWTH Aachen University)
Johannes Munk, (Leibniz Supercomputing Centre (LRZ))
Johannes Vindeck, (Technische Universität Darmstadt)
Jürgen Fuhrmans, (Technische Universität Darmstadt)
Marc Thomas Horsch, (UK Research and Innovation (UKRI))
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Nils Hoppe, (Technische Universität Duisburg-Essen)
Sophia Leimer, (Leibniz Supercomputing Centre (LRZ))
Stephan Hachinger, (Leibniz Supercomputing Centre (LRZ))
Susanne Arndt, (Technische Informationsbibliothek (TIB))

Publisher:

National Research Data Infrastructure for Engineering Sciences

Imported Ontologies:

bibo
biro
dcat
dcterms
foaf
owl





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and apply now!

NOMAD Laboratory

enables FAIR sharing and use of materials science data

Mar 23, 2021 [April 8, 2021: CECAM Session on Data Driven Science with an Overview Talk by Claudia Draxl](#)

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NOVEL MATERIALS DISCOVERY

Powerful Artificial-Intelligence Tools for Materials Science

Find New Patterns and Information in Materials Data

Guest (LOGIN)

Find New Patterns and Information in Materials Data



DataMaterialised.eu



- A comprehensive website for RDM in the MSE domain
- Created under the umbrella of RDA/EOSC Future Domain Ambassador #2 program
- In coordination with other international activities dealing with RDM tools for the MSE domain
- Expected pilot functionality: 1Q/2023

Czech WG Material Sciences and Technology

- 27 members, 14 universities and research institutes, 4 RIs
- Engagement of new institutions and individuals in Open Science and EOSC
- **Sharing of experience**
- Adaptation of existing Electronic laboratory notebooks (**ELN**) for the MSE community
- **Long-term aim:** To automatise generation of a majority of metadata



Thank you for your attention!

