



Vice Rectorate for Digitalisation and Change Management Digitale TU Graz Marketplace



In the least years, the adoption of FAIR (*Findable – Accessible – Interoperable – Reusable*) data principles and research data management (RDM) practices is increasingly required by funders and publishers to ensure the transparency and reusability of research. Inspired by this, the Graz University of Technology wants to advance towards more open and accessible science by encouraging researchers to adopt RDM practices in their everyday work. Handlungsfeld Forschung of the Digitale TU Graz initiative is therefore opening a call for projects in RDM, and invites active TU Graz researchers at any career stage to submit project proposals. Whether you have a tool in place and want to make it more stable and usable for others, want to build a prototype to help manage data in your discipline, or are interested to use InvenioRDM or CyVerse Austria, we encourage you to apply!

RDM (Research Data Management) Marketplace

As part of the university's digitisation strategy, and to support its RDM policy, TU Graz aims to enable the efficient adoption of FAIR principles and RDM practices by developing state-of-the-art tools and services that can be used across different fields, or tailored to specific demands. Uptake of these tools will save researchers time and energy, as well as help them to comply with RDM requirements from funders and publishers by assisting them in planning, storing, analysing, and archiving their data according to international scientific community standards.

Researchers can request between €5,000-25,000 to cover staff costs, infrastructure, and/or events. Applicants must be active TU Graz scientific staff or students. Projects are expected to commence on 1st January 2021 and have a maximum duration of 12 months. We expect that research groups involved will have made crucial steps towards improving data handling practices in their team/discipline, as well increase the reproducibility and reusability of their research. The projects funded will in turn help TU Graz gain more insight into the RDM needs of researchers, evaluate generic and discipline-specific tools already available, and better understand users' needs for further tools and services to support RDM, ultimately boosting the visibility and international reputation of TU Graz.

To give more information about the <u>RDM policies</u>, services and tools currently in development at TU Graz, and to give researchers the opportunity to present their proposals and discuss potential collaborations, an "RDM Marketplace information event" will be held online on 2nd September (14:00-15:30). To register for this event, please send an email to <u>rdm.marketplace@tugraz.at</u>.

Requirements of RDM Marketplace submissions

Proposals should seek to focus on one or several of the topics in the list below:

- Prototype or further develop locally created tools for RDM
- Gather discipline-specific RDM requirements, or define their own metadata templates
- Define faculty-specific needs and responsibilities for RDM policies
- Pilot a faculty-specific RDM implementation strategy
- Act as an early adopter of the upcoming TU Graz data repository <u>InvenioRDM</u> and provide feedback on its functionalities as a data archiving solution
- Develop use cases for machine-actionable Data Management Plans (maDMPs)
- Develop a discipline-specific use case in <u>CyVerse Austria</u>
- Use Docker technology for reproducible analytics
- Use distributed storage resources available via iRODS in CyVerse Austria
- Host discipline-specific RDM training events





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Proposals are invited from across the University, but applications related to Engineering fields (especially Computational Engineering) are especially welcome. Please contact rdm.marketplace@tugraz.at for any questions regarding scope and content of the proposals.

Proposals must use the designated template and be no more than 4 pages long, and have to be submitted in PDF format to the details given below, **no later than 30 September.** The template defines specific fields, all of which must be completed:

- Clear concept, rationale and objectives (incl. value for researchers and degree of innovation)
- RDM methodology and work programme (incl. timeline and milestones/deliverables)
- Impact, usage scenario and sustainability (i.e. possibility for wider application in other TU Graz faculties, roll-out to other institutions after the end of the project, applicability for teaching)
- **Details of the staff** who will undertake the activities, highlighting capabilities necessary to undertake the project and any previous experience with RDM
- An assessment of the risks associated with the project and how these will be managed
- **Justification of requested budget** (total staff costs¹, as well as travel, software and hardware). We appreciate in-kind contributions in the projects.

The work will be supported by the Open and Reproducible Research Group (ORRG) lead by Tony Ross-Hellauer, project leader in Digitale TU Graz - Handlungsfeld Forschung. Support will include three coordination meetings to provide input and feedback, information and invitation to participate in community events as well as dissemination of results in blog posts, news, etc.

Procedure and Important Dates

- The call will be open from 5th August to 30th September;
- 2nd September: Online RDM Marketplace information event;
- Acceptance notification of awarded projects: third week of October.
- 28th October: announcement of the awarded projects at the TEL/TEA/RDM Marketplace; Winners will be expected to give a brief lightning talk on the project;
- January 2021: Start of the projects.

Contact for submission and Information

E-mail: rdm.marketplace@tugraz.at

TU4U: https://tu4u.tugraz.at/go/rdm-marketplace.

Links for further information

RDM policies at TU Graz: https://www.tugraz.at/sites/rdm/home/.

The FAIR principles: https://en.wikipedia.org/wiki/FAIR_data; see also the original paper: https://doi.org/10.1038/sdata.2016.18.

InvenioRDM (https://invenio-software.org/products/rdm/) is the repository and document management platform of the Invenio project, developed by CERN (https://cern.ch).

CyVerse Austria (https://www.tugraz.at/sites/cyverse/home/) provides powerful computational infrastructure to handle huge datasets based on **iRODS** (https://irods.org/) and complex analyses using **Docker Technology** (https://www.docker.com) to "package" software (code, runtime, system tools, system libraries and settings).

¹ **Please note** that the funding can only cover costs associated with project-based staff; contribution from staff paid from the global TU Graz budget will be in-kind. Staff costs are to be calculated according to the *Gehaltsschema* from TU4U and include employers' contributions. Students (in particular master students) do not have to be TU Graz employees and can be hired through a *Werkvertrag*.