"When I look back on 10 years of curating research data and harmonizing metadata at GFZ Data Services and ask myself what is the most frequent adjustment I have to make, I would say: Getting the name of GFZ right!

- We used to be called *GFZ Potsdam* or *GeoForschungsZentrum Potsdam*.
- Later we became a *Helmholtz Centre*
- now we have the new official names, **Helmholtz Zentrum Potsdam Deutsches GeoForschungsZentrum GFZ** and **Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences**.

For publications, we may officially abbreviate and write **GFZ German Research Centre for Geosciences** and **GFZ German Research Centre for Geosciences**. These are four official names for the same institute. For computers, however, they are four different institutes. If we take this game further, there are over 30 sections within the GFZ and for many scientists it is a matter of course to include these in the affiliation. In the English versions, there is also the question of whether to write Center or Centre or where to put GFZ, at the front or at the back?" (Kirsten Elger, head and curator of GFZ Data Services).

All these different spellings of research institutions pose no problem for humans in terms of correct institutional attribution. However, computers, which are supposed to produce reliable figures for automatic citation analyses, recognize different institutions in the different spellings and thus produce "wrong" figures. The same difficulty also arises during automated metadata exchange between domain repositories, such as GFZ Data Services, to institutional research information systems at universities

The ROR Identifier is a current solution, first launched in January 2019. ROR stands for Research Organization Registry and is an open registry for research organizations. The registry is developed and operated as a joint initiative of the California Digital Library, Crossref and DataCite. ROR already references more than 103,000 organizations, ranging from universities and extramural research institutions to government agencies, research funders and government departments.

The strength of ROR is that it incorporates existing identifiers for institutes and research funders (e.g. GRID, ISNI, Crossref Funder ID), so it is not a "counter-offer". ROR is a rather modern product that has been supported by the community right from the beginning. The ROR

Figure 1: Example of the ROR page of the GFZ Research Centre for Geosciences.

The URL (top left) can be integrated into machine-readable metadata, such as those used for DOI registration. The page also shows the official English name of the GFZ as well as the abbreviated names in German and English. There is information on the location of the institute and a link to its website. ROR also brings together existing institutional identifiers such as GRID, ISNI, the Crossref Funders ID and Wikidata and shows the integration of GFZ into the Helmholtz Association in the "Relationship" section.

identifier is human and machine readable. It can be expressed as a URL, and thus integrated into machine-readable metadata, so that computers can immediately recognize the correct mapping (Figure 1). If an institutional name changes, ROR can be updated via a change request form on the ROR website.

The only minor drawback to using the ROR exclusively is that it only catalogues the top-level individual institutes or universities and does not break down to internal organizational units, such as faculties or departments. This was a deliberate decision, as the names of faculties and departments change so often that it would be prohibitively expensive to curate the entries. For this reason, ROR is likely to be integrated into the repositories primarily as an additional service.

Further reading:

ROR Website: https://ror.org

ROR display guidelines: https://ror.readme.io/docs/ror-id-display-guidelines-and-logos

ROR search portal: https://ror.org/search

--

GFZ German Research Centre for Geosciences

 Kirsten Elger & Melanie Lorenz, Potsdam

--

info@fidgeo.de

www.fidgeo.de