



Beitrag ID: 77

Typ: Talk

FAIR AIMS –bringing rich metadata for physical samples into the digital world

Persistent identifiers (PID) are critical elements of digital research data infrastructures, enabling the unambiguous identification, location and citation of digital representations of a growing range of entities, such as publications and data. Physical samples form the basis for many research results and data. The International Generic Sample Number (IGSN) provides a globally unique, persistent, and web-resolvable identifier for physical objects, allowing them to be found, cited and reanalysed. IGSNs facilitate direct links between data, publications, originating samples, and records of their creation. This closes one of the final gaps in the provenance of research results.

FAIR AIMS builds upon the successful HMC project FAIR WISH. The main outcome of FAIR WISH was the FAIR SAMPLES Template –a modular template, developed for EaE researchers that allows users to select sample-type-specific metadata properties and create customized, rich sample descriptions that comply with the IGSN schema - regardless of the level of digitisation of sample metadata and the individual researcher's metadata training. The template includes a number of linked data vocabularies and forms the basis for the semi-automated generation of IGSN metadata XMLs and subsequent IGSN registration. IGSN metadata submitted via the FAIR SAMPLES TEMPLATE have already proven to be much richer and more complete than previous submissions.

FAIR AIMS will develop an online version of the FAIR SAMPLES Template with automated workflows for IGSN registration and the integration of linked-data vocabularies as dropdown lists, as well as automated metadata quality checks during uploads. FAIR AIMS is also the first IGSN-related project to actively reach beyond the geosciences. Our partner HZB will contribute to FAIR AIMS by developing IGSN metadata profiles for material science samples and integrate the online template into their sample database SEPIA.

ONLY WORKSHOPS - Proposed interaction format

Alternative Track

ONLY WORKSHOPS - Tentative audience

ONLY WORKSHOPS - Maximum number of participants

ONLY WORKSHOPS - Special technical requirements

Autor: ELGER, Kirsten (GFZ Helmholtz Centre for Geosciences)

Co-Autoren: BRAUSER, Alexander (GFZ Helmholtz Centre for Geosciences); HEIM, Birgit (Alfred-Wegener-Institut Helmholtz Zentrum für Polar- und Meeresforschung); GÖRZIG, Heike (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH); RIAL, Katherine (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH); WIECZOREK, Mareike (Alfred-Wegener-Institut Helmholtz Zentrum für Polar- und Meeresforschung); SEDEQI, Mojeep (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH); KRAHL, Rolf (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH); ANTIPANOVA, Tatjana (GFZ Helmholtz Centre for Geosciences)

Vortragende(r): ELGER, Kirsten (GFZ Helmholtz Centre for Geosciences)

Sitzung Einordnung: TALK SESSION

Track Klassifizierung: HMC Conference 2026 Track Topics: 1. Metadata in Action: Embedding Quality and Context into Research Infrastructures