Steinbuch Centre for Computing (SCC)
Data Exploitation Methods (DEM)

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Using EVOKS to build controlled vocabularies

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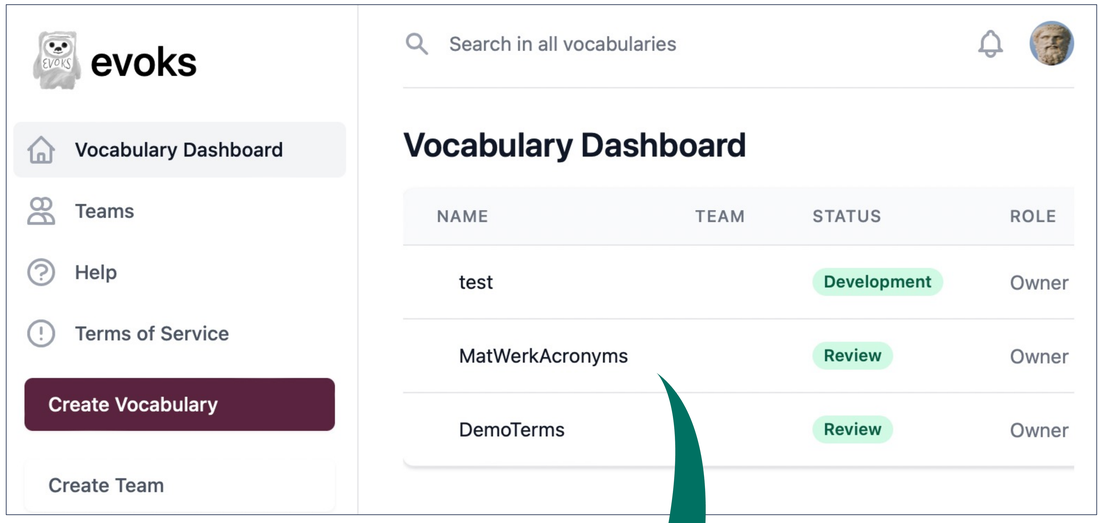
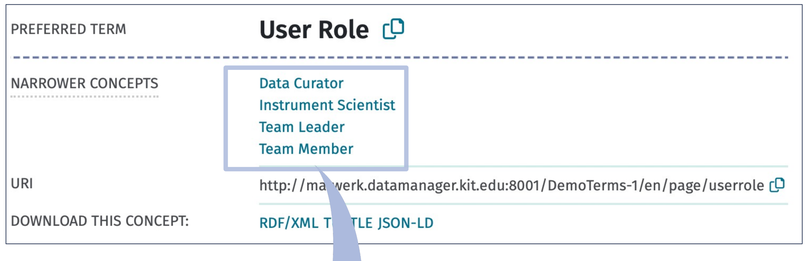
Controlled vocabularies play a vital role in describing knowledge within a specific domain. They not only eliminate data ambiguity but also serve as a reference for term definitions, foster semantic interoperability, and facilitate seamless integration with ontologies.

EVOKS, the **E**ditor for **Vo**cabularies to **K**now **S**emantics, is a general-purpose vocabulary service that allows for **easy creation**, **import**, **editing, curation and publishing of vocabularies**. Publishing the vocabulary using SKOSMOS (www.skosmos.org) requires just **a single click**.

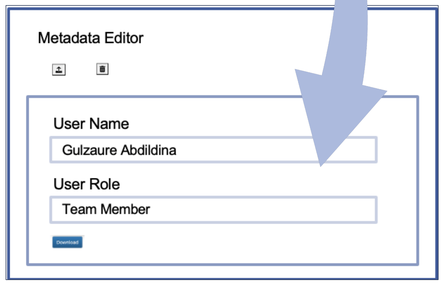
To illustrate the usability of EVOKS, we established the **MatWerk Acronyms Vocabulary**. EVOKS allows users to work collaboratively with other contributors and iterate on the vocabulary creation process. This includes editing and publishing of revised versions.

Use case: Terms in a Metadata Schema using Metadata Editor
Integrating vocabularies into the Metadata Editor eases the use of controlled vocabularies that adhere to FAIR principles, linking terms in a schema through URIs instead of hard-coding them, and enabling the automatic propagation of any changes made within the vocabulary.

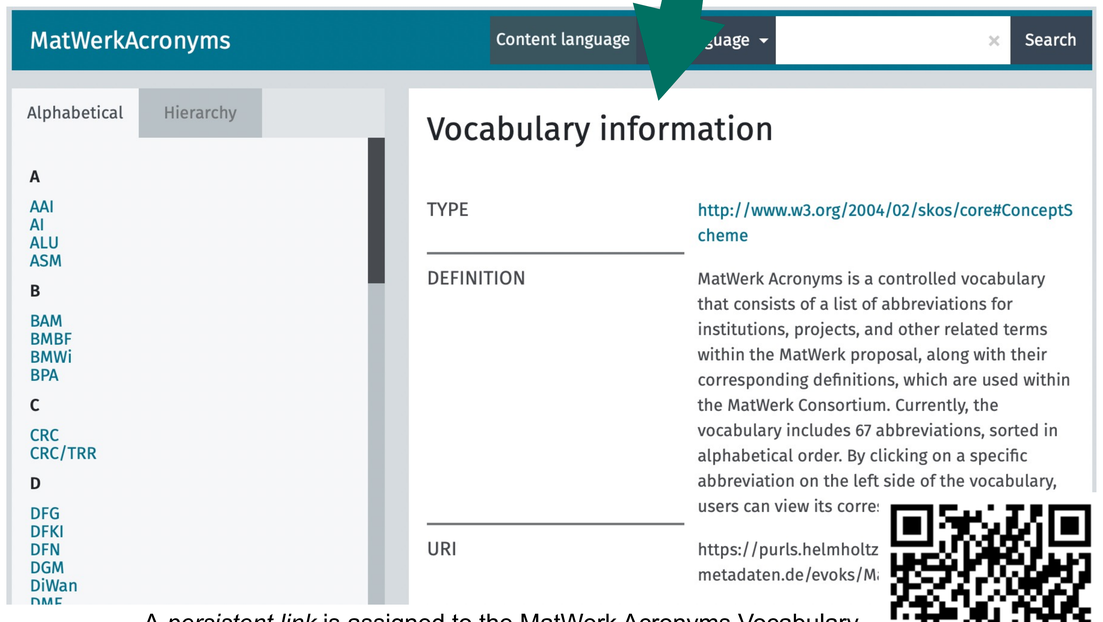




https://github.com/kit-data-manager/Metadata-Schemas-for-Materials-Science/tree/evoks



Applications can directly access and use the vocabulary via the internet. In this example, we link the term User Role to a field in our Metadata Editor. Terms are defined in a metadata schema. The narrower terms of the preferred term User Role are taken from a controlled vocabulary and are presented as selectable options in the Metadata Editor's drop-down menu according to the schema. In this way, controlled vocabularies ease interoperability and contribute to FAIRness.



A *persistent link* is assigned to the MatWerk Acronyms Vocabulary, ensuring its long-term accessibility and stability:
https://purls.helmholtz-metadaten.de/evoks/MatWerkAcronyms/

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