ICAT metadata at Diamond

Use-cases: 1. Data owner data search   ✓

                       2. Open data search (Findability)   ✓

                       3. Data processing (Interoperability)   X

For searching:

                1. Admin metadata (names, dates, title, abstract..)
                2. Experimental parameters
                    - NeXus terms
                    - Sample description
                    - Other?

Plan:

     Small/extensible managed set of parameters
     PIDs where possible (including NeXus via NeXus Ontology)
     Need units

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Challenges

Data owners (main use-case!) want to search their data in real time (during an experiment).

No community-agreed approach to **sample names/descriptions**.

Very high priority – not addressed because it is difficult!

Have multiple local definitions – not consistent or FAIR.

General approach to labelling (e.g. datasets) with ontologies (if this doesn't already exist).

Predicate Logic for parameters

E.g. label a dataset with a PaNET technique:

Subject:	dataset	ICAT Dataset
Predicate:	PaNET/hasTechnique	Parameter type PID?
Object:	PaNET/PaNET01146	Parameter valueType PID?

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