Plan Overview

A Data Management Plan created using DMPonline

Title: Shaping a modern approach to open data from a World-leading science facility

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ORCID iD: 0009-0008-7829-3647

Project abstract:

This project is a collaboration between the University of Oxford and Diamond Light Source that aims to understand the opportunities and barriers in moving towards FAIR (Findable, Accessible, Interoperable, Reusable) and open data within the Photon and Neutron scientific community. The project is designed to improve the FAIRness level of the science life cycle at Diamond, and deliver novel conceptual and methodological contributions to enhance the value of Diamond research data, while leveraging on and complementing the activities of existing communities and projects.

ID: 152807

Start date: 01-10-2023

End date: 30-09-2027

Last modified: 27-07-2024

Shaping a modern approach to open data from a World-leading science facility

Data types

1. Collecting as many experiment proposals as possible from Diamond Light Source as well as other Photon and Neutron facilities such as the European Synchrotron Radiation Facility.
    - Title
    - Authors
    - Abstract
    - References (if applicable)
    - DOI (if applicable)
2. Creating metadata of all the collected experiment proposals. Metadata will be structured in a machine-readable format and linked to the respective experiment proposals.
    - Topic
    - Experimental techniques
3. Producing Python code in Visual Studio Code to collect the experiment proposals and create the associated metadata.
4. Collecting web survey responses from Diamond staff and researchers (number to bedetermined later).
5. Creating audio recordings of interviews with Diamond staff and researchers (number to be determined later).
6. Creating posters for academic conferences
7. Writing papers and the final DPhil thesis

Data preservation

All data will be uploaded to and stored on a public GitHub repository (https://github.com/terencetan-c/Project-Stakeholder-Group).
Deposit of the thesis in the Oxford University Research Archive (ORA) is a mandatory requirement. Upload of other data to the ORA will be contingent on approval from Diamond Light Source.

The Python script used to collect the experiment proposals and create the associated metadata will be provided so that others can reproduce the data. Comments will also be added so that others can understand the code.
A README file will be created in the GitHub repository to describe and contextualise the various data files.
Metadata will be added when depositing data on ORA.

Data can be stored indefinitely on GitHub repositories and ORA.

Data sharing

All data will be shared with permission from the University of Oxford and Diamond Light Source.

All data excluding the code will be uploaded to the GitHub repository as soon as possible, with the exception of information deemed confidential by the University of Oxford or Diamond Light Source. The code will be cleaned up and uploaded together with the submission of the thesis.
The thesis will be required to be deposited in ORA after submission.

The data will be available via the GitHub repository.
A permanent descriptive record is created for all data deposited in ORA and a Digital Object Identifier (DOI) can be requested. Data in ORA will be discoverable through Google and other search engines.

Resources

GitHub repositories are free to use and require minimal upkeep from users.

ORA is currently free of charge, and curation and online delivery of the data will be assured by ORA staff, ensuring the long-term preservation, back-up and accessibility of the data.