STFC Ernest Rutherford Fellowship

A Data Management Plan created using DMPonline

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Manchester Data Management Outline

- Funder
- No - only institution involved
- Acquire new data
- University of Manchester Research Data Storage
- 1 - 8 TB
- No
- 21+ years
- No sensitive or personal data

N/A

- Not applicable
- Not applicable
- Not applicable
- No

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Data types

The proposal involves acquisition of analytical data from a wide range of instruments. These and their data types include:

- Electron Probe: X-ray intensity as at a selection of predefined regions of the spectrum.
- LA-ICP-MS Laser ablation Inductively Coupled Plasma Mass Spectrometry. Mass spectra related to defined spots in a sample.
- Secondary Electron Microscopy: Maps, X-ray spectra and compositional information associated with regions.
- Argus-MS data: Ionized gas signals at a number of specific mass-to-charge ratios.

Data preservation

Each instrument in each laboratory has a data management plan to archive and make available the results of analyses that conforms to the requirements of the STFC and the University of Manchester and follows the guiding principle expressed above and below.

For each instrument raw data (e.g. digitised spectra) from sample analyses, calibrations and blanks will be recorded in a systematic directory structure that is backed up locally at least every night and at least weekly to the resilient and backed up university storage. Metadata (instrument conditions, analytical target) will be recorded alongside each primary dataset, as will versions of any software used to extract derived quantities from raw data.

Raw data can only be opened with the mass-spectrometer software, the final reduced data can be opens with spreadsheet software (i.e. Excel)

Data will be preserved in this format indefinitely, and for at least ten years from the completion of the project.

Data sharing

For each technique, the calibrated results appropriate for publication will be identifiable and available. These data will be signed off by the lead of the laboratory before they are added to the data repository. Image data will be presented in a standard format. Numerical data in comma delimited text files (or other widely accessible format). Sign off will constitute an affirmation that the data are of publishable quality and therefore of interest to the wider community. Alongside these data there will be metadata indicating the raw data corresponding to sample analyses, calibrations and blanks (where appropriate) and the protocols (including versions of software) used to generate the final data product from the raw data. These raw data, protocols and software versions will be available through the raw data backups described in the previous section. It is worth noting that many publications in our field now require data to be available on submission for publication, but data on which publications rely will be made available within no more than three months of acceptance.

Data not published (but signed off as publishable) shall be made available no later than three years from the date on which they were generated in their final form.

Datasets that form the basis of publications will be made freely available through the University research information system Pure, where open access versions of all publications will also be available.

Resources

n/a