

Bragg Institute Mail-In Neutron Powder Diffraction Service

The Bragg Institute has initiated a powder diffraction mail-in service. Initially this service is available on the Echidna high resolution powder diffractometer only. It is intended for users who require high-quality data from a limited number of samples, for new users, or for users wishing to check samples prior to applying for a normal instrument time allocation.

Proposal Guidelines

All users of the mail-in service must create a proposal on the Bragg Institute customer portal at <http://neutron.ansto.gov.au>. A special round, “2009 Echidna Mail-In Service” has been created for these proposals. No scientific justification is required, and proposals will be reviewed for technical feasibility and safety only. The proposal requirements are significantly abbreviated:

1. Experiment Page. Choose a science area and write a brief plain language description of the science in the “proposal summary” section. Indicate any intellectual property concerns.
2. Researchers Page. Skip this page.
3. Instruments Page. Select Echidna from the drop down list (it is the only choice but you have to actually select it). Enter any special sample handling etc requirements: the other fields can be left blank. On the Echidna page (opens when you add Echidna as an instrument)
 - enter the date you would like the data by in the “Desired starting date field”
 - Enter 1 in the “No. of Days Requested” field
 - Indicate desired wavelength (1.3, 1.6, 2.4 Å) and room temperature or cold (4K) data collection
4. Samples Page: add all samples to the table (follow the instructions on the page). Indicate whether you would like the sample returned or disposed by ANSTO.
5. Figures Page: skip this page.
6. Submit Page: submit the proposal when complete.

Sample Guidelines.

At this time, only powder samples are being accepted under the mail-in scheme. A full safety review will be carried out on the proposed samples before a mail-in proposal is accepted.

All samples must be packaged and shipped to and from ANSTO according to Australian and international transportation regulations. For researchers from Australian research organisations a transport container for each sample will be forwarded to you when your proposal is accepted.

The arrangements for the shipping of samples from other countries will be arranged on an individual basis.

If you are unsure of the amount of sample required, please visit http://www.ansto.gov.au/research/bragg_institute/facilities/instruments/echidna/specifications and use the Neutron Powder Diffraction Experiment Planner at the bottom. Typically several grams will be needed.

Following the measurement we can dispose of the sample, return it, or you can collect it if you are planning a visit to ANSTO in the near future.

Data Policy

Data collected using the mail-in service are subject to the normal Bragg Institute non-proprietary research policy: it is expected that scientific results will be published in the open literature with appropriate reference to ANSTO and use of the Echidna high-resolution powder diffractometer.