

Experiment Report Form

The double page inside this form is to be filled in by all users or groups of users who have had access to beam time for measurements at the ESRF.

Once completed, the report should be submitted electronically to the User Office using the **Electronic Report Submission Application:**

<http://193.49.43.2:8080/smis/servlet/UserUtils?start>

Reports supporting requests for additional beam time

Reports can now be submitted independently of new proposals – it is necessary simply to indicate the number of the report(s) supporting a new proposal on the proposal form.

The Review Committees reserve the right to reject new proposals from groups who have not reported on the use of beam time allocated previously.

Reports on experiments relating to long term projects

Proposers awarded beam time for a long term project are required to submit an interim report at the end of each year, irrespective of the number of shifts of beam time they have used.

Published papers

All users must give proper credit to ESRF staff members and proper mention to ESRF facilities which were essential for the results described in any ensuing publication. Further, they are obliged to send to the Joint ESRF/ ILL library the complete reference and the abstract of all papers appearing in print, and resulting from the use of the ESRF.

Should you wish to make more general comments on the experiment, please note them on the User Evaluation Form, and send both the Report and the Evaluation Form to the User Office.

Deadlines for submission of Experimental Reports

- 1st March for experiments carried out up until June of the previous year;
- 1st September for experiments carried out up until January of the same year.

Instructions for preparing your Report

- fill in a separate form for each project or series of measurements.
- type your report, in English.
- include the reference number of the proposal to which the report refers.
- make sure that the text, tables and figures fit into the space available.
- if your work is published or is in press, you may prefer to paste in the abstract, and add full reference details. If the abstract is in a language other than English, please include an English translation.



	Experiment title: GABARAP BAG Time Birkbeck College	Experiment number: LS-1810
Beamline: ID29	Date of experiment: from: 02/02/01 to: 03/02/01	Date of report: 7/8/01 (update to 27/2/01)
Shifts: 1	Local contact(s): Andy Thompson	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): Dr Nicholas Keep * Mr David Knight * School of Crystallography and BBSRC Bloomsbury Centre for Structural Biology, Birkbeck College, Malet St London WC1E 7HX UK		

Report: It was initially hoped to collect MAD data at the Nickel and bromine edges as the crystals require 10mM Nickel to grow and other crystals had been soaked in NaBr. However although the crystals diffracted to better than 2.5 Å, there was disorder and splitting which had not been clearly seen on the home source. Despite screening quite a few crystals none were suitable for MAD experiments. One crystal mounted late on was better than the others and a data set was collected. This has been processed and has an Rmerge of 8% between 7 and 2.2 Å and reasonable completeness. Molecular replacement with a 50% homologous protein has given a good signal (correlation of 0.355 in Molrep next solution 0.227) and there is density for non-identical side chains truncated to Ala. Rfree is staying relatively high in refinement at present particularly for the low resolution data and poor spot shape is still a problem with this crystal, so another data set may be necessary to get good refinement. Crystallisation of complexes with binding partners is being pursued.

Since the above report was submitted in February an improved native data set has been collected at SRS Daresbury using altered freezing conditions. This gave a data set that has allowed the structure to be solved to 1.75 Å with R=20.3 Rfree=23.0, with the molecular replacement solution reported above. A manuscript is close to submission and complexes are under investigation. A fuller scientific report will be submitted in February 2002.

