



BAG Beam time Progress Report

This represents a summary of the BAG progress in the reporting period, and is **in addition** to the standard ESRF report sheet for each project which will be used for the Review of the BAG.

BAG Title Towards ultrahigh resolution structures of several metabolically important proteins

Allocation Period 6 shifts, used on 5-6 of February, 2000 , LS-1681

List of publications resulting from ESRF beam time

1. Cytochrome b1 – Bacterioferritin, Handbook of Metalloproteins, John Wiley & Sons, to be published.

Global Summary

This was our first visit to ESRF with the protein structures projects. We have utilized six allocated shifts in the optimal manner, however most of our data suffering from some instability in the crystal orientation. By elimination we have come to the conclusion that the most probable cause of that is a combination of the geometry of the Oxford Cryostream (perpendicular to the axis of rotation) and our, mounted on the copper pin loops (too long). For mos of our projects Mar 165detector is not adequate (relatively high resolution+relatively large mosaicity versus relatively large unit cell).

On the spite of this problem, some of the data sets have been successfully (but not painlessly) processed and have produced very useful structural information. Most of the projects should be remeasured. This we hope to accomplish during forthcoming sessions.

Visits made to the ESRF

Date(s) of visits	Beamline	No. of Shifts	Short Summary of each Visit
1. 5-6 February, 2000	ID14	6	Partially successful due to frequent orientation problems.