INSTALLATION EUROPEENNE DE RAYONNEMENT SYNCHROTRON



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 via the User Portal:

https://wwws.esrf.fr/misapps/SMISWebClient/protected/welcome.do

Reports supporting requests for additional beam time

Reports can 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.

ESRF	Experiment title:	Experiment number:
Beamline: ID29	Date of experiment : from: 02/12/2016 to: 02/12/2016	Date of report:
Shifts:	Local contact(s):	Received at ESRF:
Names and affiliations of applicants (* indicates experimentalists): Dr Marie Prevost ISMB, Birkbeck College London, UK		

Report:

The work done was aiming to solve the structure of the main ATPase of the type IVb secretion system, DotB. This protein is powering the secretion system that allows some intracellular bacterial pathogens to secrete virulent proteins into the cytoplasm of the host cell, leading to deseases, such as Legionnaire's disease or Q fewer.

On the 2^{nd} of December 2016, 16 crystals of the *Yersinia pseudotuberculosis* DotB homologue were screened on ID23-1. 2 full datasets were collected, improving the working resolution from 3.4 to 3.0 Å

Those session helped us to improve crystallization conditions and further better datasets were collected in other facilities for both homologues. We are now solving their structures.