



Experiment title: High resolution studies of native and CO-complexed hydrogenase

Experiment number: LS-499

Beamline: BM02

Date of experiment:
from: 26-Oct-96 7:00 to: 28-Oct-96 7:00

Date of report:
27-02-97

Shifts:
3

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Received at ESRF:
- 4 MAR. 1997

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Report:

Crystals of reduced *D. gigas* hydrogenase with CO, which is a competitive inhibitor, have been successfully flash-cooled in the glove-box. Data to 2.18, have been collected and processed with XDS. Some of the statistics are presented here:

	$\lambda(\text{\AA})$	$d(\text{\AA})$	Nobs.	Nun.	Compl(%)	Rsym(%)	Maille (P1)
Jeu complexe CO exp LS-499	0.98	2.135	480526	267626	84.2	6.1	$a=113.26\text{\AA}$ $b=112.86\text{\AA}$ $c=133.12\text{\AA}$ $\alpha=89.98^\circ$ $\beta=89.99^\circ$ $\gamma=119.8^\circ$

The 2.54 Å model of the oxidized *D. gigas* hydrogenase was used as a starting model for refinement with the program X-PLOR, which is under way. The high resolution of this data set (the best at the moment) should allow us to characterize possible changes taking place at the active site.