

**X-ray diffraction experiment with crystals of FetA from *Pseudomonas fluorescens*
bound to the ferric enantiopyochelin
Experiment 30-01-830
27-07-2009/28-07-2009 and 19-09-2009/20-09-2009**

Crystals of FetA from *P. fluorescens* bound to ePch-Fe were tested on BM30A (27-07-2009/28-07-2009). Most of them diffracted X-ray around 7 angströms resolution. 2 crystal forms were found: one appears using PEG and the second one using only salts. The first one probably belong to the orthorhombic system while the second one is trigonal or hexagonal with a long c axis around 500 angströms. The best diffracting crystals were saved to work on a ID beamline.

New crystals of FetA bound to ePch-Fe were obtained in new crystallization conditions. They diffracted around 4 angströms resolution on BM30A (19-09-2009/20-09-2009). They belong to the C2221 space group with cell parameters:154.06, 169.51, 232.64. Two dataset at low resolution were collected and the structure solved by MR using the structure of FetA in its empty form. The analyzes of the electron density showed local conformational changes due to the ligand binding. In the binding pocket, ePch-Fe-ePch is bound.

Better resolution is needed to find the structure of ePch and perform structural comparisons with the pyochelin receptor (FptA) bound to the iron-pyochelin from *P. aeruginosa*.