

*Pseudomonas aeruginosa* is an opportunistic human pathogen which infects injured, immunodeficient, or otherwise compromised patients. Under iron-limited conditions, the bacterium secretes a major siderophore: pyoverdine (PaA). PaA seems to play an important role in infection by competing with transferrin for iron in order to overcome the iron-withholding mechanism present in mammals. It is transported through the outer membrane of *P. aeruginosa* by FpvA.

During the experiment 30-01-629, a 3 wavelength MAD dataset was collected from a crystal of SeMet substituted FpvA. The data were processed using Denzo/Scalepack, Mosflm/Scala and XDS. The crystallographic data obtained using XDS are summarized in the Table 1.

**Table 1:** summary of the crystallographic data

	11	12	13
Wavelength (Å)	0.979413	0.979632	0.977801
Resolution (Å)	3.6		
Space group	C2		
Cell parameters (Å)	137.3 231.3 121.5 90.0 104.6 90.0		
Number of reflections	143761	144322	126878
Unique reflections	81484	81819	80861
Completeness (%)	96.9	96.8	95.3
Rsym (%)	14.6	14.3	13.1

The location of the Se atoms was unsuccessful even using several packages. Both  $F^+$  and  $F^-$  were then merged using the data collected at 0.979413 Å. Trials to solve the phase problem by molecular replacement were undergone from this dataset using a polyalanine model. A solution was found. The solvent flattening and the density averaging are now applied in order to improve the phases. The free-R factor and factor R are now below 40 %.