Experiment 30-01-770

Pseudomonas aeruginosa is an opportunistic human pathogen which infects injured, immunodificient, or ortherwise compromised patients. Under iron-limited conditions, the bacterium secretes a major siderophore: pyoverdine (Pvd). Pvd 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. Pvd is also able to bind gallium and chrome.

Several crystals of FpvA, FpvA-Pvd-Cr and FpvA-Pvd (more than 100) were tested. Only the FpvA crystals diffract the x-ray beyond than 4 Å resolution.

The space group of the FpvA crystals is C2 with cell parameters a= 191.4, b= 130.6, c= 139.9 Å , $\beta =$ 130.387°.