



	Experiment title: Crystallographic Investigation of Structure and Function of Photosystems I and II	Experiment number: LS-2188
Beamline: ID14 1	Date of experiment: from: 16.11.-18.11.2002	Date of report: 29.04.03
Shifts: 6	Local contact(s): Dr Elena Micossi	<i>Received at ESRF:</i>
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Report:

We proceeded to collect “new” derivatives according to our new freezing protocol (see report from February and June 2002). We were able to collect 12 data sets applying the quick soaking method with five different heavy atom components:

compound	resolution [Å]	Completeness [%]	R _{sym}	I/(σ)	mosaicity
Hg(Cl) ₂	3.9	95.7 (87.7)	0.071 (0.427)	13.2 (1.9)	0.4
Hg(PO ₄)(Ethyl)	4.0	96.1 (95.3)	0.063 (0.461)	14.7 (2.1)	0.4
Hg(SCN) ₂	4.0	95.0 (85.4)	0.078 (0.411)	12.3 (2.3)	0.5
Hg(SCN) ₂	4.1	94.7 (87.3)	0.080 (0.483)	12.2 (1.5)	0.45
Hg(SCN) ₂	4.3	91.8 (80.2)	0.081 (0.444)	11.5 (2.1)	0.45
OsO ₄	4.15	95.3 (90.9)	0.075 (0.432)	12.7 (2.2)	0.5
W ₁₂ O ₄₀	4.1	94.7 (93.0)	0.103 (0.464)	8.0 (2.0)	0.6
W ₁₂ O ₄₀	3.9	93.4 (93.4)	0.098 (0.505)	11.9 (2.0)	0.3
W ₁₂ O ₄₀	4.0	86.5 (70.6)	0.123 (0.401)	8.4 (2.3)	0.5
Xe	4.6	90.5 (73.7)	0.099 (0.528)	9.8 (2.0)	0.7
Pb(NO ₃) ₂	3.8	87.7 (71.3)	0.095 (0.536)	12.1 (2.2)	0.6

Reference

Zouni, A., Witt, H.-T., Kern, J., Fromme, P., Krauß, N., Saenger, W., Orth, P. (2001) Crystal structure of photosystem II from *Synechococcus elongatus* at 3.8 Å resolution. *Nature* **409**, 739-743.