
Electronic Supplementary Information

Profile fits achieved as a function of Space Group (Table S1) and Final Profile Fit (Figure S1)

5 Table S1. Summary of profile fits achieved as a function of space group choice, 2 K data.

Space Group	R_p	R_{wp}	χ^2	Total No. of Parameters varying
Fd-3m	4.56	5.83	1.04	4
F-43m	4.44	5.72	0.99	8
I-4m2	4.88	6.13	1.15	13
F23	4.45	5.70	0.99	8
I4 ₁ 22	4.42	5.62	0.96	9

10

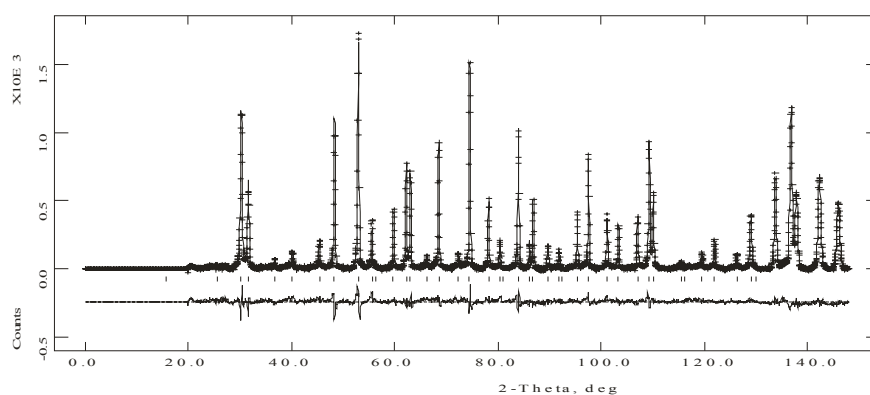


Figure S1. Final profile fit achieved in Fd-3m to the data collected at 2K from RbOs₂O₆. Crosses observed data, upper continuous line the calculated profile and lower continuous line the difference. Tick marks show the reflection positions.