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**Preliminary crystal data on hexabromoselenates(IV)
of some amino acids**

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Crystalline salts containing SeBr_6^{2-} octahedral anion and protonated amino acids cations have been synthesized according to the previously reported method (PASTUSZAK *et al.*, 1974; SZWABSKI, 1975).

Amino acid Formula	Cell constants			V	Z	$\frac{V}{Z}$	Space group				
	a	α	b (Å)								
	c	γ									
DL-Alanine $(\text{C}_3\text{H}_8\text{NO}_2)_2\text{SeBr}_6$	12.33(2)	—	105.5(3)	940	2	470	Cm or $C2/m$				
	7.71(1)	105.5(3)									
	10.26(2)	—									
ϵ -Aminocapronic acid $(\text{C}_6\text{H}_{14}\text{NO}_2)_2\text{SeBr}_6$	13.41(2)	—	102.0(3)	1276	2	638	$P2_1/c$				
	7.49(1)	102.0(3)									
	12.97(2)	—									
DL-Ornithine $(\text{C}_4\text{H}_{12}\text{N}_2\text{O}_2)_2\text{SeBr}_6$	10.89(2)	101.8(3)	100.5(3)	888	2	444	$P1$ or $P\bar{1}$				
	7.45(1)	100.5(3)									
	11.84(2)	103.3(3)									
L-Lysine $(\text{C}_6\text{H}_{14}\text{N}_2\text{O}_2)_2\text{SeBr}_6$	34.00(4)	—	93.0(3)	3380	8	422	$C2$				
	7.88(1)	93.0(3)									
	12.62(2)	—									
L-Arginine needles $(\text{C}_6\text{H}_{16}\text{N}_4\text{O}_2)_2\text{SeBr}_6$	11.66(2)	106.5(3)	114.3(3)	984	2	492	$P1$				
	7.78(1)	114.3(3)									
	12.43(2)	96.7(3)									
L-Arginine plates $(\text{C}_6\text{H}_{16}\text{N}_4\text{O}_2)_2\text{SeBr}_6$	7.43(1)	—	102.2(3)	916	2	458	$P2_1$				
	10.74(2)	102.2(3)									
	11.77(2)	—									

X-ray crystallographic data were obtained on a precession camera using $\text{CuK}\alpha$ radiation. The results are given above.

References

- R. PASTUSZAK, H. JĘDRZEJCZAK, and J. DOBROWOLSKI (1974), Hexabromotellurites of protonated amino acids. Roczniki Chem. **48**, 2267–2274.
S. SZWABSKI (1975), Etudes et préparation des hexabromosélénates(IV) d'acides protonés. Thesis, Technical University, Gdansk.