

Note on a new Mineral from Långban (Sahlinite).

By

G. AMINOFF.

With chemical analysis by R. BLIX.

(M. S. received 11/8 1934.)

The new mineral occurs in dolomite impregnated by hausmannite. It forms aggregates of thin scales of one to a few mm in diameter. The scales have one very prominent cleavage, but do not show any other crystallographical development. The colour is light sulphur yellow.

The symmetry is monoclinic, and the cleavage plane is parallel to the symmetry plane. (A 2-fold symmetry axis is perpendicular to Laue-photogramms on the cleavage plane).

As yet the following optical data have been established. The mineral is optically negative. The acute bisectrix is perpendicular to {010}. The optical axial angle in air (Na-light) is $96^{\circ} 38'$. Refractive indices higher than for methylene iodide (probably very high).

The hardness is about 2—3. The spec. grav. is 7.95.

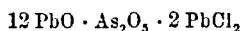
The chemical analysis was kindly made by Dr. R. BLIX and gave the following result.

	1	2	Medium
PbO	89.31	89.35	89.33
As ₂ O ₃	6.67	6.47	6.57
CaO	0.46	—	0.46
CO ₂	0.43	—	0.43
Cl ₂	4.05	4.05	4.05
H ₂ O (hygrosc.) . . .	0.10	—	0.10
			100.94
			— O = Cl ₂ 0.91
			100.03

Supposing CaO and CO₂ to be present as calcite and neglecting the hygroscopical water, the molecular quotients are as follows.

		M. Q.	
PbO	89.33	0.4002	13.98
As ₂ O ₃	6.57	0.0286	1
Cl ₂	4.05	0.0571	2.00

These ratios give the formula



This extremely basic arseniate seems to have nothing corresponding to it among the minerals hitherto known.

The new mineral has been named in honour of Dr. CARL SAHLIN, formerly manager of the iron works of Laxå (Sweden), in recognition of his services in connection with the history of mining and metallurgy in Sweden and his great interest in the Riksmuseum and the mineralogy of Långban.

Riksmuseets mineralog. avdelning, May 1934.
