there are no volcanic rocks. The Agni Manis found in Biliton are strongly etched and bear no relation to the country rock. On Biliton the natives believe them to be "seeds of tin" and on finding one, bury it again so the tin mines will not become exhausted. Throughout the Orient, the Agni Mani is credited with bringing the wearer riches and a long line of descendants.

Purfield Kent, Secretary

NEW MINERAL NAMES

Falkenstenite


Variolites in basaltic lava near Falkensten, Oslo area, are described. The rock had the mode: pyroxene (diopside augite) 24.3, chlorite 23.3, zeolite 40.2, ore 10.2, apatite 1.6, calcite 0.4. A complete analysis of the rock is given from this, and assuming compositions for the pyroxene and chlorite that are in accord with the optical data, the composition of the zeolite is calculated to be $K_2Na_2Ca_3Mg_2Al_2Si_7O_{20}·16\frac{1}{2}H_2O$. The rock lost its water (6.49%) as follows: at $110^\circ$ C. 2.76, at $500^\circ$ 1.40, at $800^\circ$ 2.33%.

Falkenstenite occurs intergrown with chlorite, or it is fibrous, thread-like with quadratic cross section and prismatic cleavage. It is uniaxial, negative, $n_\alpha=1.508$, birefringence about 0.003. The optical data are very close to those of gonnardite, but the latter contains no magnesium. The chemical composition, except for $H_2O$, is similar to that of aschroline, but the latter is optically positive, with $n_\alpha=1.536$. Hence falkenstenite does not seem to correspond with any known zeolite.

Discussion: Further study is needed, including chemical, x-ray, and dehydration studies, before this mineral can be classified.

Michael Fleischer

Courzite


There are two analyses in the literature of wellsite, the original by Foote (1897), No. 1 below, and a second by Fersman (1909), No. 2 below. Each of these is the average of two analyses.

<table>
<thead>
<tr>
<th>$SiO_2$</th>
<th>$Al_2O_3$</th>
<th>$Fe_2O_3$</th>
<th>$BaO$</th>
<th>$SrO$</th>
<th>$CaO$</th>
<th>$MgO$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 43.86</td>
<td>24.96</td>
<td>0.12</td>
<td>5.07</td>
<td>1.15</td>
<td>5.80</td>
<td>0.62</td>
</tr>
<tr>
<td>2. 49.40</td>
<td>19.14</td>
<td>5.80</td>
<td>1.80</td>
<td>0.61</td>
<td>5.67</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Thugutt calculates these analyses in terms of molecules such as $CaO-Al_2O_3-3SiO_2$ and arrives at the conclusion that the first analysis represents largely trisilicates, the second largely hexasilicates ($RO-Al_2O_3-6SiO_2$). Hence the material studied by Fersman, despite its crystallographic similarity, must be different from wellsite, and the new name Courzite (modified version of the locality name Kurzy, Crimea) is proposed.
DISCUSSION: The method of calculation is invalid and the new name is a useless burden on mineralogy. If the same principle were to be applied to similar variations of Si and Al in all the zeolites, some dozens of new names would be required.

M.F.

Rooseveltite


CHEMICAL PROPERTIES: Composition Bi\textsubscript{2}O\textsubscript{3}. Analysis Bi\textsubscript{2}O\textsubscript{3} 67.2, As\textsubscript{2}O\textsubscript{3} 33.2; sum 100.4%. Easily soluble in HCl, more slowly in HNO\textsubscript{3} and H\textsubscript{2}SO\textsubscript{4}. In closed tube, decomposes slightly, turns yellow when hot, but gives original color on cooling. B.B. on charcoal, fuses to bead.

PHYSICAL PROPERTIES: Color gray, luster adamantine. No cleavage, fracture conchoidal; very brittle. H. = 4-4.5, G. = 6.86 (pycnometer). Refraction very high, strongly anisotropic. Crystallographic system not determined. Synthetic Bi\textsubscript{2}O\textsubscript{3}, prepared in 1903 by de Schulten, was reported to be monoclinic, with G. = 7.14.

OCCURRENCE: Found as a crystalline crust on wood tin veinlets in rhyolitic and dacitic lava flows at Santiaguillo, Macha, Potosí, Bolivia.

NAME: For Franklin Delano Roosevelt.

M.F.

Souxite


The name souxite is given to SnO\textsubscript{2} \cdot xH\textsubscript{2}O, supposed to be the form in which tin soluble in HCl occurs in some Bolivian deposits. Analysis of a light yellow tin ore from the Utne veins, Cotamitos mine, Cerro de Potosí, gave: Sn total 25.8, Sn soluble in HCl 17.2, Sb 4.15, As 0.33, WO\textsubscript{3} 0.19, S total 2.10, S as sulfide 1.04, SO\textsubscript{4} 2.65, Fe 8.90, SiO\textsubscript{2} 25.8, Al\textsubscript{2}O\textsubscript{3} 3.40, H\textsubscript{2}O 11.89%. This is recalculated to give the following mineral composition of the ore: SnO\textsubscript{2} as cassiterite 10.95, SnO\textsubscript{2} as SnO\textsubscript{2} \cdot Fe\textsubscript{2}O\textsubscript{3} 21.85, wolframite 0.25, pyrite or marcasite 1.95, Fe\textsubscript{2}O\textsubscript{3} \cdot Fe\textsubscript{2}SiO\textsubscript{4} \cdot xH\textsubscript{2}O 13.60, Fe\textsubscript{2}Sb\textsubscript{2}O\textsubscript{5} \cdot xH\textsubscript{2}O 5.07, Sb\textsubscript{2}O\textsubscript{3} 0.46, Bi\textsubscript{2}O\textsubscript{3} 0.37, Al\textsubscript{2}O\textsubscript{3} 3.40, SiO\textsubscript{2} 25.80, H\textsubscript{2}O 11.89; sum 100.00%.

NAME: For Mr. Luis Soux, a mine owner.

DISCUSSION: The only fact that emerges is that the material contains tin in some form soluble in HCl (and also in H\textsubscript{2}SO\textsubscript{4}). This may be a new mineral, but the evidence is certainly insufficient to justify a name or the assignment of a formula.

M.F.

Dunhamite


The name dunhamite is given to the oxidation product of altaite described by K. C. Dunham (N. Mex. Bur. Mines, Bull. 11, 159-160 (1935)) from the Organ Mts., N. Mex., which is similar to material mentioned by Schneiderhöhn-Ramdohr. The statement is made, "Its mode of formation suggests the possible formula PbO \cdot TeO\textsubscript{3} (?)."

DISCUSSION: Fairbanks makes a plea for the naming of such material. He says, "If the determinative data are substantial, a name is certainly justified in spite of the inability to obtain a quantitative chemical analysis."

It is not clear whether Fairbanks re-examined this material or depended on the literature entirely. He reports the mineral to be anisotropic; Dunham says it is distinctly
NEW MINERAL NAMES

isotropic (a misprint?); Schneiderhöhn-Ramdohr describe the oxidation product of altaite as strongly anisotropic. Fairbanks says the mineral contains Pb and Te; Dunham does not mention making any tests, but suggests that it may be a lead tellurite. Writing a formula under such circumstances has no justification.

If Dunham's judgment was that the data available were insufficient to justify a name, it seems inadvisable for a later worker to reverse the decision of the man who saw the material, unless new work had added further information.

M.F.

Fersmite


CRYSTALLOGraphy: Orthorhombic. The crystals were imperfect, and the axial ratio found, $a:b:c = 0.377:1:0.356$, is approximate. The main forms observed were: $b$ (010), $m$ (110) and $p$ (111); $n$ (130) is rather common; $r$ (131) and $k$ (021) have been observed.

CHEMICAL Properties: Essentially a calcium columbate of the AB$_2$O$_6$ group, (Ca, Ce, Na) (Cb, Ti, Fe, Al)$_2$ (O, OH, F)$_4$. A complete and a partial analysis of material from two pegmatites gave (n.d. = not determined): SiO$_2$ 0.715, n.d.; Cb$_2$O$_6$ 70.12, 71.51; Ta$_2$O$_5$ traces, n.d.; TiO$_2$ 3.21, 2.94; Fe$_2$O$_3$ 1.71, 1.25; Al$_2$O$_3$ 1.28, n.d.; rare earths 4.79, 3.98; CaO 14.49, 15.53; MgO 0.98, 0.97; MnO 0.48, n.d.; Na$_2$O 0.46, n.d.; H$_2$O 0.72, n.d.; F 1.87, n.d.; sum 100.86, n.d.; less O = $F_2$ = 100.07%. X-ray chemical study by I. B. Borovsky showed the rare earth precipitate of $F_2$ (4.79%) to consist of 80% Ce group, 10% Y group, 10% ThO$_2$.

A qualitative x-ray chemical analysis is given.


Optically, distinctly anisotropic, $n$ about 2, birefringence medium; biaxial, probably positive, 2V large.

Occurrence: In two syenitic pegmatites, northern part of Vishnevye Mts., region of Lake Buldym. The rock of the veins is composed of microcline and plagioclase. Fersmite usually forms segregations with irregular outlines, up to 1–1.5 cm.; it is confined to oligoclase. Associated minerals include biotite, pyrochlore, hornblende, apatite, sphene, and quartz; accessories include pyrite, magnetite, muscovite, zircon, and xenotime.

Name: For A. E. Fersman. Not to be confused with fersmanite.

M.F.

Mansfieldite


Bastinite


Tinticite


Montbrayite

DISCREDITED MINERALS

Antamokite


X-ray and microscopic study of material from the type locality, Benguet mine, Antamok, Philippine Islands, indicate that the supposed new mineral was a mixture of petzite and calaverite.

M.F.

Klaprothite (= Wittichenite + Emplectite)


NEW DATA

Sauconite


M.F.