Crystal Data: Monoclinic. **Point Group:** \(2/m\) or \(2\). As crystals, to 0.1 mm, bladed to scaly, elongated \([001]\) or tabular \(\{010\}\), composed of \(\{100\}\), \(\{010\}\), \(\{001\}\), \(\{101\}\), \(\{\overline{0}1\}\), in rosettes and microcrystalline coatings.

**Physical Properties:** **Cleavage:** On \(\{010\}\), perfect. **Hardness:** \(\sim 2\)  
D(meas.) = 1.92(2)  
D(calc.) = 1.931  
May dehydrate to metaschoderite in a dry atmosphere.

**Optical Properties:** Semitransparent. **Color:** Yellowish orange.  
**Optical Class:** Biaxial (-). **Pleochroism:** \(X =\) pale yellow; \(Y =\) deep yellow; \(Z =\) yellow.  
**Orientation:** \(X = b\); \(Y \wedge c = 26(5)^\circ\).  
\(\alpha = 1.560(1)\)  
\(\beta = 1.563(1)\)  
\(\gamma = 1.565(1)\)  
\(2V(\text{meas.}) = 42(3)^\circ\)

**Cell Data:** **Space Group:** \(P \overline{2} \overline{1} m\) or \(P 2_1 \overline{1}\).  
\(a = 16.26(1)\)  
\(b = 30.60(4)\)  
\(c = 12.55(1)\)  
\(\beta = 91.77(8)^\circ\)  
\(Z = 18\)

**X-ray Powder Pattern:** Wilson Springs mine, Arkansas, USA.  
16.3 (100), 15.3 (70), 7.64 (35), 2.893 (35), 5.686 (25), 5.410 (25), 2.843 (25)

**Chemistry:**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P_2O_5)</td>
<td>17.4</td>
<td>21.08</td>
<td>17.40</td>
</tr>
<tr>
<td>(V_2O_5)</td>
<td>24.6</td>
<td>22.37</td>
<td>22.29</td>
</tr>
<tr>
<td>(Al_2O_3)</td>
<td>23.8</td>
<td>25.67</td>
<td>24.99</td>
</tr>
<tr>
<td>(Fe_2O_3)</td>
<td>0.27</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td>(H_2O^+)</td>
<td>7.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H_2O^-)</td>
<td>26.6</td>
<td>[30.41]</td>
<td>35.32</td>
</tr>
<tr>
<td>Total</td>
<td>[100.17]</td>
<td>[100.00]</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Fish Creek Range, Nevada, USA; original total given as 100.27%, corresponds to \(Al_{1.92}(PO_4)_{1.00}(VO_4)_{1.10} \cdot 7.94H_2O\). (2) Wilson Springs mine, Arkansas, USA; by electron microprobe, \(H_2O\) by difference. (3) \(Al_2(PO_4)(VO_4) \cdot 8H_2O\).

**Occurrence:** A rare mineral formed from amorphous phosphatic gels or by crystallization from meteoric solution in fractures in phosphatic chert (Fish Creek Range, Nevada, USA).

**Association:** Vashegyite, wavellite (Fish Creek Range, Nevada, USA); metahewettite, metaschoderite, bokite, minyulite, leucophosphite (Cockalorum Wash, Nevada, USA); hewettite, duttonite, fervanite, metaschoderite, straczekite, apatite, quartz (Wilson Springs mine, Arkansas, USA).

**Distribution:** In the USA, from the Van-Nav-Sand claim group, Fish Creek Range, about 48 km south of Eureka, Eureka Co., and near Cockalorum Wash, Nye Co., Nevada; in the Wilson Springs (Potash Sulphur Springs) mine, Garland Co., Arkansas.

**Name:** To honor William Paul Schoder (1900–1977), research chemist, Union Carbide Corporation, for his work on the metallurgy of vanadium.

**Type Material:** National Museum of Natural History, Washington, D.C., USA, 145791, 144479.