**Lazaridisite**  
\( \text{Cd}_3(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O} \)

**Crystal Data:** Monoclinic.  *Point Group:* 2/m.  As clusters < 0.5 mm of stacked, short prismatic and rounded crystals or crusts.

**Physical Properties:** Cleavage: None.  Tenacity: Brittle.  Fracture: Conchoidal  Hardness = \( \sim 3 \)  
D(meas.) = 3.10(5)  D(calc.) = 3.088  Nonfluorescent.

Luster: Vitreous.  
Optical Class: Biaxial.  \( \alpha = 1.552(2) \)  \( \beta = 1.561(2) \)  \( \gamma = 1.570(2) \)  
2V(meas.) = 90(5)\(^\circ\)  2V(calc.) = 90\(^\circ\)

**Cell Data:**  
Space Group: C2/c.  
\( a = 14.813(3) \)  \( b = 11.902(2) \)  \( c = 9.466(2) \)  
\( \beta = 97.38(1)\(^\circ\) \)  \( Z = 4 \)

**X-Ray Diffraction Pattern:** Esperanza Mine, Kaminiza area, Lavrion Mining District, Greece.  
6.860 (100), 5.965 (84), 3.109 (83), 3.608(82), 3.727 (78), 6.317 (72), 4.512 (58)

**Chemistry:**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CdO</td>
<td>44.45</td>
<td>50.06</td>
</tr>
<tr>
<td>SO(_3)</td>
<td>31.98</td>
<td>31.21</td>
</tr>
<tr>
<td>CuO</td>
<td>3.02</td>
<td></td>
</tr>
<tr>
<td>FeO</td>
<td>1.19</td>
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</tr>
<tr>
<td>MgO</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>H(_2)O</td>
<td>[19.26]</td>
<td>18.73</td>
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<tr>
<td>Total</td>
<td>100.06</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Esperanza Mine, Kaminiza area, Lavrion Mining District, Greece; average electron microprobe analysis, H\(_2\)O calculated; corresponds to 3[(Cd\(_{0.86}\)Cu\(_{0.09}\)Fe\(_{0.04}\)Mg\(_{0.01}\))\(_{2}S_{1.00}O_{3}\)]\(_{2}\)H\(_2\)O.  
(2) \( \text{Cd}_3(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O} \).

**Occurrence:** A secondary mineral from the weathering of primary hawleyite and greenockite.

**Association:** Voudourisite, sphalerite, galena, edwardsite, chalcanthite, gypsum, greenockite.

**Distribution:** At the Esperanza Mine, Kaminiza area, #19 Mine, Ano Sounio area, and at the North Mine, Villia area, Lavrion Mining District, Greece.

**Name:** Honors Stathis *Lazaridis* (1953-2010), a mineral collector from Lavrion, who contributed significantly to the current understanding of the paragenetic sequences within the Lavrion deposits.

**Type Material:** Institute for Mineralogy and Crystallography, University of Vienna, Austria, (HS13.077).