**Crystal Data**: Triclinic. *Point Group*: $\bar{1}$. Crystals, to 10 $\mu$m, are elongated along [001] and flattened on (100). Also as fibers with rectangular cross-section apparently bound by {100} and {010}. Typically in random sprays or aggregates.

**Physical Properties**: *Cleavage*: Distinct on {010} and {100}. *Fracture*: Uneven. *Tenacity*: Brittle. Hardness = n.d. (easily crushed between two glass slides.) D(meas.) = n.d. D(calc.) = 2.934

**Optical Properties**: Transparent. *Color*: Pale to greenish yellow. *Streak*: Pale to greenish yellow. *Luster*: Vitreous.
*Optical Class*: Biaxial (+). $\alpha$ = 1.747(3) $\beta$ = n.d. $\gamma$ = 1.754(3) 2V(meas.) = n.d. 2V(calc.) = n.d.

**Cell Data**: *Space Group*: $P\bar{1}$. $a$ = 5.383(2) $b$ = 10.363(3) $c$ = 6.878(2) $\alpha$ = 96.42(4)° $\beta$ = 109.19(3)° $\gamma$ = 102.30(2)° Z = 1

**X-ray Powder Pattern**: Eduardo pegmatite mine, Conselheiro Pena, Minas Gerais, Brazil.
6.35 (100), 9.85 (95), 2.960 (39), 2.884 (35), 3.158 (32), 3.671 (29), 2.680 (29)

**Chemistry**:

| | (1) | (2) |
|---|---|---|
| FeO | [11.50] | 11.52 |
| $Fe_2O_3$ | [25.56] | 25.61 |
| $P_2O_5$ | 3.54 | |
| $As_2O_5$ | 33.51 | 36.86 |
| $H_2O$ | [26.01] | 26.01 |
| Total | 100.12 | 100.00 |

(1) Eduardo pegmatite mine, Minas Gerais, Brazil; average of 4 electron microprobe analyses supplemented by IR spectroscopy, FeO:$Fe_2O_3$ calculated by analogy to laueite group minerals, $H_2O$ calculated from stoichiometry; corresponds to $Fe^{2+}_{0.98}Fe^{3+}_{1.96}[(AsO_4)_{1.79}(PO_4)_{0.31}](OH)_{1.52} \cdot 8.08H_2O$.
(2) $Fe^{2+}Fe^{3+}_2(AsO_4)_2(OH)_2 \cdot 8H_2O$.

**Mineral Group**: Laueite group.

**Occurrence**: Filling a miarolitic cavity in a zoned granitic pegmatite, likely replacing arsenopyrite.

**Association**: Pharmacosiderite, scorodite, arsenopyrite.

**Distribution**: From the Eduardo pegmatite mine, near Boa Vista creek, Conselheiro Pena municipality, Minas Gerais, Brazil.

**Name**: Honors César Mendonça Ferreira (b. 1942), Professor of Mineralogy and Gemology and founder of the Gemological Laboratory of the Federal University of Ouro Preto, Brazil.

**Type Material**: Museum of Science and Technology, School of Mines, Federal University of Ouro Preto, Minas Gerais, Brazil (SAA-011).

**References**: (1) Scholz, R., N.V. Chukanov, L.A.D. Menezes Filho, D. Atencio, L. Lagoeiro, F.M. Belotti, M.L.S.C. Chaves, A.W. Romano, P.R. Brandão, D.I. Belakovskiy, and I. Pekov (2014) Césarferreiraite, $Fe^{2+}Fe^{3+}_2(AsO_4)_2(OH)_2 \cdot 8H_2O$, from Eduardo mine, Conselheiro Pena, Minas Gerais, Brazil: Second arsenate in the laueite mineral group. Amer. Mineral., 99, 607-611.