

**Crystal Data:** Amorphous to X-rays; nearly so to electrons. *Point Group:* n.d. Massive, as associations of colloidal-sized particles and disseminations.

**Physical Properties:** *Tenacity:* Sectile. Hardness = Soft. VHN = n.d. D(meas.) = n.d. D(calc.) = n.d.

**Optical Properties:** Opaque. *Color:* Gray-black to lead-gray. *Luster:* Submetallic, dull. R: n.d.

**Cell Data:** *Space Group:* n.d. Z = n.d.

**X-ray Powder Pattern:** Himmelsfürst mine, Germany; by selected area electron diffraction. ~6 (diffuse)

**Chemistry:** Established as MoS<sub>2</sub> on very impure materials.

**Polymorphism & Series:** Trimorphous with molybdenite and molybdenite-3R.

**Occurrence:** As veinlets and coatings of probable medium- to low-temperature hydrothermal origin.

**Association:** Ilsemanite, molybdenite, uraninite, coffinite, kerogen, cinnabar, pyrite, fluorite, apatite, stilbite, calcite, quartz.

**Distribution:** In Germany, from the Himmelsfürst mine, Erbsdorf, near Freiberg, Saxony [TL]. In Austria, at Bleiberg, Carinthia. From Hromnice, Czech Republic. In the USA, in the Sun Valley mine, east of Jacob Lake, Coconino Co., Arizona; in Oregon, at the Kiggins mercury mine on the Oak fork of the Clackamas River, about 80 km southeast of Portland, Clackamas Co.; at Ambrosia Lake, McKinley Co., New Mexico; in the Schwalder mine, Ralston Creek district, Jefferson Co., and near Lake Como, Hinsdale Co., Colorado; from near Marysvale, Piute Co., Utah; in the Goldstrike mine, Lynn district, Eureka Co., Nevada; from the Lucky Mc mine, Gas Hills, Fremont Co., Wyoming. In Chile, from Carrizal Alto, Atacama. At the Agostinho deposit, Poços de Caldas Plateau, Minas Gerais, Brazil.

**Name:** In honor of Eduard Friedrich Alexander Jordis (1868–1917), colloidal chemist.

**Type Material:** Mining Academy, Freiberg, Germany.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 331. (2) Staples, L.W. (1951) Ilsemanite and jordisite. *Amer. Mineral.*, 36, 609–614. (3) Clark, A.H. (1971) Molybdenite-2H, molybdenite-3R and jordisite from Carrizal Alto, Atacama, Chile. *Amer. Mineral.*, 56, 1832–1835. (4) Diemann, E. (1976) Zur Struktur des natürlichen amorphen Molybdänsulfids (Jordisit) *Naturwiss.*, 63, 386–386 (in German). (5) Kao, L.-S., D.R. Peacor, R.M. Coveney, Jr., G. Zhao, K.E. Dungey, M.D. Curtis, and J.E. Penner-Hahn (2001) A C/MoS<sub>2</sub> mixed-layer phase (MoSC) occurring in metalliferous black shales from southern China, and new data on jordisite. *Amer. Mineral.*, 86, 852–861.