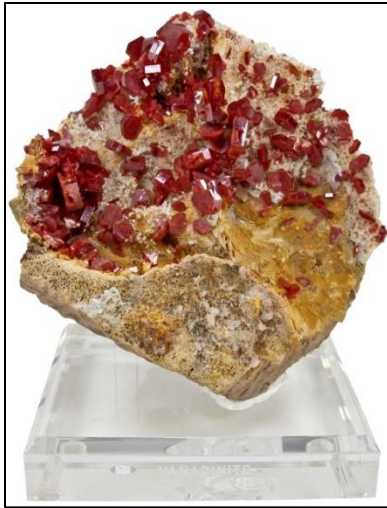


**Vanadinite** [Pb<sub>5</sub>(VO<sub>4</sub>)<sub>3</sub>Cl]

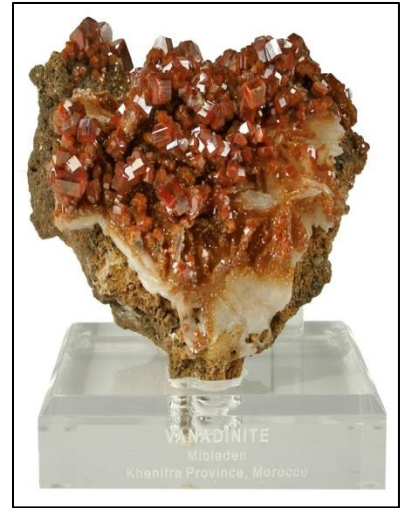
A relatively rare mineral, vanadinite forms hexagonal, prismatic, orange-red crystals. The English chemist Sir Henry Roscoe first isolated vanadium from vanadinite in 1867, and, since then, vanadium has been used to alloy and strengthen steel. Although vanadinite is a relatively soft mineral with a Mohs hardness of 3, vanadium steel is particularly strong and hard because it forms carbides with carbon atoms already present in the steel. P18



**Vanadinite** P18



**Vanadinite** B37



**Vanadinite** OR6