Crystal Data: Hexagonal (synthetic). Point Group: 3m. In narrow laths, to 1 cm long, exsolved || {111}, and in blebs along grain boundaries of kamacite in meteorites.


Cell Data: Space Group: R3c (synthetic). a = 6.640(2) c = 37.982(7) Z = 12

X-ray Powder Pattern: Synthetic. 1.977 (100), 1.924 (100), 2.150 (64), 2.103 (64), 1.778 (41), 2.613 (33), 2.585 (33)

Chemistry:

\[
\begin{array}{ccc}
\text{Fe} & 4.0 & 9.4 \\
\text{Co} & 0.04 & 0.05 \\
\text{Ni} & 80.5 & 75.6 \\
\text{Cu} & 0.29 & 0.20 \\
\text{Si} & 12.0 & 11.8 \\
\text{P} & 4.1 & 3.4 \\
\hline
\text{Total} & 100.93 & 100.45
\end{array}
\]

(1) Horse Creek meteorite; by electron microprobe, corresponds to (Ni\textsubscript{7.35}Fe\textsubscript{0.39})\Sigma=7.74 (Si\textsubscript{2.28}P\textsubscript{0.72})\Sigma=3.00. (2) Mt. Egerton meteorite; by electron microprobe, corresponds to (Ni\textsubscript{7.29}Fe\textsubscript{1.00})\Sigma=8.29 (Si\textsubscript{2.37}P\textsubscript{0.63})\Sigma=3.00.

Occurrence: In anomalously silicon-rich mesosiderite and enstatite chondrite meteorites, probably formed by exsolution from kamacite.

Association: Kamacite, troilite, schreibersite (Horse Creek, Kota-Kota meteorites); kamacite, enstatite (South Oman meteorite).

Distribution: In the Horse Creek and Mount Egerton iron meteorites, and the Kota-Kota, South Oman, St. Marks, Norton County, Indarch, and other enstatite chondrite meteorites.

Name: For Stuart Hoffman Perry (1874–1957), American newspaperman and leading private collector of meteorites, who originally described the Horse Creek meteorite.

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