Crystal Data: Hexagonal. Point Group: \( \text{\overline{3}} \) 2/m. As crystals, to 5 mm; massive.

Physical Properties: Cleavage: Good on \{001\}. Hardness = n.d. VHN = 110
D(meas.) = 7.19 D(calc.) = 7.22

R\(_1\)-R\(_2\): (400) 49.4–53.0, (420) 50.3–52.0, (440) 51.5–51.6, (460) 52.9–51.6, (480) 54.4–52.2, (500) 55.9–52.9, (520) 57.4–54.0, (540) 58.9–55.2, (560) 60.2–56.5, (580) 61.4–57.8, (600) 62.5–59.1, (620) 63.3–60.2, (640) 64.1–61.1, (660) 64.6–61.8, (680) 65.2–62.4, (700) 65.7–62.9

Cell Data: Space Group: \( \text{\overline{3}} \) \( \text{m1} \). \( a = 3.716(5) \) \( c = 5.126(5) \) \( Z = 1 \)

X-ray Powder Pattern: Kuusamo, Finland.
2.729 (100), 2.007 (45), 1.510 (35), 2.567 (25), 1.860 (25), 1.535 (20), 5.13 (15)

Chemistry:
\[
\begin{array}{ccc}
\text{Ni} & 22.42 & 23.6 & 22.13 \\
\text{Co} & 0.40 & 0.1 & \\
\text{Fe} & 0.2 & & \\
\text{Cu} & 0.07 & 0.1 & \\
\text{Te} & 47.46 & 44.0 & 48.10 \\
\text{Se} & 30.22 & 31.3 & 29.77 \\
\text{S} & & 0.4 & \\
\hline
\text{Total} & 100.57 & 99.7 & 100.00
\end{array}
\]

(1) Kuusamo, Finland; corresponding to \((\text{Ni}_{1.01} \text{Co}_{0.02})_{\Sigma=1.03} \text{Te}_{0.99} \text{Se}_{1.01}\)· (2) Do.; by electron microprobe, corresponding to \((\text{Ni}_{1.07} \text{Fe}_{0.01} \text{Co}_{0.01})_{\Sigma=1.09} \text{Te}_{0.92} \text{Se}_{1.05} \text{S}_{0.03}\)· (3) NiTeSe.

Mineral Group: Melonite group.

Occurrence: In narrow carbonate-bearing fissure veinlets in albite.

Association: Clausthalite, hematite, selenian polydymite, selenian linnaeite, pyrite.

Distribution: From Kuusamo, northeastern Finland [TL].

Name: For the Kitka River, Finland, in the valley of which the mineral was found.
