**Going Inside Fettelite, a Hg-Sulfosalt Mineral**

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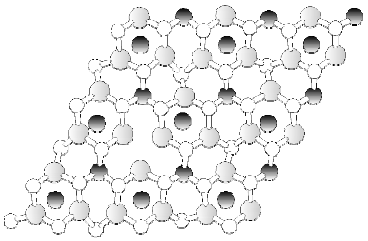
Fettelita's name honours Mr. M Fettel who found it. The empirical formula from microprobe analysis (based on 24 Ag atoms) is $Ag_{24}Hg\ Cu_{0.04}Fe_{0.03}Tl_{0.02}Pb_{0.01}Sb_{0.07}As_{5.01}S_{20.07}$, ideally $Ag_{24}HgAs_5S_{20}$, and the crystal system trigonal [1].

Despite Fettelite sensitivity to X-Ray exposition, we have tried to elucidate its structure. As in Laffittite [2], metal and sulphur atoms form hexagonal rings linked by sharing their edges giving rise to parallel sheets when view along the c axis (see figure). The sheets join themselves composing a three dimensional network. Coordination around the metal ion is typical for sulfosalt structures.



[1] Wang N., Paniagua A., *N. Jb. Miner. Mh.*, 1996, **H. 7**, 313-320. [2] Nakai I., Appleman D. E., *American Mineralogist*, 1983, **68**, 235-244.

**Keywords: sulfosalts, mineral crystal structures, mineralogy and crystallography using x-ray diffraction**