

Multianalytical Study of Historical Luminescent Lithopone for the Detection of Impurities and Metal Trace Ions

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Scanning Electron Microscopy images of the samples studied as part of this work are given. The images demonstrate the fine particles size associated with the coprecipitates of ZnS and BaSO₄ which are characteristic of historical and modern lithopone.

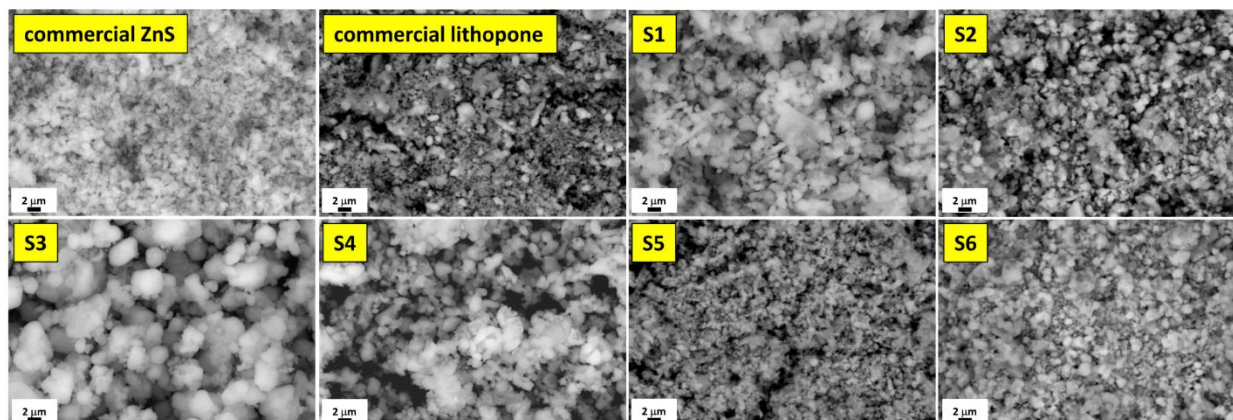


Figure S-1 Scanning Electron Microscope images recorded in backscattering mode of the eight samples analyzed as part of this work (S1-S6 are the historical samples, see Table 1 for a description of their origin). Images highlight the presence of a uniform distribution of particles of ZnS and BaSO₄, demonstrating that coprecipitates have been formed. Differences in particle size are ascribed to either grinding grade or thermal treatments during preparation.

Morphologies and the microstructure of samples were imaged with a scanning electron microscope (SEM, Zeiss EVO 50 EP). Powders were deposited on a carbon tape suitable for SEM analyses, and sputter-coated with a 10 nm layer of gold.