

Fluorescent calcite of southwest New Mexico: Ultraviolet colors to rival Franklin New Jersey

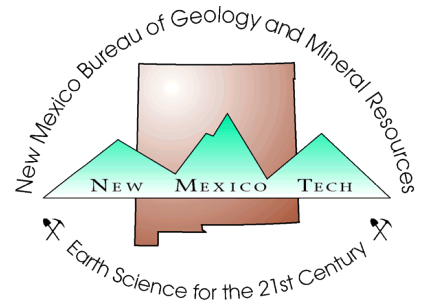
Bruce E. Cox

40th Annual New Mexico Mineral Symposium
November 9-10, 2019, Socorro, NM
pp.25

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The annual [New Mexico Mineral Symposium](#) provides a forum for both professionals and amateurs interested in mineralogy. The meeting allows all to share their cumulative knowledge of mineral occurrences and provides stimulus for mineralogical studies and new mineral discoveries. In addition, the informal atmosphere encourages intimate discussions among all interested in mineralogy and associated fields.

The symposium is organized each year by the [Mineral Museum](#) at the [New Mexico Bureau of Geology & Mineral Resources](#).



Abstracts from all prior symposiums are also available: <https://geoinfo.nmt.edu/museum/minsymp/abstracts>

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Fluorescent Calcite Of Southwest New Mexico: Ultraviolet Colors to Rival Franklin New Jersey

—Bruce E. Cox, Geologist, Missoula, MT and T or C, NM

Abstract

The southwest quadrant of New Mexico hosts many localities yielding calcium carbonate minerals that fluoresce under short wave and long wave ultraviolet light. These localities correlate geographically with the mapped occurrence of manganese (Mn) deposits. Specimen fluorescent colors range from deep red, orange and pink (Mn activator?) to white, yellow and green (uranium and organic activators?). Samples were selected for a range of fluorescent color and intensity and submitted to a commercial lab for ICP analyses to determine potential UV activator elements. A comparison with other US fluorescent localities is presented.