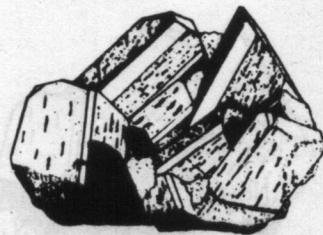


FM friends of mineralogy colorado chapter



November Program

"Minerals of Breccia Pipe Ore Deposits in the Grand Canyon area, Arizona".

Dr. Karen Wenrich, U.S. Geological Survey

7:30 pm, Thursday, Nov. 10

West Auditorium, Denver Museum of Natural History

Karen, who is also a Colorado FM member, has spent a number of years as the chief of a project to study mines and potential ore deposits in northern Arizona. She is widely recognized as an expert on the economic geology of this area, and has been the recipient of several "best paper" awards at geological meetings for the quality of her presentations. The breccia pipe deposits typically have formed within chimneys of broken rock that originate through collapse into cave systems developed in the Redwall Limestone. The mines she has studied, which include the Grandview, Orphan, Ridenour, and many others, contain ores of uranium, copper, vanadium, silver, and other metals. Minerals include uraninite, a diverse group of sulfides and arsenides including pyrite, siegenite, bravoite, millerite, gersdorffite, rammelsbergite, niccolite, arsenopyrite, marcasite, chalcopyrite, enargite, galena, sphalerite, bornite, chalcocite, djurleite, digenite, and covellite, and secondary minerals such as brochantite, azurite, malachite, and aurichalcite (plus many other uranium minerals, arsenates, vanadates, and molybdates). Karen's work has taken her to seldom-visited areas around all parts of the Grand Canyon region, including trips down the Colorado River and out on Indian reservations bordering the canyon. Her talk should include a spectacular array of photographs of the Grand Canyon country, as well as an informed look at its minerals.

Denver Show FM's small contributions to the very excellent 1988 Denver Gem and Mineral Show included running the "free mineral identification" table and an exhibit of amazonite and associated minerals. The "Amazonite and Its Friends" (Minerals of the Pikes Peak Granite) exhibit, prepared by Barbara Muntyan, included specimens of amazonite, smoky quartz, and other associates including albite, microcline, goethite, fluorite, and zinnwaldite. The mineral identification table was organized by Pete Modreski; other FM members who helped staff it included Don Belsher, Craig Brunstein, Jim Hurlbut, Barbara Muntyan, Ed Pedersen, Bill Smith, and Bill Warren. The usual interesting array of minerals, rocks, and gemstones was brought in for examination. One of the more unusual and most debated was a slightly weathered lump of metal, very much resembling an iron meteorite though completely nonmagnetic (all iron meteorites are at least moderately magnetic--we checked); upon more complete examination after the show, it proved to be a piece of ferromanganese metal alloy. On Friday, the identification table was kept busy by swarms of school children who were quite fascinated in the minerals illustrating hardness, cleavage, and streak, and the identification tools (especially the balance and microscope).

New Mexico Mineral Symposium For those attuned to the minerals from our neighbor to the south, the N.M. Mineral Symposium will be held the weekend of Nov. 12-13, at New Mexico Tech in Socorro. Registration is \$15; there is a banquet Saturday evening, with featured speaker Peter Bancroft, "Gem and Mineral Treasures, II", mineral sales and tailgating at the El Camino motel Friday evening, and a silent auction Sunday afternoon. The twelve talks scheduled for the symposium include five by Colorado FM members--Arnold Hampson (microminerals of the San Juans), Carol Hill (mineralogy of Carlsbad Caverns), Tom Rosemeyer (the Sunnyside mine), Pete Modreski (mineralogy of caves in Colo. and N.M.), and Gene Foord (mineralogy of the Black Range). For more information contact the New Mexico Bureau of Mines and Mineral Resources, (505) 835-5302, or talk to Pete or Gene.

Pegmatite Symposium Reprint? As of the beginning of October, our stock of the "Colorado Pegmatites" volume from the 1986 symposium is completely sold out (250 copies were originally printed for the symposium, and another 100 were printed in Jan., 1987). We currently have about 8 unfilled orders, mainly from university libraries, for copies of the book, and several other people have asked for copies. At our November board meeting, the FM directors will consider having additional copies printed; the cost for xeroxed copies, staple-bound with covers, will be between approximately \$6-\$8 depending on the number to be printed; we have been selling the volume for \$15.

Recap on Precious Metals Symposium Attendance at our Symposium on the Mineralogy of Precious Metal Deposits was approximately 130. We have heard nothing but compliments from all those who took part in it. The talks were excellent, and the field trips were well attended and most enjoyable. The symposium itself was approximately a break-even, financially; however, the sale of the remaining copies of the symposium volume will provide a net source of income to the chapter. 300 copies of the 190-page volume were printed; about 135 were distributed at the symposium, and 60 have been sold subsequently (several copies were distributed without charge to local libraries). At present there are about 105 copies left, and these are available for \$15, postpaid.