

NOTICES

MINERALOGICAL SOCIETY OF AMERICA MEETING, BOZEMAN,  
MONTANA—JULY 26-31, 1964. JOINT MEETING WITH THE  
AMERICAN CRYSTALLOGRAPHIC ASSOCIATION

Monday Morning—July 27, 1964

9:00 A.M. Welcoming Remarks

Dr. Leonard G. Berry, President of MSA

Dr. Howard T. Evans, Jr., President of ACA

9:15 A.M. A unique occurrence of uranium minerals at Marshall Pass, Saguache Co., Colorado.

Eugene B. Gross, Division of Mines and Geology, San Francisco, Calif.

A new, Baringer Hill-type, rare-earth pegmatite from the Central Mineral Region, Texas.

A. J. Ehlmann, J. L. Walper, Texas Christian University, Fort Worth, Texas, and J. Williams, The Texas Architectural Aggregate Company, San Saba, Texas.

The origin of some native lead-pyrochroite parageneses.

Kurt Bostrom, Scripps Institute of Oceanography, La Jolla, Calif.

The mineralogy of the Butte District, Montana.

John Guilbert and Lester G. Zeihen, The Anaconda Company, Butte, Mont.

Xanthophyllite from the Tobacco Root Mountains, Montana.

R. G. Stevenson and Carl W. Beck, Indiana University, Bloomington, Ind.

Regressions of optical properties and density on the composition of orthopyroxene.

Horace Winchell and Bernard E. Leake, Yale University, New Haven, Conn.

The origin of tinalconite at Searles Lake, California.

Carl J. Bowser, The University of Wisconsin, Madison, Wis.

<sup>1</sup>Deerite, howieite and zussmanite, three new minerals from the Franciscan of the Laytonville district, Mendocino Co., California.

Stuart O. Agrell, University of Cambridge, Cambridge, England.

Seven new barium minerals from eastern Fresno County, California.

John T. Alfors, Melvin C. Stinson, Robert A. Matthews and Adolf Pabst, California Division of Mines and Geology, San Francisco, Calif.

Fluorapatite and sphene from Crystal Lode Pegmatite, Eagle, Colo.

Edward J. Young and John W. Adams, U. S. Geological Survey, Denver, Colorado.

Mineralogy of the Kalkar Quarry, Santa Cruz, California.

Charles W. Chesterman and Eugene B. Gross, California Division of Mines and Geology, San Francisco, Calif.

<sup>1</sup> Invited paper—given at May 27, 1964 meeting of the Mineralogical Society of Great Britain.

**Monday Afternoon—July 27, 1964**

2:00 P.M. Geology of the Crazy Mountains, Montana—Alkaline dikes, sills, and laccoliths; northern part.

Frederick E. Simms, Jr., University of Cincinnati, Cincinnati, Ohio.

Geology of the Crazy Mountains, Montana—Clay minerals of the upper Livingston formation; northern part.

John D. Sims, Univ. of Cincinnati, Cincinnati, Ohio.

Geology of the Crazy Mountains, Montana—Big Timber Stock.

John Tappe, Univ. of Cincinnati, Cincinnati, Ohio.

Zircons of the Boulder Batholith near Helena, Montana.

Leonard H. Larsen, Univ. of Cincinnati, Cincinnati, Ohio.

Pyroxene relations in experimentally crystallized 1887 Mauna Loa basalt.

Myron G. Best, University of Ottawa, Ottawa, Canada.

An occurrence of abundant chialtolite, Sawtooth Mountains, Alaska.

Robert L. Foster and Clayton H. Johnson, University of Missouri, Columbia, Missouri.

Mineral orientation in slates and argillites—a comparison.

Ronald B. Parker, The University of Wyoming, Laramie, Wyoming.

Skarns in the Precambrian of Denver Mountain Parks, Colorado.

Margaret Fuller Boos, Geologic Consultants, Denver, Colorado.

Zeolite zones in volcanic rocks, Nevada Test Site.

D. L. Hoover and A. O. Shepard, U. S. Geological Survey, Denver, Colo.

Groundwater leaching of quickly cooled volcanic rocks.

Donald C. Noble, U. S. Geological Survey, Denver, Colorado.

**Tuesday—July 28, 1964**

Field Trip—Butte Hill.

**Wednesday—July 29, 1964**

A.M. Field Trip—Bozeman Area Geology

P.M. Field Trip—Asbestos Mine in Gallatin Canyon

Evening Picnic

**Thursday—July 30, 1964**

9:00 A.M. The crystal structure of the decavanadate  $K_2Zn_2V_{10}O_{28} \cdot 16H_2O$ , chemical analog of humerite and pascoite.

Howard T. Evans, U. S. Geological Survey, Washington, D. C.

Crystal structure of the sodium-calcium borate mineral, ulexite.

Joan R. Clark and Daniel E. Appleman, U. S. Geological Survey, Washington, D.C.

Structure and twinning of synthetic lithium-fluor micas.

Hiroshi Takeda and J. D. H. Donnay, The Johns Hopkins University, Baltimore, Maryland.

The crystal structure of turquoise,  $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$ .

Hilda Cid-Dresdner, Massachusetts Institute of Technology, Cambridge, Mass.

Layer structures in secondary copper minerals.

Abraham Rosenzweig, The University of New Mexico, Albuquerque, New Mexico.

Observations on the crystal chemistry of fossil bone and the carbonate apatites.

J. Thomas Nash and Gerald P. Brophy, Amherst College, Amherst, Massachusetts.

Polytypism in biotites.

Malcolm Ross and David R. Wones, U. S. Geological Survey, Washington, D. C.

The crystal structure of alunite.

Rong Wang, W. F. Bradley, and H. Steinfink, University of Texas, Austin, Texas.

The crystal structure of a marialite scapolite.

James J. Papike and Tibor Zoltai, University of Minnesota, Minneapolis, Minnesota.

Temperature parameters of silicate crystal structures.

Charles W. Burnham, Geophysical Laboratory, Washington, D. C.

The shape of misoriented reciprocal lattice planes as recorded by precession photography.

M. J. Buerger and W. A. Dollase, Massachusetts Institute of Technology, Cambridge, Mass.

A slide rule for choosing precession camera settings.

Seymour F. Kaplan, 603 Charles Place N. W., Albuquerque, New Mexico.

2:00 P.M. Quantitative prediction of mineral stability.

M. Slaughter, University of Missouri, Columbia, Mo.

The relationship between the mean sound velocity and the mean index of refraction for oxide minerals.

Orson L. Anderson, Lamont Geological Observatory, Palisades, N. Y.

A. N. Winchell's observations on plagioclase, 1900; an historical note.

A. Pabst, University of California, Berkeley, Calif.

New specific refractive energies ( $n - 1/d = K$ ) for  $\text{CuO}$  and  $\text{Sc}_2\text{O}_3$ .

Mary E. Mrose, U. S. Geological Survey, Washington, D. C.

Diamond disc preparation of polished thin sections for the electron microprobe.

Donald E. Cadwell and Paul Weiblen, Minnesota Mining and Manufacturing Company, St. Paul, Minnesota.

The origin of the term "nuée ardente."

Marjorie Hooker, U. S. Geological Survey, Washington, D. C.

Solubility and growth of sphalerite under hydrothermal conditions.  
R. A. Laudise, E. D. Kolb and J. P. De Neufville, Bell Telephone Laboratories,  
Murray Hill, New Jersey.

<sup>1</sup>Zeolite Type X equilibria with trivalent cerium and yttrium cations.  
Lloyd L. Ames, Jr., General Electric Company, Richland, Washington.

Evening Banquet

**Friday—July 31, 1964**

Field Trip—Yellowstone National Park

**Saturday—August 1, 1964**

Field Trip—Geology East of Butte

<sup>1</sup> By title.