GUADARRAMITE DISCREDITED[1]

George Switzer, *U. S. National Museum, Washington, D.C.*

A supposedly new radioactive mineral from Monte de Lagasca (in the Sierra de Guadarrama), near San Rafael, Segovia, Spain, was first mentioned by Munoz del Castillo (1906). Later that same year he described it more fully and named it guadarramite (Munoz del Castillo, 1906*A*).

Guadarramite was described as resembling ilmenite, but possessing strong radioactivity. A chemical analysis gave TiO_2 50.94%, FeO 38.49, MnO 3.71, SiO_2 5.80, undet. 1.06; sum 100.00. It was found as tabular black crystals on feldspar and mica, in the soil above a pegmatite outcrop.

Guadarramite is listed in Spencer's 6th list of new mineral names (*Min. Mag.*, **16**, 361) as a radioactive variety of ilmenite, and in the same way in Dana's *System of Mineralogy*, 6th edition and 7th edition. The original material has never been reexamined.

The U. S. National Museum recently received a specimen of guadarramite (U.S.N.M. Cat. No. 106159) from the type locality, from Sr. José Melgar, of Madrid, Spain. This specimen, consisting of tabular black crystals on a weathered feldspar matrix, is radioactive as a whole, as shown by a geiger counter. However, a purified sample of the guadarramite is not radioactive. A spectrographic analysis of the purified material, made by Helen W. Worthing of the U. S. Geological Survey, gave Fe, Ti$>$10%; Mn 1.0–10; Si, Al 0.1–1.0; Mg, Nb, Pb 0.01–0.1; Sr, Ca, Ni, Ba, V 0.001–0.01; Cr, Y, Yb, Ag, Cu 0.001–0.0001. The *x*-ray powder pattern of guadarramite is identical with that of ilmenite from Miask, Ural Mts., U. S. S. R.

The feldspar matrix contains small reddish-brown crystals of monazite. A polished section containing both guadarramite and matrix was placed in contact with the emulsion of a nuclear-track plate (Ilford L-2) and exposed for five days. The radioactivity as shown by alpha particle tracks on the developed and fixed plate is associated with the nonmetallic phase (monazite).[2]

In summary, guadarramite is not radioactive, the supposed radioactivity being contributed by the associated monazite. The name should, therefore, be dropped.

References

Munoz del Castillo, José (1906), Nuevos Minerales radioactivos de San Rafael de El Espinar (provincia de Segovia): *Bol. real Soc. Espanola Hist. Natur.*, **4**, 163–166.

——— (1906*A*) La Guadarramita: propuesta de una nueva individualidad mineralogica radioactiva: *Bol. real. Soc. Espanola Hist. Natur.*, **4**, 479–481.

---

[1] Published by permission of the Secretary, Smithsonian Institution, Washington, D. C.

[2] Personal communication from T. W. Stern, U. S. Geological Survey.

REVISED GLOSSARY OF URANIUM- AND THORIUM-BEARING MINERALS ISSUED

A publication, entitled "A glossary of uranium- and thorium-bearing minerals," by Judith Weiss Frondell and Michael Fleischer, is issued as Geological Survey Circular 194. Copies may be obtained without charge from the Director, Geological Survey, Washington 25, D. C.

The glossary, intended as a guide to the nomenclature of these minerals, was prepared as part of the work on radioactive minerals undertaken by the Geological Survey on behalf of the United States Atomic Energy Commission. It contains a list of minerals and their chemical formulas, together with information as to series relationships collected from laboratory work and scientific literature.

This second edition contains 350 entries comprising 182 species. The minerals listed in the glossary are divided into four groups, as follows: *A*, minerals containing uranium and thorium as major constituents; *B*, minerals containing minor amounts of uranium and thorium; *C*, minerals which, if investigated by modern analytical methods, might show uranium or thorium content; and *D*, minerals that are nonuranium- or nonthorium-bearing, but that have been reported to contain impurities or intergrowths of uranium, thorium or rare-earth minerals.

AGI REPORT NO. 6 TEMPORARILY OUT OF PRINT

Report No. 6, *Departments of Geological Science in Educational Institutions of the U. S. and Canada*, Shepard W. Lowman, Editor, is now being revised for re-issue as soon as possible this fall. Definite availability date cannot be announced at this time, but orders received from now on are being held for earliest possible delivery.

The Societa Mineralogica Italiana held its 9th National Congress of Mineralogy in Florence from Sept. 29 to Oct. 3, 1952. The Societa welcomes subscriptions from American mineralogists; the membership fee is $1.75 a year and members receive each year the *Rendiconti Soc. Ital. Mineral.* which includes abstracts and papers given at the annual meeting. Those interested should write to Prof. G. Carobbi, Instituto di Mineralogia, Univ. Firenze, Piazza S. Marco 4, Florence, Italy.

Professor Duncan McConnell, a member of the department of mineralogy staff at Ohio State University since October, 1950, has been appointed chairman of the department. He succeeds Professor William J. McCaughey, who retired this summer after 40 years of service on the faculty, and has now been named professor emeritus.

The vacancy on the staff of the department left by the retirement of Professor McCaughey will be filled by Dr. W. R. Foster of Detroit, a member of the research laboratory staff of the Champion Spark Plug Co. of that city.

The Austin Flint Rogers Research Fellowship in Mineralogy has been established at Stanford University. This fellowship is open to graduate students who intend to undertake research in the field of mineralogy and preference may be given to those who have had a year of graduate work. The emolument will be $2000 and teaching duties will not be required of the Fellow.

Further inquiries should be made to Professor C. Osborne Hutton, School of Mineral Sciences, Stanford University, Stanford, California.

Dr. Clarence S. Ross of the Geochemistry and Petrology Branch of the U. S. Geological Survey was one of the recipients to receive the "Distinguished Service Honor Award" at the ninth Honor Awards Convocation of the United States Department of the Interior at Washington, D. C., on Tuesday, September 23, 1952.

ERRATA

RESETTING A TRICLINIC UNIT-CELL IN THE CONVENTIONAL ORIENTATION:

J. D. H. DONNAY, *The Johns Hopkins University, Baltimore, Md.*

Corrections

While re-orienting a large number of triclinic substances for a forthcoming determinative table based on unit-cell dimensions, I had occasion to use the transformation matrices given in my paper of 1943 (*Am. Mineral.*, **28**, 507–511). This is how, to my dismay, I discovered the first mistake corrected below. The second mistake, which originated in a misprint in the literature, was kindly pointed out to me by Dr. H. T. Evans, Jr.

Page 510, Table 1: The transformation matrices printed in pigeon holes *E*, *F*, *G*, *H* should appear in pigeon holes *K*, *L*, *M*, *N*, respectively, and *vice versa*.

Page 511, under (*S*): Delete the second example (copper sulfate pentahydrate) and footnote 4. The value of *a*, 5.12, taken from the literature, should have read 6.12; transformation *C* is applicable.