

**HANDBOOK OF  
IRON METEORITES**

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**VOLUME 2**

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**VOLUME 1**  
**IRON METEORITES IN GENERAL**

*Tables, Appendices, References*

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**VOLUME 2**  
**IRON METEORITES**

*Abakan – Mejillones*

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**VOLUME 3**  
**IRON METEORITES**

*Merceditas – Zerhamra*

*Supplement*

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# HANDBOOK OF IRON METEORITES

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*Their History, Distribution, Composition  
and Structure*

by

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VOLUME 2

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IRON METEORITES

*Abakan–Mejillones*

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# A Guide to the Use of This Handbook

The Descriptive Part which follows contains a designation of all iron meteorites known to the author as of January 1, 1973. They are listed alphabetically according to the name adopted by Hey (1966) or other authorities. Numerous synonyms and cross references are given to help the reader find the meteorite sought. Additional names and synonyms may be found in Appendices 2, 3 and 4. A *Supplement*, giving information on meteorites examined after January 1, 1973, will be found at the end of Volume 3.

Each full description is headed by a summary statement that may serve as a *fingerprint* for the particular meteorite. In the paragraph *History*, the available information as to date and locality of find is critically discussed, and reasons are given for the elimination of a number of meteorites, hitherto believed to be independent falls, see Appendix 3. In some cases 'lost masses' could be relocated in various collections, such as Duel Hill (1854), Duel Hill (1873) and many Mexican meteorites; or entirely new meteorites could be established, such as Augusta County, Sandtown and Zerhamra. See page 37. The more important of the earlier studies are very briefly discussed. For papers printed before 1900 the reader should, in general, refer to the references and discussions found in Wülfing (1897), Cohen (1905) and Farrington (1915).

Following the history, there is a list of *Collections* known to the author possessing material of the particular meteorite. This information is based upon recent catalogs and numerous personal visits to the various collections. For a list of the collections, their relative sizes and their published catalogs the reader is referred to Appendix 8.

The *Chemical Analyses* contain only the best available results. Such analyses which a critical comparison with the microstructure showed to be dubious have been omitted, usually without mention or discussion. It may be criticized that the omitted data are not quoted and discussed first, but it was felt that this would unnecessarily expand an already voluminous paper. The analysis quoted in the "fingerprint" heading is a weighted average of the selected analyses, often with added information on P, S and C from the author's planimetry of large sections.

The *Description* is based upon the examination of the main masses if still extant, and of major and minor specimens in numerous collections. Macro- and microphotographs have been included to support the text. Unfortunately not all figures are of the quality the author would have preferred. It was often necessary to photograph a corroded museum specimen for documentation of the macrostructure, and it was also often necessary to work with samples too large for a perfect polish to be obtained. Microhardness determinations (usually 100 g or 50 g load on a Vickers Pyramid; the number is designated HV) were, however, without exception taken on small sections of high quality.

The last entry in each description concerns the samples in the Smithsonian Collection of the U.S. National Museum in Washington. The weights, sizes and museum numbers are given and the shape is indicated. 'Main mass' is a meteorite from which less than 1/4 has been cut. 'Endpiece' is a sample with one cut and ground surface, and with much of the exterior surface preserved. 'Fragment' is a sample broken from the main mass, either by explosive impact, by corrosion or by artificial handling. 'Slice' or 'Full Slice' is a sample through the mass with parallel surfaces and bounded by exterior surfaces all around. 'Part slice' is a sample with parallel surfaces and only partially bounded by exterior surfaces.

Weights are in metric units of grams, kilograms and tons. Since however, many original reports date from a time when other units were in general use, the original weights are usually quoted directly in the old systems and then recalculated to metric units. For the recalculation of old American, English, Russian, Spanish, Portuguese, German, Austrian, French and Danish units resort was taken to standard reference works. When — as often happened — it was not directly stated in the original paper what unit was applied, it was estimated from the context and from standard reference works of contemporary date. It is to be hoped that few inconsistencies have crept in during this translation to modern units.

**Hjertets reenhed er at ville eet.**

– Søren Kierkegaard,  
*En literair Anmeldelse*,  
Copenhagen, 1846