Crystallographers

This section is intended to be a series of short paragraphs dealing with the activities of crystallographers, such as their changes of position, promotions, assumption of significant new duties, honours, etc. Items for inclusion, subject to the approval of the Editorial Board, should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).

Dr K.-Th. Wilke, of the Zentralinstitut für Optik und Spekroskopie, Akademie der Wissenschaften der D.D.R., died on 17 October 1974 after a long period of illness. In addition to scientific papers, he prepared two major compilations on crystal growth, Methoden der Kristallzüchtung and Kristallzüchtung, which were published in 1963 and 1973 respectively. His other activities included membership of the Union's Commission on Crystal Growth.

Professor J. B. Cohen has been appointed a Co-Editor of Journal of Applied Crystallography. His address is given inside the front cover of this issue.

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).

Acta Crystallographica

Ten-year index 1958-1967

A cumulative index for Volumes 11–23 (1958–1967) of Acta Crystallographica has just been published, and is available directly from Munksgaard International Publishers Ltd, 35 Nørre Søgade, DK-1370 Copenhagen K, Denmark, or from Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pennsylvania 15238, U.S.A. The price is 120 Danish kroner (currently about U.S. $20). Copies for the personal use of scientists, however, may be obtained at the special price of 60 Danish kroner. These prices include postage.

Not only does this cumulative index save the trouble of looking at the Indexes to thirteen separate Volumes (there were six Volumes in the years 1965–1967), but it should also avoid the irritation liable to be caused by the changes in arrangement over the years. As in all earlier indexes, each of the Volumes 11–13 combined author and subject entries in a single alphabetical list. In all subsequent Volumes there are separate subject and author indexes, but with Volume 14 the author entries ceased to give the titles of the papers. These defects have been remedied in the cumulative index, which adopts the arrangement introduced with Volumes A24 and B24. That is to say there are separate subject and author indexes but the author index gives the full title of each paper once, each main entry being cross referenced under the names of all authors other than the first.

The complete index contains 146 pages and, like that for Volumes 1–10, is bound in a similar manner to the relevant issues of the journal.

Book Review

Works intended for notice in this column should be sent direct to the Book-Review Editor (M. M. Woolfson, Physics Department, University of York, Heslington, York Y01 5DD, England). As far as practicable books will be reviewed in a country different from that of publication.


The present book is a new, considerably revised and enlarged edition of the one published in 1954 entitled Die Mineralfunde der Schweizer Alpen. The new edition also contains mineral and locality descriptions from all other parts of Switzerland (Southern Valais, the Mont-Blanc Massif and the Jura Mountains), as indicated by the new title. The 1973 edition is new in many respects: the photographs are improved and some are in colour; the new descriptions and listings are made on the basis of questionnaires sent to museums in many parts of the world and to professional 'mineral hunters' (Strahler); the drawings and tables are therefore considerably improved and enlarged. The new edition is about 25 or 30% larger than the old. The mineralogist-crystallographer will find a wealth of morphological, paragenetic and location data; the economic geologist will find many interesting genetic data, especially on the products of lateral secretion. This book, like its two predecessors, is by far the most complete encyclopaedia of the mineral occurrences of a single area or mountain range.

Since the war, and especially since about 1960, mineral collecting has become very fashionable. Apart from a number of negative effects of this development, the number of new localities known, or of additional species found in known places, has grown by a factor of ten to twenty per year. The collection of data could not be handled by one person and, fortunately, the Geotechnische Kommission was able to obtain the help of four specialists (H. A. Stalder, F. de Quervain, E. Niggli and S. Graeser). Entirely new is the introduction on the origin of alpine fissure minerals, chemical, mineralogical and physical conditions, trace elements, isotopic values and fluid inclusion thermometry (18 pages altogether). The list of mineral species and meteorites found for the first time in Switzerland (p. 391) is also new. The bibliography has been changed considerably without being enlarged; many old titles have been omitted and new ones entered. The alphabetical list of all minerals (pp. 371–390) is also very much changed and its space has been reduced by rearrangement. The structural formulae have been introduced. The additions consist of new mineral species found after 1953 and of ore minerals. The list contains 517 entries.

The organisation of the main part of the book (pp. 19–370) remains the same; essentially the same classification was used as that of R. L. Parker, except for a few changes produced by the addition of new areas. The 'Mineralgesellschaften' (why not 'Paragenesen'?) are mineralogical (i.e. paragenetic) subdivisions; but the individual occurrences are grouped according to petrological-geological provinces. After a description of the main paragenetic groups A1–12, B1–4, C1–4, D1–12 and miscellaneous (a total of 30) (pp. 19–37), the regionally subdivided main part follows (pp. 38–370). In this, 16 areas of mineral occurrences are singled out ('Fundgebiete'). Within these, the subdivision is according to paragenetic similarities ('Fundortgruppen', a total of 110). In summary, the 110 'Fundortgruppen' belong to 30 'Mineralgesellschaften' (paragenetic types). The subdivision of these into A, B, C, D and 'miscellaneous' is according to the wall rock.

This book is not only an atlas of mineral occurrences and parageneses, it is also a progress report on the research on 'topographic mineralogy' in the Swiss Alps; and the progress made since 1954, and especially since the original progenitor of this book, Koenigsberger's two volumes of 1940, is enormous. The authors and their colleagues are to be
congratulated on this unique achievement, both in regard to completeness (no other mountain belt has been so thoroughly studied mineralogically), and in regard to teamwork.

In addition, this remarkable book is an outstanding international source book for information on paragenetic, morphological and 'topographic' (regional) mineralogy.

Critical reading has revealed few errors (printing errors which do not disturb the meaning are present, but are not overly abundant), a minimum of mineralogical idiosyncrasies [Laemmlein (1939) was not the first to point out the elimination of crystals by a 'geometric principle': this was known long before in the electro-refining of metals], and a minimum of missing details. A number of figures could perhaps have been printed lighter and with less violent contrast. But on the whole this is a very remarkable book and Professor de Quervain, President of the Geotechnical Commission, his coauthors and the publisher are to be congratulated on a fine piece of work, which sets an example so far unequalled anywhere else in the world. The original drawings by F. N. Ashcroft and A. J. Hislop are retained, whereas the original locality map has been considerably improved and divided into two parts, a western and an eastern half.

This book serves mineralogy as well as crystallography and petrology, and, as pointed out elsewhere, economic geologists can learn from it that lateral secretion can be a most important process, and that sphalerite and fluorite were known to be diagenetic in reefs as long ago as 1916 (Table 48a and b).

It ought to be clear from the above that this book is unique in many ways and will serve the earth scientists for at least a generation.

G. C. AMSTUTZ
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