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As of 1974 the 'Zeitschrift für Geophysik' (formerly published by Physica-Verlag, Würzburg) will be continued by Springer-Verlag Berlin - Heidelberg - New York under the above name, beginning with Volume 40.

English is now regarded as the universal language of science. To ensure the widest possible readership for the journal, the majority of papers will be published in English.

The journal will continue to be published for the Deutsche Geophysikalische Gesellschaft under the editorship of W. Dieminger, Max-Planck-Institut für Aeronomie, Lindau/Harz, and J. Untiedt, Institut für Geophysik der Universität Münster/Westf. It will be under the scientific direction of an editorial board and advisory board of international membership. Scientists from a number of countries have accepted the invitation to serve on these boards.

The scope of the journal remains unchanged: it publishes original papers and progress reports on all areas of general and applied geophysics, extraterrestrial physics, and related fields. A feature of special interest is the rapid publication once a paper has been accepted. Short Communications can be published very fast. There are also review articles, letters to the editors, and book reviews.



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Spilites and Spilitic Rocks

Edited by G. C. Amstutz

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The spilite problem is crucial in petrological research, comparable to that of granite or carbonatite. Spilites are phases of basaltic rocks, considered by some to be secondary to the original primary process of rock formation, and by others as logical products of the latest stages of magmatic differentiation. This interplay of opposites is the essence of the present book and illustrates the necessary growth process of scientific thought.

The problem involves a mineralogical convergence between rocks with albite \pm chlorite \pm carbonates or Ca-silicates \pm iron oxides \pm quartz. These minerals are typical for the greenschist

facies in metamorphic petrology, yet many rocks of approximately basaltic composition and with primary textures are of similar composition. The question to be answered here is whether the spilites sometimes called primary on the basis of textural evidence are in fact examples of mimetic replacement or not.

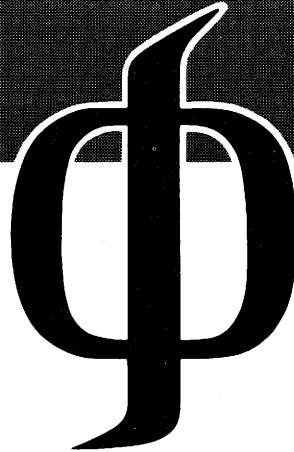
The answer as given by the majority of papers in this book is that perfect mimetic replacement is impossible and that primary spilites must exist. Opinion is divided on whether the term spilite, or spilitic rock, should also be applied to more or less metamorphic rocks of obviously metamorphic texture belonging to the greenschist facies.

In addition to its petrographic importance, the spilite problem is also of very specific interest in the study of mineral deposits. The connection of hydromagmas with the formation of hydrothermal mineral deposits was shown for the first time in 1958 by the editor of this volume. The significance of the book reaches far beyond the field of petrology — and even the earth sciences — in that it deals with the eternal problem of endo- and exogenesis (in the fundamental meaning of these terms) and of syngensis and epigenesis.



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