



A Norwegian journal  
of geology

Volume 54 . 1974 Number 4

Universitetsforlaget

# NORSK GEOLOGISK TIDSSKRIFT



# Norsk Geologisk Tidsskrift

*A Norwegian journal of geology issued under the auspices of  
the Norwegian Geological Society*

---

## EDITOR

Konservator NATASCHA HEINTZ

## EDITORIAL ADDRESS

Norsk Geologisk Tidsskrift  
Paleontologisk Museum, Sars gate 1, Oslo 5, Norway.

## EDITORIAL COMMITTEE

Dosent B. G. ANDERSEN, Førstekonservator I. BRYHNI, Professor J. A. W. BUGGE,  
Professor K. S. HEIER, Professor G. HENNINGSMOEN, Professor H. NEUMANN, Professor  
B. A. STURT, Statsgeolog T. TORSKE, and Professor F. M. VOKES.

## PUBLISHER

UNIVERSITETSFORLAGET, P.O. Box 307, Blindern, Oslo 3, Norway. American office: P.O.  
Box 142, Boston, Massachusetts 02113, U. S. A.

## SUBSCRIPTIONS

*Members* of the Norwegian Geological Society who have paid their annual subscription (N. kr. 40.–) receive the journal free from Universitetsforlaget. Membership subscriptions, changes of address, and communications from members concerning the journal should be sent to the Treasurer, Norsk Geologisk Forening, Geologisk Museum, Sars gate 1, Oslo 5, Norway.

*Non-members* of the Norwegian Geological Society should send their orders to Universitetsforlaget. The subscription price per volume (four issues) including postage, is as follows:

Norway: N. kr. 65.– postgiro 15530.

Sweden: S. kr. 55.– postgiro 44337.

Denmark: D. kr. 70.– postgiro 14954.

U.S.A.: U.S. \$ 14.50.

Single issues, at a price of N. kr. 19,50, U.S. \$ 4.50, can also be ordered.

# Instructions to Authors

Manuscripts should be sent to the Editor. The author's permanent and temporary addresses must be given. Accepted manuscripts will not be returned until printed, and the author is requested to retain a complete copy of the manuscript. Authors will receive one set of proofs which should be read carefully and returned promptly to Universitetsforlaget. The author will be charged for changes against the manuscript made by him in proof. Fifty reprints will be sent free of charge to the author. In cases of multiple authorship, 75 reprints will be sent to the team. Reprints required in addition to those supplied free should be ordered when returning the first proofs to Universitetsforlaget.

## MANUSCRIPT

The manuscript must be typewritten (carbon copy not acceptable) on one side of standard sized paper, double spaced, with an ample margin. The text must be clear and concise, and written preferably in English; however, Norwegian, Danish, Swedish, French, or German may be used. Manuscripts should be arranged in the following order: (1) Informative but brief title. (2) Author's name. (3) A short abstract, always in English, not exceeding 12 lines (910 letters and spaces), and starting with a repetition of 2 and 1 with a translation in parentheses of non-English titles. (4) The author's professional postal address and a dating of the manuscript. (5) The main text. Use three or fewer grades of headings. Instead of footnotes, insert paragraphs which can be composed in smaller type or use parentheses. Indicate in the left-hand margin the approximate positions for the insertion of Halftone illustrations, Figures and Tables. The words 'Fig.' ('Figs.') and 'Table' (unabbreviated) should be capitalized. (6) A List of References conforming with the examples given below. Abbreviations used should be consistent: necessary editorial changes will be made according to the *International List of Periodical Title Word Abbreviations* (UNISIST/ICSU AB 1970). (7) Figure captions on a separate sheet. Add an English translation below captions in other languages. (8) Tables, if any, with captions, numbered with arabic numerals.

## ILLUSTRATIONS

Illustrations should be reducible to a maximum size of  $11.8 \times 19.8$  cm or less. If not adjustable to the entire width of the type area, 11.8 cm, they must be considerably narrower. Line drawings (maps, sections, etc.) may occasionally be allowed to extend into the inner margin of the page by an additional 2.7 cm. Drawings should be in black Indian ink. Letters should not be smaller than 1 mm after reduction for reproduction. Photographs should be clear, sharply contrasted, and printed on white paper with glossy finish. Figures may be composed of several units (designated A, B, C, etc.) and mounted in such a way that each unit after reduction is separated by a space at least 1 mm broad. All units should be similar in tone. Illustrations should generally be termed Figures (not Plates) even if occasionally covering an entire page. All Figures should be marked with the author's name and the Figure number. Do not attach captions to the Figures. When not obvious, the top and bottom of Figures, and their scale, should be indicated.

## REFERENCES

- Barth, T. F. W. 1962: *Theoretical Petrology*, 2nd ed., John Wiley & Sons, Inc., New York. 416 pp.
- Bjørlykke, H. & Svinndal, S. 1906: The carbonatite and per-alkaline rocks of the Fen area. Mining and exploration work. In Høltedahl, O. (ed.), *Geology of Norway. Nor. Geol. Unders.* 208, 105–110.
- Eskola, P. 1920: Mineral facies of rocks. *Nor. Geol. Tidsskr.* 6, 143–194.
- Størmer, L. 1944: On the relationship and phylogeny of fossil and recent Arachnomorpha. *Skr. Nor. Vidensk. Akad. i Oslo, Mat.-Naturvidensk. Kl.*, 1944, No. 5, 158 pp.

# Norsk Geologisk Tidsskrift

VOLUME 54 NUMBER 4



## CONTENTS – *INNHold*

### PAPERS – *AVHANDLINGER*

- SALTER, D. L. & APPELYARD, E. C.: An occurrence of vein palygorskite from the nepheline syenite at Lillebugt, Stjernøy, northern Norway ..... 329
- NILSEN, ODD: Mafic and ultramafic inclusions from the initial (Cambrian?) volcanism in the central Trondheim Region, Norway .... 337
- FALKUM, TORGEIR & STEEN PETERSEN, JON: A three-fold division of the 'farsundite' plutonic complex at Farsund, southern Norway .. 361
- GRØNLIE, GISLE & ROST, FRANZ: Gravity investigation and geological interpretation of the ultramafite complex of Åheim, Sunnmøre, western Norway ..... 367
- HEINTZ, ANATOL: Additional remarks about *Hemicyclaspis* from Jeløya, southern Norway ..... 375
- SYLVESTER, ARTHUR G.: Surface faulting and fumarolic activity since the 1970 Beerenberg eruption, Jan Mayen ..... 385

### NOTES – *NOTISER*

- ŠRÁMEK, JAN: A comment. Origin of limestone nodules in the Lower Palaeozoic of the Oslo Region ..... 395
- BJØRLYKKE, KNUT: A reply. Origin of limestone nodules in the Lower Palaeozoic of the Oslo Region ..... 397
- HENNINGSMOEN, GUNNAR: A comment. Origin of limestone nodules in the Lower Palaeozoic of the Oslo Region ..... 401
- BJØRLYKKE, KNUT: A reply. Origin of limestone nodules in the Lower Palaeozoic of the Oslo Region ..... 413
- ROBINS, BRIAN: A discussion. Petrology of the Hyllingen gabbro complex, Sør-Trøndelag, Norway ..... 417
- NILSEN, ODD: A reply. Petrology of the Hyllingen gabbro complex, Sør-Trøndelag, Norway ..... 421
- HÄNEL, RALPH, GRØNLIE, GISLE & HEIER, KNUT S.: Terrestrial heat flow determinations from lakes in southern Norway ..... 423
- GRØNLIE, GISLE & JØRGENSEN, PER: Thickness of Pleistocene deposits determined by gravimetric methods in Numedalen, Norway ..... 429
- GEE, DAVID G.: Comments on the Metamorphic Allochthon in northern Trøndelag, central Scandinavian Caledonides ..... 435

### REVIEWS – *NY LITTERATUR*

Issued December 1974