

# The Geochemical News

NUMBER 46

July 1967

## THE GEOCHEMICAL SOCIETY COUNCIL MEETING

San Francisco, California

November 13, 1966

The Council met from 2:30 to 6:00 p.m., November 13, 1966, at the San Francisco Hilton Hotel.

Present: Julian Goldsmith, presiding; Paul Barton, E. C. T. Chao, W. S. Fyfe, Paul Gast, Patrick M. Hurley, Russell M. Honea, Earl Ingerson, A. A. Levinson, K.J. Murata, Sol Silverman, and P. P. Toulmin, III.

### REPORT OF OFFICERS

**Secretary's Report:** Ninety new members joined the Geochemical Society from November 1965 to October 31, 1966, as compared to 103 new members last year. The total membership is 2084. Of these, 492 are foreign members outside of North America and 110 are from Canada. Three hundred and four are members of the Organic Geochemistry Division.

The membership directory dated April 1965 finally arrived in June 1966 and was distributed to all members of the Society.

As in the past, the American Geological Institute holds the addressograph of the Society and handles much of the bulk mailing of the Society. A constant source of difficulty lies in obtaining an up-to-date list of those members of the Society who are not members of the Geological Society of America. Approximately 297 members (212 domestic and 85 foreign) who are not members of GSA plus 90 new members received the GSA circulars I and II and the program of the annual meeting from our Society. These complications will probably continue until AGI adopts a centralized mailing system so that an up-to-date directory as well as members' affiliation can be printed out upon short notice. The system is also designed to facilitate the collection of dues and the mailing of ballots, etc. A cost and trade-off study has been made by Documents, Inc. Together with GSA, MSA, Paleontology Society, and Clay Minerals Society, the Geochemical Society has expressed an interest in participating as a member society associated with AGI in this central mailing system.

E. C. T. Chao, Secretary

Treasurer's Annual Report for the period Jan. 1, 1966 to Dec. 31, 1966: The Society continued this year to operate at a slight loss. Normal operating expenses exceeded income by \$365.87, pointing out the need for the increase in membership dues approved by members during the year.

The large apparent deficit (\$13,559.38) of expenses over income for the 1964 volume of Geochemistry International is not in reality a deficit. Rather, the expenses of \$19,260.18 were met largely from income previously received by the Society from the National Science Foundation, and reported in the 1965 Treasurer's Report as part of the Society's Operating Fund. All costs of the translations were met by combined National Science Foundation and subscription income, and excess income in the amount of \$4,021.43 was returned to the National Science Foundation at the close of the grant.

Reprint costs for the first of the Society's "educational series" were paid from the Operating Fund. It appeared to me appropriate to maintain as large a balance as possible in the interest-bearing Publication Fund savings account to aid in future Society publication support.

Russell M. Honea, Treasurer

#### BALANCE SHEET

December 31, 1966

#### ASSETS

##### Operating Fund:

Cash on hand and in banks	\$5,155.64	
Accounts receivable	<u>0.00</u>	
		\$5,155.64

##### Publication Fund:

Savings account		<u>\$3,521.98</u>
Total assets		<u>\$8,677.62</u>

#### LIABILITIES

##### Operating Fund

Balance of 1966 American Geological Institute Assessment	\$ 610.39	
Members' equity	<u>4,545.25</u>	
		\$5,155.64

##### Publication Fund:

Account balance		<u>\$3,521.98</u>
Total liabilities		<u>\$8,677.62</u>

## STATEMENT OF INCOME, EXPENSES AND CHANGES IN FUND BALANCES

JANUARY 1, 1966 TO DECEMBER 31, 1966

Operating FundGeneral

## Income:

Dues	\$ 6,051.96	
Interest on savings account	70.78	
Reprint sales (educational series)	<u>15.25</u>	
Total income		\$ 6,137.99

## Expenses:

American Geological Institute assessment	\$ 1,179.80	
American Association for the Advancement of Science	20.00	
Mailing services (AGI)	920.03	
Programs and circulars (GSA)	560.94	
Geochemical News	811.86	
Executive Editor	1,332.48	
Secretarial services:		
Treasurer	292.50	
Secretary	254.00	
Printing charges	619.97	
Express and shipping	23.96	
Bank charges	53.43	
Postage and telephone charges	136.16	
Reprint costs (Journal Geological Education)	<u>303.36</u>	
Total expenses		\$ 6,508.49
Excess expenses over income		(\$ 370.50)

Geochemistry International translation (NSF GN-295)

## Income:

Subscription sales	\$ 5,142.80	
AGI refund for 1965 translations	<u>558.00</u>	
Total income		\$ 5,700.80

## Expenses:

Translation costs	\$ 3,916.25	
Composition, printing, etc.	10,980.00	
Indexing	50.00	
Indirect costs	292.50	
Refund to NSF (Grant balance adjustment)	<u>4,021.43</u>	
Total expenses		\$19,260.18
Excess expenses over income		(\$13,559.38)

Publication Fund

## Income:

Royalties	\$ 128.60
Interest	<u>147.14</u>

Total income	\$ 275.74
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## Expenses:

None

Excess income over expenses	\$ 275.74
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Fund Balance, January 1, 1966:

## Operating fund:

Savings account	\$ 1,591.83
Checking account	17,475.48
Petty cash	
Treasurer	11.52
Translation editor	6.69

## Publication fund:

Savings account	<u>3,246.24</u>
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Total	\$22,331.76*
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Fund Balance, December 31, 1966:

## Operating fund:

Savings account	\$ 1,662.61
Checking account	3,491.78
Petty cash	
Treasurer	1.25

## Publication fund:

Savings account	<u>3,521.98</u>
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Total	\$ 8,677.62
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Net change in fund balance	(\$13,654.14)
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\*Note — This total does not include \$2,618.45 reported by C. Wayne Burnham, the previous Treasurer, in the Operating Fund at the close of the 1965 fiscal year. This amount was held by the American Geological Institute in an escrow account of subscription income for Geochemistry International on behalf of the Society, and was received and is reported as income in the present fiscal year.

### COMMITTEE REPORTS

Auditing: The Auditing Committee has examined the accounts of the Treasurer for the period January 1, 1966 to December 31, 1966, and has verified the accuracy of the statements and amounts shown in his report.

W. Warren Longley  
Harold W. Miller  
Ernest E. Wahlstrom, Chairman

Program: The program for the 1966 annual meeting of the Geological Society of America in San Francisco, November 14-16, consisted of the following sessions:

Geochemistry I: Volcanology  
Geochemistry II: Isotope Geology  
Geochemistry III: Solution Geochemistry  
Geochemistry IV: General  
Geochronology I  
Geochronology II

An Organic Geochemistry session and a symposium entitled "Shale Oil, Oil Shales and Related Kerogens" were organized by Dr. J. Gordon Erdman, chairman of the Organic Geochemistry division.

In addition, we organized from volunteered papers a session on meteorites and a session on extraterrestrial processes. In doing so, we rescued from oblivion a number of excellent papers that would otherwise have been rejected because of a lack of organizational sponsorship. In our opinion the GSA serves to benefit by maintaining an active interest in the burgeoning field of space science. Nevertheless, the Geochemical Society seemed to be the only organization willing to serve this important field of endeavor.

The general consensus of the membership as expressed at the annual business meeting was that symposia should not be discouraged where appropriate but that the present reliance on volunteered papers should continue to be our policy. The present policy has the advantage of encouraging young, relatively unknown researchers and it leaves the door open for new and novel researches which might otherwise be overlooked. The Program Committee will do its best to organize the volunteered papers into compatible sessions with a minimum of conflict with related concurrent sessions.

It is anticipated that a similar number of geochemical sessions will be scheduled for the 1967 annual GSA meeting in New Orleans. Any special requirements for space at the 1967 meeting should be anticipated early and arranged through the Program Committee.

Paul E. Damon, Chairman

Education: It is a novel and quite pleasurable experience for the undersigned to report concrete achievements of the Education Committee with nary a complaint or chiding admonition.

## COMMITTEE REPORTS (cont.)

With the financial support of the Geochemical Society and the wholehearted cooperation of Robert E. Boyer, editor of the Journal of Geological Education, the Educational Series on Geochemistry has been launched in fine style.

The first paper (E.S.G.1), "Geochemical Weathering of Rocks: Source of Raw Materials for Good Living" by W. D. Keller, appeared in the February 1966 issue of the Journal.

The second paper (E.S.G.2), "The Geochemical Application of Eh-pH Diagrams" by Paul L. Cloke, was just published in the October 1966 issue.

Manuscript of the third paper (E.S.G.3), "Terrestrial Heat Flow, Radioactivity, and the Chemical Composition of the Earth's Interior" by John W. Winchester, is now in the hands of Dr. Boyer and is being prepared for publication in the December 1966 issue.

Three thousand (3,000) reprints with handsome light blue semi-hard covers of E.S.G.1 are now available for purchase from the office of Dr. Cloke, editor of the Geochemical News. Information on cost and mode of purchase is given in prominent fashion at the end of E.S.G.2 in the October issue (p. 148). Additional publicity in GeoTimes, Science and other publications will follow in the near future.

Although it is too early to assess the potential demand for reprints, 3,000 copies per article will continue to be printed until income from sales can be ascertained. The cost per article (publication plus reprints) appears to be quite reasonable (between \$300 and \$350). At this rate, the fund of \$2,500 provided by the Society should be adequate to cover publication, distribution and incidental costs of at least six articles, even without any appreciable income from the sale of reprints. Thus the financial well-being of the Geochemical Series seems to be assured through 1967 (on the basis of the present publication schedule of three articles per year). It is hoped that the planned intensive publicity campaign will result in a rising income from sales to carry our programs beyond 1967 without additional subsidy from the Geochemical Society.

The Committee's efforts are now directed toward procuring new authors willing to prepare articles for the Series. New "Guide Lines for Prospective Authors" have been prepared and are being widely circulated. At present four articles in outline form are being screened for acceptance.

In conclusion, the undersigned is desirous of making changes in the membership of the Education Committee, viz., replace one member who has retired from active teaching and another who has failed to "produce." There is also the possibility of adding one or two members to the present complement of six (including the chairman) to compensate for the absence of members on sabbatical leaves (at least one per year). Toward this end, officers and members of the Geochemical Society are urgently requested to submit names of qualified and interested candidates to the chairman for consideration. There is a particular need for the appointment of a working representative from the Organic Geochemistry group.

Kurt E. Lowe, Chairman

Tellers: The Teller's Committee has completed its assignment and reports as follows:

Ballots received (gross total) . . . . .	721
Deduct: Ballots bearing a postmark after Oct. 15 deadline (one as late as Oct. 24!) . . . . .	7
Ballot envelopes unsigned . . . . .	4
Ballots bearing unidentifiable signatures . . . . .	9
Ballots received in mailing envelope only . . . . .	<u>15</u>
Total ballots invalidated . . . . .	<u>35</u>
Valid ballots counted . . . . .	686

The count produced the following results:

President:	P. M. Hurley
Vice President:	E. F. Osborn
Councilors:	G. Ernst Karl K. Turekian
Executive Editor:	A. A. Levinson

The amendment was passed by a vote of 545.

The reason that the total of votes on any office or issue does not equal the total of ballots counted is simply that many members chose not to vote on every office or on the amendment.

The Teller's Committee did not check every ballot against the membership lists on the assumptions that (1) the Secretary would have mailed ballots only to currently active members; and (2) only bona fide members of the Society would affix their signatures and ante up the postage for the ballot.

A number of ballots were accompanied with write-in comments. The majority of these reflected some degree of dissatisfaction with the "single-slate" ballot. One carried the comment: "This is NOT an election; it is a confirmation of a nomination." In the opinion of the tellers this observation, as a practical statement, is true. Theoretically, however, so long as provision is made on the ballot for write-in votes, the balloting does constitute an election. And any time a sufficiently large number of the members of the Society wish to do so, it is entirely feasible to translate theory into practice!

The committee recommends that in providing ballot envelopes for future elections, a note be printed underneath the signature line, calling for the voter to print his last name. We urge this in view of the number of ballots received with undecipherable signatures — undecipherable not only by all three members of the committee, but undecipherable also on the part of some talented cryptographers in the California Division of Mines and Geology!

And now, in concluding this report, may we express our appreciation for the opportunity to have served the Society in this small way, and may we also be permitted - now that the ballots are counted and our work is done - to depart from the necessary on-the-job objectivity of tellers, and indicate that in our opinion the membership has voted wisely, and by this election has assured itself that the affairs of the Society will be in good hands for another year.

Charles W. Chesterman  
Matti S. Tavela  
Ian Campbell, Chairman

Nominating: The following persons are recommended for nomination for the offices indicated:

Vice President:	J. B. Thompson, Jr., Harvard University
Councilor:	D. L. Graf, University of Minnesota
Secretary:	E. Roedder, U.S. Geological Survey

Each person has indicated his willingness to accept this nomination.

R. E. Folinsbee  
D. R. Lewis  
D. M. Shaw  
H. E. Shaw  
G. W. Wetherill, Chairman

(Editor's Note: A list of one suggested alternate for each office and a list of six to nine additional names for each office accompanied the report.)

#### REPORTS OF THE EDITORS

The Geochemical News: With the inclusion of changes of address, lists of new members, personals, and news of possible geochemical interest culled from various sources, the number of issues of The Geochemical News has increased over last year. At the time of the annual meeting another issue will be ready for printing; this will make a total of three issues during the past year. So far as can be anticipated, no great changes will arise during the next year. Accordingly, three to four issues will probably be all that are needed.

Essentially no response was obtained from the membership from the proposal that research projects be listed. The consensus seems, therefore, to be against such a column and plans for its publication have been dropped.

Paul L. Cloke, Editor  
The Geochemical News

Book Translations: Changes in status of translations and manuscripts since the report of November 2, 1965, are as follows:

Volumes that have been published, or otherwise made available since November 2, 1965:

Beus, A. A., GEOCHEMISTRY OF BERYLLIUM AND GENETIC TYPES OF BERYLLIUM DEPOSITS. Original: 330 pp., 1960. Translated by F. Lachman, edited by Lincoln R. Page. Published as a companion volume to the first book by Beus on the Geochemistry of Beryllium, by W. H. Freeman and Company, San Francisco. 401 pp., 1966.

Ermakov, N. P., INVESTIGATIONS OF MINERAL-FORMING SOLUTIONS (plus two supplements which bring the text up to date). Original: 200 pp., 1950. Translated by V. P. Sokoloff, edited by E. Roedder. Pergamon Press Earth Science Monograph Series, No. 22, 1966.

Vlasov, et al., LOVOZERO ALKALIK MASSIF. Original: 623 pp., 1960. Translated under joint sponsorship with the British Department of Scientific and Industrial Research, edited by C. F. Davidson. Oliver and Boyd, London. 610 pp., 1966, 12 guineas.

Krasnikov, V. I. (ed.), GEOCHEMICAL PROSPECTING FOR ORE DEPOSITS IN THE U.S.S.R. Original: 407 pp., 1957. Edited by Herbert E. Hawkes. Microfilm available from the American Geological Institute, 1444 N Street, N.W., Washington, D. C. 20005.



Translation and/or editing finished since November, 1965, but not yet published:

Strakhov, N. M. (ed), TYPES OF DOLOMITE ROCK AND THEIR GENESIS. Original: 378 pp., 1956. This book was translated under a grant from the Petroleum Research Fund of the American Chemical Society through the University of Texas. In press, Pergamon Press Earth Science Monograph Series.

Dobrayansky, A. F., (ed), TRANSFORMATIONS OF PETROLEUM IN NATURE. Original: 416 pp., 1958. Translated by Robert B. Gaul and Bruno C. Betzner, edited by Sol Silverman. In press, Pergamon Press Earth Science Monograph Series.

Manskaya, S. M., and Drozdova, T. V., GEOCHEMISTRY OF ORGANIC MATERIALS. Original: Moscow, 1964. Translated by Leonard Shapiro, edited by Irving Breger, U.S.G.S., in cooperation with Pergamon Press, who paid three-fourths of the translation cost. Pergamon Press, Earth Science Monograph Series.

Tausom, L. V., THE GEOCHEMISTRY OF RARE ELEMENTS IN GRANITOIDS. Original: 231 pp., 1961. Translated and edited by Donald E. McGannon. Publication planned by AGI for the Geochemical Society.

With the remaining funds from Grant NSF-G10050 the Book Translation Committee plans to translate a series of outstanding Russian papers on the geochemistry of natural waters, and to have the translations published in a single volume. The list is being compiled by Dr. Frank T. Manheim, of Woods Hole Oceanographic Institution in cooperation with some of his Russian colleagues whom he visited during the summer of 1966, and with the advice of American hydrologists and geochemists.

October 15, 1966

Earl Ingerson  
Book Translations Editor

Geochemistry International: The National Science Foundation has granted funds for the continued support of Geochemistry International, Vols. 3 and 4 (Geokhimiya, volume years 1966 and 1967). As for Vols. 1 and 2, the grants were made to the American Geological Institute; the Geochemical Society provides technical editorial services as a subcontractor to AGI. This arrangement, whereby AGI handles the fiscal and mechanical aspects of the project, has proved successful in relieving the Society (especially the Treasurer and the Journal Translations Editor) of a considerable burden of effort. I hasten to point out that the necessity for a price increase for Volume 3, from \$25 to \$50, and the probable requirement of a further increase to \$75 for Vol. 4, arise from the National Science Foundation's policies on pricing of Foundation-supported publications and are not to be laid at AGI's door. The Foundation insists on a price designed to recover all costs of putting out the journal, and Geochemistry International is greatly underpriced by comparison with similar translation journals.

The new prices, if applied across the board, would presumably wipe out the few individual subscriptions that remain. Although only about 25 people (6% of the paid subscriptions) still subscribe to the journal as individuals, it seems undesirable to withdraw the possibility of their continuing to subscribe if this is avoidable. A reasonable alternative would be to retain the present \$25 rate for those members of the Society whose institutions hold a subscription at the regular rate. This arrangement would be a convenience for the individuals and would bring in \$25 each for subscriptions that otherwise would be lost.

The rate of editing and production has been somewhat lower than desired, but is now increasing: No. 4 of Volume 2 should have appeared by the time of the Annual Meeting; No. 5 is composed, and the material for No. 6 is translated and mostly edited at the time of writing this report. Nos. 1-5 of Geokhimiya 1966 have been translated, and Nos. 6-8 are in process of translation. We expect to have Volume 3 complete or nearly so by July 1967, and to continue thereafter to publish about 6 months after the appearance of the corresponding issue of Geokhimiya.

A continuing problem is the selection of articles from sources other than Geokhimiya. Suggestions and recommendations from the membership are much desired and earnestly sought.

The system of separating the technical editing of translations from the general editorial chores of selecting articles, reading proof, and general management has proved highly successful. I wish to thank the many colleagues who have helped by evaluating and editing articles in their specialties. The officers of the Society and the staff of Scripta Technica and AGI have been helpful in every way possible.

Priestly Toulmin, III  
Journal Translations Editor

#### COUNCIL ACTIONS AND DISCUSSIONS

Mailing: E. C. T. Chao reported that AGI, with interested participating societies, has been considering the changeover to a centralized mailing system to improve the current mailing. As a request from AGI regarding Geochemical Society's response, it was moved, seconded, and passed that, in principle, the Geochemical Society endorses the central mailing system planned to be installed by AGI, provided that the Society is not charged for the initial conversion cost, and that the share of the operating cost is comparable to the current mailing cost.

Billing: Russell Honea suggested the possibility of joint billing of membership dues and subscription to the Geochimica et Cosmochimica Acta. A. A. Levinson was asked to find out the number of members who subscribe to the Acta to enable Honea to decide whether joint billing is desirable. The Treasurer will send list of membership who have paid dues to Pergamon Press.

The Geochemical News: Russell Honea also discussed problems of subscription of The Geochemical News by libraries. Under the current category of individual membership, it is not feasible for a library to subscribe to The Geochemical News. It was suggested as a possibility after Levinson, Cloke, and Pergamon Press got together to determine the advisability of a 2-page pull-out per issue for The Geochemical News. This possibility depends on the number of members subscribing to the Acta and on Pergamon's reaction. Council authorized going ahead, if feasible.

Program Committee: It has been suggested that a letter be included in the Geochemical News to encourage more papers to be presented by title and that the old pros give the younger men a chance to present their papers.

Education Committee: The council recommends that a letter of appreciation of the Committee's accomplishment be sent by the President to Dr. Kurt Lowe.

Nominating Committee: The nominees accepted by the Council are:

Vice President:	J. B. Thompson, Jr.
Secretary:	Edwin Roedder
Councilors	D. L. Graf
	Edward Anders

Liaison Committee on Public Health Problems: No formal report. The function of this committee needs to be redefined and committee membership revised to encourage more positive interest in this area. The following names, for the benefit of the President of the Society, were mentioned as members who may be interested in serving on this committee:

Karl Turekian	Claire Patterson
Duncan McConnel	Herb Volchak of AEC
Jack Winchester	(Not a GS member)

Standards Committee: No formal report. It is suggested that A. A. Smales and Grover J. Schrayner (Organic Geochemistry Division) be asked to join the committee. President Hurley will contact Frank Flanigan to suggest upgrading and improving activity of this committee.

Constitution and By-Laws Committee: The Council recommends recessing the Constitution and By-Laws Committee until such time as modifications are needed again.

Geochemistry International: The resolution following was approved by the Council.

WHEREAS it appears that continued financial support for the production of Geochemistry International is dependent on a subscription designed more nearly to return operating costs, and

WHEREAS nevertheless, an important aim of the Geochemical Society's Journal Translation Program is to make translated literature as widely available to the profession as possible, now therefore be it

RESOLVED, that the Council of the Geochemical Society hereby approves and ratifies the action of the American Geological Institute in raising the annual subscription rate for Geochemistry International to \$50, effective with Volume 3, and, if deemed necessary by the American Geological Institute in consultation with the Journal Translations Editor of the Geochemical Society, to \$75 for Volume 4;

PROVIDED, however, that a special annual subscription rate, not to exceed \$25, be established for individual members of the Geochemical Society who are affiliated with organizations that subscribe to Geochemistry International at the regular rate. In case of uncertainty as to eligibility for the special rate, the judgment of the Journal Translations Editor of the Geochemical Society should be followed.

Geochimica et Cosmochimica Acta: A. A. Levinson presented plans for improving manuscript reviews for the journal and recommended the following list of Executive Editor, Editor, and Associate Editors. The list was approved by Council.

EXECUTIVE EDITOR

Dr. A. A. Levinson, Gulf Research and Development Company, P. O. Drawer  
2038 Pittsburgh, Pennsylvania 15230

## EDITOR

Prof. C. W. Correns, Sedimentpetrographisches Institut der Universität,  
Lotzestr. 13, Göttingen, Germany

## ASSOCIATE EDITORS

- Prof. E. Anders, The Enrico Fermi Institute for Nuclear Studies  
The University of Chicago, Chicago, Illinois 60637
- Dr. J. R. Butler, Department of Geology, Imperial College of Science  
and Technology, London S.W. 7, England
- Prof. P. W. Gast, Lamont Geological Observatory of Columbia University,  
Palisades, New York 10964
- Prof. H. J. Greenwood, Department of Geology, Princeton University,  
Princeton, New Jersey 08540
- Prof. I. R. Kaplan, Department of Geology, University of California,  
Los Angeles, California 90024
- Prof. S. R. Nockolds, Department of Mineralogy and Petrology,  
University of Cambridge, Cambridge, England
- Prof. D. M. Shaw, Department of Geology, McMaster University,  
Hamilton, Ontario, Canada
- Dr. S. R. Silverman, Chevron Research Corporation, P. O. Box 446,  
La Habra, California 90633
- Dr. S. R. Taylor, Department of Geophysics and Geochemistry, The  
Australian National University, Canberra, Australia
- Prof. K. K. Turekian, Department of Geology, Yale University,  
New Haven, Connecticut 06520
- Prof. E. A. Vincent, Department of Geology and Mineralogy,  
The University Museum, Oxford, England

Levinson also introduced the following resolution which was approved by  
Council:

The Editorial Advisory Board of Geochimica et Cosmochimica Acta has  
been in existence since the Journal began in 1951. Its distinguished  
members have been of utmost aid in policy decisions, reviewing manu-  
scripts, and in determining the general conduct of the Journal. Many of  
the men on the Editorial Advisory Board have participated faithfully in  
the affairs of the Journal since its inception. A new Executive Editor  
and staff have now been installed and, in considering and accepting this  
staff, the following resolution was proposed and unanimously adopted by  
the Council of the Geochemical Society:

WHEREAS the Editorial Advisory Board has been in existence since  
the beginning of Geochimica et Cosmochimica Acta providing invaluable  
assistance in numerous ways, and

WHEREAS the general policy and procedures of Geochimica et Cosmo-  
chimica Acta are now well established, and

WHEREAS a new Executive Editor has now been duly elected by The  
Geochemical Society and his staff of Editor and Associate Editors  
approved by the Council; therefore be it

RESOLVED, that the Geochemical Society expresses its sincere appreciation to the members of the Editorial Advisory Board of Geochimica et Cosmochimica Acta for their faithful distinguished service to the Journal, especially in its formative years, and the Council now considers the excellent work of the Editorial Advisory Board completed.

The Council was impressed by the steps taken to improve the management of processing manuscripts for Geochimica et Cosmochimica Acta, for revitalizing the note section of Acta, and for addition of a new series of short articles less than 2000 words.

Levinson also recommended that a letter from the new President be sent to retired members of the Advisory Board who have served the Society well. This recommendation was approved by the Council.

Priestly Toulmin reported, with no request for action by the Council, on the Advisory Committee to AGI-GSA Bibliography of Geology Exclusive of North America and the AGI Glossary Editorial Committee, as follows:

AGI Glossary Editorial Committee: A meeting was held June 22, 1966. Present were Alice Allen (AEG), Marjorie Hooker (MSA), Walter White (SEG), George Cohee (AAPG), Priestley Toulmin (GS), and Foster Smith and Robert McAfee of AGI. The proposed revision of the Glossary of Geology and Related Sciences was discussed in rather general terms, with particular attention to such matters as scope and intensity of review. The project will rely heavily on panels of experts, and names were suggested for the chairmen of many possible panels.

Editorial Advisory Committee for the AGI-GSA Bibliography of Geology Exclusive of North America met July 20-21, 1966; the committee is composed of representatives of the member societies of AGI. Those in attendance were: Samuel P. Ellison (GSA), Chairman; Marie Siegrist (GSA), Martin Russell (GSA), John B. Patton (AASG), William M. Adams (AGU), Arthur A. Meyerhoff (AAPG), Clayton Ray (SVP), Priestley Toulmin, III (GS), Ralph L. Langenheim (PS), Rev. James Skehan (NAGT), George V. Cohee (SEPM), Marjorie Hooker (MSA), Bruce Hall (AEG), John D. Ridge (AIME, SME), Walter S. White (SEG), Louis Cima (NSF, observer), Roy Graves (Petroleum Abstracts, observer), Robert Van Nostrand (SExG), Foster Smith (AGI), Thomas Caless (AGI), Linn Hoover (AGI).

The committee adopted the following recommendations:

- 1) that the Bibliography and Index of Geology Exclusive of North America cover all papers concerning geology (exclusive of North America) in the broadest sense of the term and it suggested that user requirements be kept in mind, including users who may not be affiliated with the American Geological Institute;
- 2) that each society representative on this Committee provide Mr. Thomas Caless, Project Manager, with a list of possible candidates who might serve as abstractors for the GSA Bibliography.
- 3) that each representative on this Committee urge his society to keep Linn Hoover, Executive Director, AGI, fully informed regarding its present and future need for special bibliographies; and
- 4) the Committee confirmed its desire that the GSA and the USGS documentation efforts evolve in a compatible manner.

It was also agreed that the next meeting of the Committee will be held in Washington, D. C. early in 1967, after the publication of the January issue of the GSA Bibliography.

In brief, the plan is to publish a monthly abstract journal, similar in format to the USGS Bibliography of North American Geology, and an annual index volume, at an annual subscription rate of \$150. Coverage is to be comprehensive, and considerable effort is to be devoted to achieving currency. The project is supported by an NSF grant of \$748,000 for expenses through 1967, GSA contribution of \$30,000 in 1967, and anticipated subscription income of \$91,000.

Considerable critical discussion of various operational aspects of the project arose, and some difficulty was experienced in separating the operational from the editorial. Regardless of the merits of those arguments, the "special competence" of the Committee was stated to lie in the field of user requirements. The question that should be considered by the Society is: do we require a monthly "current-awareness"-type abstract journal covering non-North American geology "in the broadest sense of the term," or are our needs for such service adequately met by such publications as Chemical Abstracts, Petroleum Abstracts, and Current Contents?

Committee Appointments: The new president was reminded of his duty to appoint members to the Teller's Committee, and to add members to the Education Committee, the Liaison Committee on Public Health problems and the Standards Committee. Representatives to AAAS also need to be appointed. The list will be appended to the minutes after the appointments have been completed.

Other Business: The Council ratified the revised Constitution and By-laws submitted by AGI and dated April 24, 1966.

Earl Ingerson and Jack Murata who plan to attend the 1968 International Geological Congress in Prague are to be invited to represent the Geochemical Society.

#### ORGANIC GEOCHEMISTRY DIVISION

Sol Silverman as spokesman reported the newly elected officers for the Organic Geochemistry Division for 1967 as follows:

Chairman	R. G. Bader
Chairman-elect	J. R. Vallentyne
Secretary	W. G. Meinschein

Sol reported that the last European branch meeting of the Organic Geochemistry Division meeting held in England was attended by 100 people. The next meeting for the European branch to last one and one-half days will be held in Amsterdam and Dr. Eisma will be in charge. A symposium for the organic geochemistry of the ocean and a half-day general session in organic geochemistry is planned for the next joint annual meeting with the GSA.

Sol protested the conflicting schedule of the business meeting with part of the sessions of the Organic Geochemistry Division.

The Council welcomed the suggestion that the Organic Geochemistry Division submit a list of people to the nominating committee as nominees for Council member.

## INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY AND COSMOCHEMISTRY (IAGC)

Information was provided by Earl Ingerson and Julian Goldsmith regarding IAGC; no action was required. The National Academy of Science - National Research Council appointed an ad hoc U.S. national committee of geochemistry to select representatives to IAGC. Since the Geochemical Society has foreign members, it does not qualify as a U.S. national representative. This ad hoc committee consists of Julian Goldsmith (Chairman), Brian Skinner, Dick Rollins, Frank Schairer, Tom Aldrich, Harrison Brown, and Don White. They appointed Frank Schairer and Julian Goldsmith as national representatives for the August 1966 symposium meeting, which was postponed till May 8-10, 1967. New representatives shall be appointed by this ad hoc committee. Information on this association follows:

### Introduction

The first attempt to establish an international organization of geochemistry appears to have been the appointment of a Commission on Geochemistry in the International Union of Pure and Applied Chemistry in 1953. It should be noted that formation of the Commission was not in response to a need felt by IUPAC, but because Prof. Paul Niggli suggested it and pushed the project through.

Several meetings and symposia were held in the late 1950's, but Paul Niggli had died shortly after the formation of the Commission and it was treated like the stepchild it had, indeed, become. At the 1958 (Oxford) meeting of the Commission, members remarked that at the Paris symposium (1957) no chemists had attended any technical session, although the meetings of IUPAC were but a few blocks distant. Moreover, the meeting space assigned was inadequate and inappropriate.

The members wondered if it would not be more fitting if the Commission associated itself with an international organization of geologists. When IUPAC showed the same lack of interest at the Munich symposium (1959) again held near the main IUPAC meeting, the feelings were intensified, and expressed in writing.

In 1960 the Commission co-sponsored another symposium, this time at the meetings of the International Geological Congress in Copenhagen. Discussions were held about the role of geochemistry in international meetings and a joint interunion committee (IGC, IUPAC, IUGG) was appointed to study the problem.

The Commission did not meet with IUPAC in 1961 (Montreal). In 1963 (London), however, another symposium was held, this time in another part of the city. The Commission sent a resolution to IUPAC, stating its conviction that the primary association of geochemistry should be with a geological organization, but expressing a strong hope that a Commission of Geochemistry, of reduced size, would be maintained in IUPAC for liaison with similar groups in other unions. No action was taken on this recommendation until 1965 (see below).

### Organization

When IUGS met in New Delhi in 1964, its president invited the ad hoc interunion committee to hold a meeting to discuss the formation of an international organization of geochemistry. The meeting was held and it was

voted to organize an international association. Because of insufficient time, completion of the organization and agreement on details were left to a committee appointed in New Delhi, with power to act being delegated by the meeting.

Unesco invited the committee to meet in Paris to complete the organization. The meeting was held in November, 1965, and UNESCO expressed the hope that an association could be activated promptly, inasmuch as geochemistry was the only large and active scientific discipline not specifically represented in the UNESCO "family." They had felt the need for such an organization for some time, not only for liaison functions, aid in planning meetings, etc., but also for discussion and referral of problems that are primarily geochemical.

The secretary of IUGS attended the meeting and was enthusiastic about the prospects of a geochemical association, largely for the same reasons expressed by representatives of UNESCO. IUGS would be pleased, he said, to have the first and primary affiliation of the association with that union, but he realized that the choice was with the association.

Organization of the Association of Geochemistry and Cosmochemistry was completed at the meeting in Paris and a tentative set of statutes was prepared. These have now undergone two revisions after wide circulation and general discussion. No adverse comments have been received on the latest version, so it appears that these can serve as the basis for operating the Association until the first meeting of the General Assembly (Prague, 1968).

There have been inquiries about affiliation of national groups with the Association from Germany, France, India, Japan, Austria, and Great Britain. These are being held in abeyance, along with invitations to other countries, until affiliation with IUGS can be formalized.

The IUPAC Commission on Geochemistry had planned a symposium for the Moscow meeting of the Union (1965). When IUPAC found that an independent Association had been voted (New Delhi, 1964), they cancelled the symposium and disbanded the Commission. They will not be averse to discussing the establishment of a smaller commission later, however.

At the Paris meeting it was voted to re-organize and expand the symposium that had been projected for Moscow and to hold it at UNESCO Headquarters in Paris. Both UNESCO and IUGS spontaneously offered co-sponsorship and funds to the symposium and UNESCO offered space, translation facilities, etc., without charge.

In addition to the functions of liaison, advising, planning, etc., mentioned above, the Association feels that there are other matters of a technical nature that can be handled only, or most effectively, on an international level. The following commissions, in process of formation, are intended to be a start in this direction:

1. Nomenclature, Documentation and Data Retrieval.
2. Analytical Methods and Standards.
3. Biogeochemistry



## NEW JOURNAL

Published by

The Geochemical Society of Japan

February 20, 1967

Dear Colleague,

The Geochemical Society of Japan announces the publication of Geochemical Journal. The Journal is intended to contribute to the development of geochemistry in general. Vol. 1, No. 1 contains five papers, fifty pages. It is small in size at present. However, we hope to enlarge it and to establish and retain a quarterly publication. This will be realized with an increase in the number of contributors and subscribers. We hope to have you as such.

Yours faithfully,

Shinya Oana  
Executive Editor

Subscription rate: U.S.A. \$2.00 per copy  
Membership dues: U.S.A. \$6.00 per annum, covering  
publications.

The first issue was published in December, 1966, and includes the following articles:

- Y. Kitano and N. Kanamori: Synthesis of magnesian calcite at low temperatures and pressures.
- A. Masuda: Lanthanides in basalts of Japan with three distinct types.
- M. Shima and M. Honda: Distribution and isotopic composition of lithium in stone meteorites.
- H. Sakai and M. Yamamoto: Fractionation of sulfur isotopes in the preparation of sulfur dioxide. An improved technique for the precision analysis of stable sulfur isotopes.
- S. Oana and H. Ishikawa: Sulfur isotopic fractionation between sulfur and sulfuric acid in the hydrothermal solution of sulfur dioxide.

## BOOK REVIEWS

MANAGEMENT OF RADIOACTIVE WASTES, by C. A. Mawson. 196 pages, illustrated. D. Van Nostrand Company, Inc., Princeton, New Jersey, 1965. \$6.95.

Dr. Mawson's book is precisely as he states it to be: a summary of the art of radioactive waste management. As such it brings together for the first time much of the published materials previously available only in technical governmental reports. Scientists interested in the subject are indebted to Dr. Mawson for making this information readily available in one book.

The text is well structured and access to an area of interest is relatively easy. The topics covered include sources and nature of radioactive wastes; waste management in the uranium industry, treatment of gaseous effluent; storage, fixation and treatment of liquid wastes; processing of solid wastes; storage and disposal into geological formations, the ground, seas, lakes and rivers. Also included are small quantity disposal, monitoring and control, and political and legal considerations.

The index seems more than adequate. The appendices include additional theory on atmospheric dispersion (this subject is about the only subject treated theoretically), selected references, and the availability of special reports.

In view of the increased attention now being given to the pollution of our environment, the appearance of this book is both timely and beneficial to a wide spectrum of professionals.

Louis I. Briggs

SILICATE SCIENCE, VOL. III: DRY SILICATE SYSTEMS, by Wilhelm Eitel. xiv + 553 pages, 340 figures, 4 tables. Academic Press, New York and London, 1966. \$22.00

This book should be of outstanding value to the mineralogist and petrologist. The first section, "Dry silicate equilibria; fusion and polymorphism," treats methods of investigation and the principles underlying or related to the methods discussed. It provides information useful in designing experiments and in evaluating the results of research. Section B, "Dry silicate systems; fusion and polymorphism," consists of a very extensive compilation of data in a great variety of silicate systems. Some of the results involve gaseous phases, including even water. Thus, they are not in all cases strictly "dry." It was not found possible, due to important influences of gaseous phases on the solids, to exclude separate hydrothermal and dry systems so rigorously as in PHYSICAL CHEMISTRY OF THE SILICATES. Extensive discussion of the results accompanies the presentation of data in section B. The availability of this book should greatly aid in the search for recent information of interest in petrology.

plc

Clarification: The Editor has been requested to state that GEOLOGICAL DATA PROCESSING by F. G. Smith, evaluated in No. 45 of The Geochemical News, was reviewed by Dr. Henry N. Pollack, a faculty member of The University of Michigan, not by Dr. Henry L. Pollak of the University of Pittsburgh.

SILICATE SCIENCE, VOL. IV: HYDROTHERMAL SILICATE SYSTEMS, by Wilhelm Eitel. xiv + 617 pages, 294 figures, 9 tables. Academic Press, New York and London, 1966. \$24.00.

In keeping with the character of the previous parts of this treatise, Volume IV gives a very comprehensive coverage of the literature from 1952 to 1962. This book is divided into two parts. Section A covers "silicate systems with volatiles" and comprises most of the volume, whereas Section B deals with "dehydration behavior of silicate hydrates: zeolites and related materials." The first 163 pages (section A) read much as a text, discussing new results, techniques, applications, and geologic meaning of recent work. The remaining 242 pages of section A are more a summary of hydrothermal systems studied, these systems being arranged systematically. Applications to geology and technology are, however, discussed concurrently. Section B is arranged in a similar manner, the first two subdivisions serving as a general introduction and instruction, and the remaining parts as a more detailed description of recent results.

The reviewer regards this volume not only as a valuable reference book, but as very worthwhile reading for advanced students in this field.

plc

SILICATE SCIENCE, VOL. V: CERAMICS AND HYDRAULIC BINDERS, by Wilhelm Eitel. xiv + 618 pages, 273 figures. Academic Press, New York and London, 1966. \$24.00

This book completes the excellent five volume coverage of recent work in silicate systems. It is divided into three sections; solid-state reactions and their uses, reactions in ceramic bodies, and Portland cements and related hydraulic binders. In each of these there is the usual comprehensive treatment of the subject with frequent reference to the literature. The book is most instructive in regard to what various researches have shown and their significance. Much attention has been given to theoretical work, for instance to structural defects, intermediate phases formed before final crystallization, and thermochemical calculations.

plc

#### CHEMICAL ABSTRACTS

(Mineralogical and Geological Chemistry)

During 1966, 5633 papers (not including books) were abstracted in Sec. 25, a decrease of 3.1% from 1965. It remains uncertain whether this decrease for the second straight year reflects a real decrease in the amount published.

Table 1 shows that the improvement noted for 1965 in speed of abstracting was maintained in 1966. Table 2 shows the distribution of papers from the leading countries. There was a considerable decrease in papers abstracted from the USSR. It is uncertain whether this reflects a real decrease in the number of papers published.

Table 1 - Year of abstract compared to Issue Year, 1966  
(by percentage of total)

Total no. of abstracts	1966	1965	1964	1963	1962
	5633	5816	6297	5256	4509
<u>Dated</u>					
1. same year	36.7	35.1	29.1	20.5	28.7
2. 1 yr. later	48.7	47.6	44.8	49.6	47.8
3. 2 yrs. later	11.9	12.6	17.0	14.3	16.2
4. 3 yrs. later	2.5	2.8	5.3	4.8	5.1
5. >3 yrs. later	0.9	1.9	3.8	1.8	2.2
(1 + 2)	84.7	82.7	73.9	79.1	76.5

Table 2 - Country of origin of papers abstracted in Sec. 25  
(leading countries)

	<u>1966</u>		<u>1965</u>		<u>1964</u>	
	No.	%	No.	%	No.	%
USSR	2150	38.2	2651	45.6	2921	46.4
USA	1025	18.2	934	16.1	1062	16.9
Germany (W&E)	284	5.0	249	4.3	255	4.0
Japan	170	3.0	206	3.6	222	3.5
France	190	3.4	193	3.3	170	2.7
England	198	3.5	177	3.0	169	2.7
India	126	2.2	149	2.6	113	1.8
Czechoslovakia	155	2.8	136	2.3	222	3.5
Australia	131	2.3	136	2.3	107	1.7
Canada	130	2.3	121	2.1	107	1.7
Italy	109	1.9	100	1.7	74	1.2
All others	965	17.2	764	13.1	872	13.9
Total	5633	100.0	5816	100.0	6297	100.0

Thanks are again due to the abstractors who made this service possible and to the excellent staff at Columbus. As always, we welcome advice and criticism from those who use Sec. 25 (which will be Sec. 53 in 1967). No letters were received in 1966.

Michael Fleischer  
Gerald M. Friedman  
Editors, Sec. 25

## ION EXCHANGE COLUMN

### New Zealand Geochemical Group

The New Zealand Geochemical Group was founded in August, 1965, and by October, 1966 had grown to 71 members, including three in the U. K., one in South Africa, and two in the United States. Several meetings have been held and five Newsletters published. The Newsletter (edited by Mr. S. H. Wilson, Institute of Nuclear Sciences, Private Bag, Lower Hutt, New Zealand) is issued to keep members of the group in touch with New Zealand geochemistry. General articles of current interest, reports of meetings, and personal items are among the topics included.

### University of Wisconsin

The Department of Geology, University of Wisconsin, Madison, has initiated a new geological oceanography program with the recent appointment of J. Robert Moore to its staff. Some of the research already underway includes detailed compositional studies, both chemical and mineralogical, of high energy marine sands. At-sea operations in European waters are scheduled for 1967, and expanded course offerings, principally in marine geology, are also being introduced.

## PERSONAL

Dr. Thomas F. Bates, who has been on leave of absence for the past two years to serve as Science Advisor of the Department of the Interior, has been named Vice-President for Planning at Pennsylvania State University, effective June 1.

Announcing the appointment at University Park, Pennsylvania, in March, Dr. Eric A. Walker, president of the University, said that Dr. Bates in this new position will have responsibility for devising plans and procedures by which the University can reach its long term goals. He will take possible new programs and plans suggested by the faculty and others and try to determine what resources must be committed and what schedules must be followed to insure success. On the basis of these studies, a decision will be made on whether or not it is in the best interests of the University and the Commonwealth to proceed, or whether other goals should take precedence.

Dr. Bates, who will continue also as professor of mineralogy, has been Director of the Institute for Science and Engineering, Assistant to the Vice President for Research, and Assistant Dean of the Graduate School at the University.

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## CALENDAR

August

28 - 31 The Clay Minerals Society, fourth meeting, and North American Clay Minerals Conference, 16th meeting, Colorado School of Mines, Golden, Colorado. (Guest speakers: Alfred Steiner, New Zealand Geological Survey; Professor Feodor V. Chukhrov, Acad. of Sci., USSR.) (L. G. Schultz, Clay Minerals Conference, U.S. Geological Survey, Bldg. 25, Federal Center, Denver, Colo. 80224).

28 - International Meeting of Geologists, Kingston, Ontario. (Geological Association of Canada, Queens University, Kingston, Ontario, Canada.)

Sept. 3

International Association on Genesis of Ore Deposits, Yugoslav Association on Genesis of Ore Deposits, USSR Academy of Science, Society of Economic Geologists Symposium on origin, evolution, and control of ore-forming fluids, Belgrade, Yugoslavia (Yugoslav Assoc. on Genesis of Ore Deposits, Box 227, Belgrade, Yugoslavia.)

25 - International Union of Geodesy and Geophysics, International Association of Volcanology. Meetings of the latter in Zurich, Switzerland.

Oct. 7 Sessions on physical volcanology, upper mantle, and earthquake forecasting. Details through National Committees (Robert O. Fournier, Geologic Division, U.S. Geological Survey, 345 Middlefield Road, Menlo Park, California 94024 for U.S.A.) Excursions to Ries Basin and Germany (Prof. Dr. W. v. Engelhardt, Mineralogisches Institut, der Universitat Tubingen, Tubingen, W. Germany), Swiss Alps (Prof. Dr. Ernst Niggli, Mineralogisch-petrographisches Institut, der Universitat Bern, 6 Sahlistrasse, 3012 Bern, Switzerland), and geothermal area of Tuscany, Italy (Prof. Giorgio Marinelli, Istituto di Mineralogia, 53 via Santa Maria, Pisa, Italia.)

1 - 14 Field symposium on the granites and basement of NE Brazil and their comparison with those of W. Africa; Recife, Brazil. (J. Lombard, 12 rue de Bourgogne, Paris 7, France.)

Nov.

20 - 22 Geological Society of America, Annual Meeting, New Orleans, La. (GSA Headquarters, 231 E. 46th St., New York, N. Y.)

April Symposium on residual and lateritic ore deposits, Dakar, Senegal.

Paul L. Cloke  
Editor

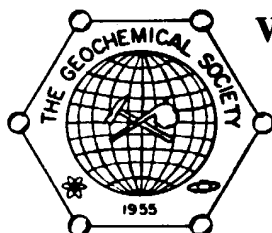
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# GEOCHEMISTRY INTERNATIONAL

Vol. 3

1966

No. 1



Translated Articles from **ГЕОХИМИЯ** 1966

and other selected geochemical translations

Published by

**THE GEOCHEMICAL SOCIETY**

with the aid of a grant from the National Science Foundation

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