The Geochemical News

NUMBER 40 May 1964

THE GEOCHEMICAL SOCIETY COUNCIL MEETINGS

New York, N. Y., November 18, 20, 1963

The Council met at 2:00 p.m., November 18, and 12 noon, November 20, at the Hotel Commodore.

Present, November 18: F. R. Boyd, C. Wayne Burnham, Michael Fleischer, Robert M. Garrels, Herbert E. Hawkes, Jr., Denis M. Shaw, Raymond Siever, Leon Silver, David B. Stewart, James B. Thompson, Jr., George Tunell (presiding), and P. A. Witherspoon

Present, November 20: F. R. Boyd, C. Wayne Burnham, Michael Fleischer (presiding), Herbert E. Hawkes, Jr., Brian Mason, Denis M. Shaw, Sol R. Silverman, David B. Stewart, James B. Thompson, Jr., George Tunell, and Paul A. Witherspoon

REPORTS OF OFFICERS

Secretary's Report. The Society's membership has continued its gradual increase in 1963. There were 107 new members this year, compared to 165 in 1962. Thirty per cent of the new members were from countries other than the United States and this percentage is about the same as that for the Society as a whole. The 107 new members with 23 resignations and 13 deaths bring the total membership to 2,269. A new member from Argentina brings the number of countries represented by the membership to 67.

The Society's procedure for handling the clerical aspects of its business has not developed in proportion to its rapid growth to over 2,000 members in eight years. Both the secretary and the treasurer maintain a card file of members, but the addressograph file through which the Society's mail is sent is located at the offices of the Geological Society of America in New York. The American Geological Institute also maintains an addressograph file of the Society's members. There are thus four different membership files in four different offices. The task of keeping all these reading the same is cumbersome, expensive, and almost inevitably inefficient.To compound the confusion, the Society's addressograph file at the offices of the GSA is maintained as a part of the main GSA file. An arrangement has recently been made where the GSA notifies the secretary of the Geochemical Society if a change is made in the addressograph file, but this has not always been the case in the past and lack of such procedure caused many of the errors which appeared in the 1962 Directory.

It is suggested that the Society thoroughly overhaul its clerical operations. In particular it is suggested that an addressograph and a single card file with information on dues be maintained in the same office. It is definitely not suggested that this become an additional duty of the treasurer, but rather that the Council find a way to contract the clerical work of the Society to some outside organization. Possibly an arrangement of this sort could be made with the American Geological Institute.

F. R. Boyd
Secretary

The Council agreed that the Society's addressograph service should be transferred from the GSA to the AGI if practical, but the treasurer felt that records on dues should be maintained by the treasurer's office and should not be transferred to an outside agency, even if such an arrangement should prove possible. The secretary moved that the Executive Committee be given power to negotiate an arrangement with AGI with regard to the addressograph service, and to make recommendations as to how the clerical operations of the Society might be streamlined. The motion was passed.

Treasurer's Report. The detailed accounting for the Society's funds will be made following the close of the current calendar year; hence, the following is a general statement of the financial situation at the present time.

The total receipts credited to the Operating Fund so far this year amount, in round numbers, to $39,650, of which $5,636 was from dues and subscriptions to the Geochemical News. Income from dues represents payment by all but 106 currently active members of the Society. Approximately $2,566 of the remaining receipts represent overhead on NSF grants for the translation of GEOKHIMIYA and accrued interest on savings; the balance represents partial payments on NSF grants.

Total expenditures from the Operating Fund since January 1, 1963, amount to $22,629, of which $3,268 was charged to general operating expenses, $500 to AGI dues, $2,979 to publication of the Geochemical News and the MEMBERSHIP LIST, and the remainder to the translation of GEOKHIMIYA. By year's end an estimated additional $2,800--$2,900 will be expended or encumbered for purposes not related to the translations program; hence, the balance in permanent Society funds is expected to be about the same as at the beginning of the year.

The Publication Fund has received $267 in royalties from sales of RESEARCHES IN GEOCHEMISTRY since January 1st. This sum, plus accrued interest, brings the current fund balance to about $2,731.

In summary, by the end of the year approximately 30 cents of each dues dollar will have been spent for the MEMBERSHIP LIST, 20 cents for dues to AGI, 20 cents for the executive editor's stipend, and 20 cents for the Geochemical News. The remaining 10 cents will not cover even the cost of postage for the year; consequently, the Society continues to be virtually dependent on overhead from NSF grants for a large part of its operating funds.

C. Wayne Burnham
Treasurer

Secretarial expenses for committee members and editors were discussed and it was agreed that if the expenses were incurred in administering NSF grants, they should be charged to the grants.

REPORTS OF EDITORS

The Geochemical News. During 1963, the Geochemical Society has published, as of this date, four numbers of the Geochemical News:

No. 36	April
No. 37	June
No. 38	August
No. 39	November

A fifth issue is planned for December, which will carry news and reports of the Annual Meeting.

The year was characterized by a shortage of news and secretarial assistance, but these are problems that have been with us in years past. Readers have contributed generously to the Ion Exchange column, and a surprising percentage of donations to Sand-in-the-Gears-of-Learning Department has been entirely printable. However, brief articles or regional reports of a lead nature have not been forthcoming. It is hoped that members of the Council might give some thought to this matter and send their suggestions to me.

In this first year as editor, I have found the position an interesting and rewarding one. The generous advice of the former editor, E. Wm. Heinrich, and cooperation of the secretary of the Society, F. R. Boyd, have greatly facilitated assumption of this responsibility.

William C. Kelly
Editor
The Geochemical News

The Council felt that the only realistic way to deal with the perennial shortage of newsworthy items for the Geochemical News was to reduce the number of issues to four per year. Such action would provide a much needed reduction for the Society's already strained budget. It was decided that the list of "Publications Received," which is occasionally published in the News, should be deleted. The value of publishing a list of papers to be presented at the Annual Meeting was also questioned inasmuch as most members receive the GSA program. Nevertheless, the Council felt that the Society should publish a notice of its own program.

Book Translations. For report, see page 7.

Earl Ingerson, Book Translations Editor, also submitted a report on his recent trip to Czechoslovakia, where he acted as a representative of the Geochemical Society at the Symposium on the Problems of the Origin of Post-Magmatic Ore Deposition. A copy of this report appears on page 12.

Geokhimiya Translation. For report, see page 8.

The Council discussed various aspects of the GEOKHIMIYA translation program at considerable length. Stewart said he did not believe that the National Science Foundation would continue to support a cover-to-cover translation of GEOKHIMIYA indefinitely and that some selectivity would be desirable. He suggested combining a selected fifty per cent of the papers from GEOKHIMIYA with an equal volume of papers from Japanese, Chinese, and other journals under a single cover with the title "Geochemistry in Translation." However, the Council felt that it was desirable to continue the title "Geochemistry" with only papers from GEOKHIMIYA, even though it might not be practical to continue "Geochemistry" as a complete, cover-to-cover translation of GEOKHIMIYA.

A motion was passed that the Council was not opposed to comprehensive translation but selective publication of papers from GEOKHIMIYA. Stewart agreed to initiate a program of obtaining translations of important geochemical papers originally published in languages other than Russian and to negotiate with AGI for their publication in the International Geology Review. He was urged to seek advice from knowledgeable persons in the choice of such papers.

Stewart was also authorized to negotiate with AGI an arrangement whereby AGI would take over promotion, publishing, and storing back issues of the GEOKHIMIYA translation. The Society would retain administrative control over the journal and continue to be responsible for the translating and editing.

REPORTS OF COMMITTEES

Auditing Committee. For report, see page 10.

Program Committee. For report, see page 10.

There was much favorable comment on the grouping of papers dealing with various aspects of Adirondack geology in a single session. This session was more widely attended than any other geochemistry session of recent memory. The program chairman was authorized to explore the possibility of a symposium on "Zirconology," meaning all aspects of the mineralogy and geochemistry of zircons.

The chairman of the Organic Geochemistry Group described a proposed symposium on the organic geochemistry of the sea, which his group wishes to hold in Miami next November. The Council approved this proposed seminar.

Standards Committee. For report, see page 11.

Education Committee. The Education Committee has been most active this year although it submitted no formal report at the time of the Council meeting. Arrangements have been made with AGI for a "Geochemical Society Educational Series," with papers aimed at acquainting high-school science teachers with geochemical subject matter. The committee has prepared four such papers, but AGI has not moved promptly in publishing them. The president, Michael Fleischer, agreed to try to persuade officials of AGI to take immediate action in the matter.

Membership Committee. No report.

Nominating Committee. The committee -- consisting of W. R. Eckelmann (chairman), K. H. Wedepohl, G. O. Arrenius, P. L. Cloke, D. R. Wones, and I. Friedman -- submitted the following slate, which was endorsed by the Council:

President: Brian H. Mason
Vice-President: Julian R. Goldsmith
Secretary: Edward C. T. Chao
Treasurer: C. Wayne Burnham
Councilors: Heinrich D. Holland, and Kiguma J. Murata

Terms of the secretary and the treasurer are now three years, but it was informally agreed at Burnham's request that the Council would accept his resignation, if tendered, after one year. This arrangement will have the double advantage of obtaining Burnham's services for the Society for an additional year and of staggering the terms of the treasurer and the secretary. To have a new secretary and a new treasurer take office at the same time would engender a great deal of confusion.

Tellers Committee. The committee, consisting of E. N. Hinrichs (chairman), H. C. Granger, and T. G. Lovering, reported that Michael Fleischer (for president), Brian H. Mason (for vice-president) and W. S. Fyfe and S. R. Silverman (for councilors) were elected by large majorities. There was a tie in the vote for executive editor of Geochimica et Cosmochimica Acta with F. F. Koczy and J. A. S. Adams each receiving 456 votes. Only about 30 members indicated a clear vote on the amendments to the By-laws by writing in the margin of the ballot; because of a typographical error, spaces for votes on the amendments were omitted. Many members took advantage of the opportunity for write-in nominations. About 125 names were submitted and these suggestions will be forwarded to the 1964 Nominating Committee.

The Council discussed possible ways of resolving the tie in the vote for executive editor. It was decided that another ballot would be the fairest way to deal with the problem. The secretary was instructed to send out such a ballot immediately. The ballot is to carry the names of Koczy and Adams with a statement that there was a tie in the count of the September-October ballot and a further statement urging all members to vote. An additional benefit of the special ballot will be that the two amendments to the By-laws can again be put to the membership for vote.

OTHER BUSINESS

Report of AGI Representative. Paul A. Witherspoon, the Society's delegate in the House of Representatives of the American Geological Institute, reported briefly on the work of that group. Witherspoon has been named chairman of an AGI committee to study the problem of "professionalism" in geology, or licensing of consulting geologists. Many research workers dislike the idea of licensing but professionalism has been a problem in the petroleum industry.

Directory Editor. A new Directory will be published in the summer of 1964 and the secretary suggested that the Council appoint an editor to help him with its publication. The Council appointed Werner Schreyer of the Mineralogisches Institut in Kiel as Directory editor.

Status of Petroleum Geochemistry in the USSR. A group of U. S. members of the Organic Geochemistry Group recently made a tour of the USSR and they intend to publish a collection of papers entitled CURRENT STATUS OF PETROLEUM GEOCHEMISTRY IN THE USSR with Sol R. Silverman as editor. Funds are needed to help pay the publication costs of the book and the Council agreed that the Organic Group could borrow what it needs from the RESEARCHES IN GEOCHEMISTRY fund with the understanding that the amount borrowed would be returned from sales of the book.

Councilor from Outside North America. The Council discussed a proposal made to the secretary by John A. S. Adams, that the term of one of the six councilors be changed from three years to one year and that this position be filled annually by a visiting geochemist from outside North America. The Council agreed that the idea had merit but decided that the best arrangement would be to invite annually a distinguished, visiting geochemist to attend the Council meetings as an adviser. The influence of such a man as an adviser would be fully as great as if he were a councilor with a vote. To enhance the effectiveness of the arrangement, the Council instructed the secretary to include the "adviser" in all Council correspondence for a year prior to the time he would attend a Council meeting. The Council invited Dr. Karl H. Wedepohl of the Mineralogisches-Petrographisches Institut in Göttingen to attend its meetings next November in Miami. Wedepohl will be visiting at McMaster University next fall.

Peace Corps. The recruiting division of the Peace Corps has requested permission to include a brochure in the next mailing of the Geochemical News. The Council agreed that they should be granted permission to use the Society's addressograph (at cost) as they have in the past, but that to include a Peace Corps brochure with an issue of the News would constitute too strong an endorsement of an organization that is to some degree political.

International Geochemical Association. Professor Carl W. Correns discussed the possibility of forming an International Geochemical Association, patterned after the International Mineralogical Association, with several individuals on the Council. The matter was considered briefly by the Council but no action was taken.

Tax Status. The Internal Revenue Service recently approved the Society's petition to be declared a tax-exempt organization. This action follows some years of negotiations. The Society is indebted to the Carnegie Institution of Washington for making available the services of their attorney, Marshall Hornblower. Hornblower re-drafted the Society's "Articles of Incorporation" and for the past two years he has represented the Society in dealing with the Internal Revenue Service.

F. R. Boyd, Secretary

THE GEOCHEMICAL SOCIETY ANNUAL BUSINESS MEETING

New York, N. Y., November 19, 1963

The meeting was called to order at 11:15 a.m. by President George Tunell with approximately 60 members present. The secretary summarized his report and that of the Tellers Committee. He reported the Council's decision to have a run-off ballot for executive editor of Geochimica et Cosmochimica Acta because of the tie vote between F. F. Koczy and J. A. S. Adams. The treasurer reviewed the financial standing of the Society. David B. Stewart, editor of the GEOKHIMIYA translation, reported improvements in the administration of this journal and plans for expanding the journal's translation program to include selected papers from journals other than GEOKHIMIYA. Alvin Van Valkenburg described the work of the Standards Committee, carried out in cooperation with the National Bureau of Standards, the U. S. Geological Survey, and the Geological Survey of Canada.

The president opened the meeting to discussion from the floor. Michael Fleischer urged members to provide Stewart with assistance and advice in selecting papers for translation.

There were no further questions or comments and the president adjourned the meeting.

F. R. Boyd, Secretary

REPORT ON BOOK TRANSLATIONS

as of November 15, 1962

Already Published, or Otherwise Available

Korzhinsky, D. S. Physicochemical basis of the analysis of the paragenesis of minerals. Consultants Bureau, 227 W. 17th St., New York 11, N. Y. 142 pp., 1959. $7.50

Vinogradov, A. P. The geochemistry of rare and dispersed chemical elements in soils. Consultants Bureau, 227 W. 17th St., New York 11, N. Y. 209 pp., 1959. $9.50

Ginzburg, I. I. Principles of geochemical prospecting. Pergamon Press, New York, N. Y. or London, Eng. Translation done by funds from three private companies, supplied to the Book Translations editor.

Beus, A. A. Mineralogy and geochemistry of beryllium. Original, 148 pp., 1956. W. H. Freeman and Co., San Francisco. 161 pp., 1962. $7.50

Abdulaev, KH. M. Dikes and postmagmatic mineralization. 232 pp., 1957. Positive microfilm copies available at $11.00 each from the American Geological Institute, 1444 N St. N. W., Washington, D. C. 20005.

Translated and Edited, but not yet Published

Krasnikov, V. I. (ed.) Geochemical prospecting for ore deposits in the USSR. 407 pp., 1957. This book was supposed to have been published by Pergamon Press in the spring of 1963; I have just written to Pergamon, asking for a statement on its current status and an estimate of the date when it will appear, but I have not heard from them.

Ermakov, N. P. Investigations of mineral-forming solutions. 200 pp., 1950, (Plus two supplements which bring the test up to date). This book is in the same status as the Krasnikov and I inquired about it of Pergamon in the same letter.

Sindeeva, N. D. Mineralogy and types of deposits of selenium and tellurium. 255 pp., 1959. I have just returned the final proof to Interscience Publishers in New York, and publication can be expected within a few weeks.

Vlasov, K. A. et al. Lovozero alkalic massif. 623 pp., 1960. Translated under joint sponsorship with the British Department of Scientific and Industrial Research. Translation of this monograph has been complete for some time, and it is in press with Oliver and Boyd of London. It should have appeared before this time, but I have not yet seen a copy of it.

Ivanov, V. V. et al. Thallium: its geochemistry and mineralogy, genetic types of deposits, and geochemical provinces. 156 pp., 1960. This manuscript has been edited by Dr. D. W. Pierce of the Atomic Energy Commission, but no publisher has yet been selected. Suggestions would be welcome.

Translation Complete, but Manuscripts in Various Stages of Editing

Andreev, P. F. et al. Transformations of petroleum in nature. Leningrad. 416 pp., 1958. About one third of this manuscript was edited by Professor Barghoorn of Harvard, after which he decided he did not have time to finish it. The remainder of the manuscript has been submitted to Sol Silverman, and a recent letter indicates that he hopes to have the editing complete before the GSA meeting.

Beus, A. A. Geochemistry of beryllium and genetic types of beryllium deposits. 330 pp., 1960. This book will be published as a companion volume to the first book by Beus on the geochemistry of beryllium, by W. H. Freeman and Co.. A recent letter to Freeman from Linc Page indicates that he has very nearly completed editing the manuscript and will send it to Freeman in the near future.

Strakhov, N. M. (ed.) Types of dolomite rock and their genesis. 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. The original plan was to have Ronald Press of New York publish this volume, but the editor, Dr. Chave of Lehigh, has indicated that he thinks it is not worth publishing in toto. He is doing the final stages of editing, after which I have asked him to send the manuscript to me, and I plan to have independent evaluations made by two or three carbonate experts before a final decision is made as to what should be done with the translation.

There is enough money left in the book translation fund to do one or two other books, depending on size. The one by L. V. Tauson, Geochemistry of rare elements in granitoids, has been tentatively selected by the committee, and I have just received a letter from Harold James in which he recommends translation and publication of a volume by E. I. Sokolova, 1962, Physicochemical studies of sedimentary iron and manganese ores and their enclosing rocks. I have asked Harold to get a copy of the book and bring it to the New York meetings, together with his recommendation.

If the Society is to do these two books, the translation funds for books will be just about expended. If we decide not to do them, or not to do one of them, we should select another volume; and suggestions from the Council would be welcome.

Earl Ingerson
Book Translations Editor

REPORT ON THE GEOKHIMIYA TRANSLATION PROJECT

Brief Summary. Record high sales of current issues and total sales revenue were set during the year, more than justifying the use of subcontracted services to handle subscription matters. The translation time lag was shortened slightly. Costs continue to rise, and storage of back issues remains a problem. The continuance of cover-to-cover translation should be critically reviewed.

Current Status of the Translation. Issue 12, that completes the 1962 volume, has been mailed to subscribers. Issue 1 of the 1963 volume has been printed and will be mailed after a short interval has passed in which subscribers may notify us if they want to drop their subscriptions at the end of the 1962 volume. Issues 2-7 are in various stages of production beyond translation; issue 10 has been received in this country. A translated issue is produced every three weeks at present. The time lag of ten months will be reduced markedly in the near future, and preparation of the proposal to NSF for the 1964 volume should begin very soon.

Circulation. A total of 412 copies of issue 1 of the 1963 volume will be mailed to subscribers, even though only 18 have completed payment for this volume. This is the highest circulation ever for a volume in production. Experience with 312 subscribers to the 1962 volume showed that only one domestic and ten foreign subscribers failed to complete payment before the mailing of ten issues after their subscription was automatically renewed. It is

anticipated that this number will be reduced when letters inquiring about non-receipt of the last issues are received. Consequently, a policy of automatic subscription renewal has been adopted.

Sales of the 1962 volume (405 copies) were the highest ever for a volume in production and yielded more than $6,320 for a new record. Very substantial sales of pre-1962 volumes ($4,048) were recorded as former subscribers were contacted and completed their sets and new subscribers took advantage of substantial discounts on complete sets. The sale of back volumes at substantial discounts ($5 vs $10-$20) fulfills The Geochemical Society's commitment to put data in the hands of users, generates a more stable subscription base when subscribers possess full sets, and relieves an expensive and severe storage problem. As of November 1st, sales of back volumes during the past year, of which I am aware, were: 1956, 51 volumes, $267; 1957, 52 volumes, $272; 1958, 48 volumes, $260; 1959, 52 volumes, $510; 1960, 108 volumes, $1,230; 1961, 125 volumes, $1509. Included in the above are 43 complete sets sold in single transactions. I have no records of revenue produced by sales handled by Professor Ingerson. Total sales of which I am aware of the past four volumes are: 1959, 389 volumes; 1960, 369 volumes; 1961, 387 volumes; 1962, 405 volumes.

The cost of Scripta Technica facilities to handle subscription matters obviously has been justified by the greatly increased subscription list and subscription revenue. Many of the problems involved in establishing subscription records, billing procedures, subscriber servicing, etc. have now been solved, and even greater achievements and services are anticipated during the publication of the 1963 issues.

Financial Condition. On August 14th the National Science Foundation issued grant GN-108 for $29,445 for the partial support of the 1963 volume of GEOCHEMISTRY. This amount plus expected subscription revenue will yield the estimated total cost of the 1963 volume, which will not exceed $35,167, including a maximum of $3,197 overhead for the Society. It is unlikely that substantial revenue will be generated by back-issue sales during the grant period, and that which is received will be accounted for against the costs of the 1962 volume in agreement with a policy approved by NSF.

Significant Development during the Past Year. The entire inventory of back issues has now been consolidated at the Society's subcontractor, Scripta Technica, Inc. The press run of 600 copies of current translations has been adequate and will be continued. The confusion attending the change in subscription price last year has deterred price increases this year, but higher subscription prices may well be warranted next year. The cost of production is estimated to increase about 3 per cent for the 1963 volume, and no doubt will increase again next year. Now that the subscription potential has almost been realized, steps must be taken to strike a better balance between revenue and subsidy.

A new feature of GEOCHEMISTRY will be a listing of translations of articles of geochemical interest produced by the entire AGI translation program (Doklady, IGR, Sovetskaya Geologiya, Izvestiya Geologic series, plus selected Japanese and Chinese articles and other articles in other languages). The contents of GEOCHEMISTRY will appear in one or more AGI translated publications.

Special Thanks. The editor wishes to thank Academician A. P. Vinogradov, editor-in-chief of GEOKHIMIYA, for his continued cooperation in supplying us with original illustrations from GEOKHIMIYA.

The publishers of Geochimica et Cosmochimica Acta, Pergamon Press, have continued to publish the contents of GEOCHEMISTRY, as has the editor of Geochemical News. I am grateful for this cooperation in publicizing our translation, and it has helped circulation measurably. The American Geological

Institute has continued its assistance with mailing lists and other supporting activities which have been very helpful.

Messrs. Winston and Gakner of Scripta Technica have continued to be most helpful in the day-to-day operation of this project.

D. B. Stewart
Editor, GEOCHEMISTRY

REPORT OF THE AUDITING COMMITTEE

To the President of The Geochemical Society:

The Auditing Committee has examined the accounts of the Treasurer of The Geochemical Society for the period of August 1, 1962 to December 31, 1962 and has verified the accuracy of the amounts as shown in his report.

Respectfully submitted,

/s/ Thomas F. Bates, Chairman

/s/ John D. Ridge

/s/ Robert F. Schmalz

April 20, 1963

REPORT OF THE PROGRAM COMMITTEE

The following is my report as chairman of the Program Committee for The Geochemical Society for the 1963 annual meetings at New York City.

My first activity as chairman of this committee was to join with Dr. F. R. Boyd in participating in the meetings of the General Program Committee of the Geological Society in New York City on August 6, 1963. At this time we found that sixty-five papers had been submitted for presentation in the geochemistry sections and that two half-day sessions had been allotted by the General Program Committee. After discussions with the representatives of the mineralogy and petrology group and with the General Committee chairman, Dr. F. Van Houten, we found it possible to arrange a third half-day session. For these three sessions a total of thirty-seven papers were assigned. Of the remaining papers, five were eliminated by direct approach to the authors of multiple papers, requesting condensation and/or combination of their work. Eight were assigned for reading by title, and approximately fifteen were transferred to various other sections, principally petrology and mineralogy.

The large number of papers submitted reflects the increasing number of requests for the opportunity to present papers which have appeared in all sections of the program of the Geological Society. The limitation of the total number of sessions permitted per day, as well as the limit of three days for the Geological Society meetings, is going to create an increasing pressure for reconsidering the program policy of The Geochemical Society. At the present

time we find that by general acknowledgment the programs are quite crowded. We had a minimum of twelve papers in each of the sessions this last year, allowing only ten-minute papers with five minutes for possible discussion. The increasing number of laboratory workers in the field of geochemistry seems to require an increasing opportunity for presentation of their experimental results. As a consequence, we certainly can anticipate continued crowding of the sessions, and it will become desirable for the Society to decide what steps should be taken: 1) to either expand the total number of sections which can be arranged for a given meeting, or 2) to provide a reasonable and appropriate basis for greater selectivity of papers accepted for presentation at the annual meeting.

Inasmuch as this is my first year as chairman of the Program Committee, I am not yet prepared to recommend a policy, but I hope to sample opinion during the current year to give this some thought and in conjunction with discussions with the officers of the Society to attempt some new arrangements in the forthcoming program.

Leon T. Silver
Chairman

REPORT OF THE STANDARDS COMMITTEE

The Standards Committee -- consisting of Michael Fleischer, Felix Chayes, George Tilton, John Maxwell, Gunar Kullerud, Frank Schairer, Roy Clark, and A. Van Valkenburg -- held two meetings during the past year.

Discussions at these meetings were concerned with a renewed interest in geochemical standards by the National Bureau of Standards and the U. S. Geological Survey. At the present time, the Geological Survey is preparing about ten rock types for reference samples. The Standards Committee turned over to the Survey a 400-pound granite sample that will augment the Survey's program. Progress has been very slow on the preparation of both the limestone and the dolomite standards by the Bureau. The word now is these standards will probably be out sometime next spring.

The standard mica samples of K/A and Rb/Sr as prepared by Jagger, et al. of the University of Bern, Switzerland, are still available for those doing work in age determinations.

Dr. Th. Hugi, of the University of Bern, has sent to the Standards Committee a list of analyzed rocks and minerals that may be of interest to geochemists. It is hoped that this list will be published in the News sometime in the near future.

John Maxwell, who is our Canadian representative on the Standards Committee, reports that the Canadian Geological Survey will probably undertake a more active program in the preparation of reference samples. They are, at present, preparing a picrite rock sample that may be available sometime next year. Dr. Shaw, at McMaster University, is preparing a slate and a fresh scapolite-biotite hornblende-feldspar-pyrite rock that may be available for a reference standard.

A. Van Valkenburg
Chairman

USCOMM-NBS-DC

REPORT TO THE COUNCIL OF THE GEOCHEMICAL SOCIETY ON THE SYMPOSIUM HELD IN PRAGUE, CZECHOSLOVAKIA SEPTEMBER, 1963

As some of you know, I was invited by the Organizing Committee of the Symposium on Problems of the Origin of Post-Magmatic Ore Deposition to attend the Symposium to present a paper, to be chairman of the discussion session on pneumatolysis, and to be the official representative of The Geochemical Society at the Symposium. I did attend the Symposium with travel expenses defrayed by a grant from the National Science Foundation and presented a paper on the "Concept of a Separable Pneumatolytic Stage in Post-Magmatic Ore Formation."

The Organizing Committee had previously requested the Geochemical Society to be co-sponsors of the Symposium, which the Council at the November 1962 meeting, I believe, voted to do. This sponsorship was prominently mentioned in the preface of the proceedings volume and in the notices and programs of the Symposium. Apparently, it was appreciated very much by the Organizing Committee and by the participants of the Symposium because it was mentioned repreatedly from the rostrum, and the representative of the Society was invited to take place in the procession that was a part of the formal opening of the Symposium.

Apparently, also, the Symposium was well thought of by at least most of the participants because there was an overwhelming vote to have a similar Symposium in Belgrade in 1966 and to recommend that the Organizing Committee be turned into a more or less permanent organization, which would be affiliated with some international geological organization and continue to plan and conduct symposia on various aspects of the formation of ore deposits. A new Organizing Committee was elected to supervise the organization of the meeting in Belgrade, and the representative of the Society was elected as one of the two United States representatives on that committee. Dean Charles F. Park of Stanford University is the other member.

Permit me to remark parenthetically here that the feeling abroad is still very strong that The Geochemical Society is an international organization and that it should strengthen its operations abroad and its ties with other international organizations in the earth sciences. There is no doubt that the Society has sponsored or co-sponsored more international symposia and meetings in geochemistry during the 1960's than any other organization and perhaps more than all other organizations combined, if we eliminate symposia that are planned and conducted solely by the Russian Institutes of Earth Science in Moscow.

I am not convinced as to what form it should take, but I still feel very strongly that The Geochemical Society has a role to play in supporting and furthering the cause of geochemistry internationally; and I hope that the Council will discuss again very seriously whether the Society should play such a role and, if so, how this can be accomplished to the best advantage of all concerned.

Earl Ingerson

OUTCOME OF JANUARY BALLOT

Professor John A. S. Adams of Rice University won the special election for Executive Editor of Geochimica et Cosmochimica Acta. He will take office immediately, replacing Professor Harold C. Urey.

The two changes in the By-laws recommended by the Council, passed by large majorities. These changes provide that all members' dues are set at $3.00 per year and that members more than a year in arrears be dropped from the Society's mailing list. The amendments further provide official recognition for the Organic Geochemistry Group and a formal procedure for the formation of other special interest groups.

F. R. Boyd
Secretary

ORGANIC GEOCHEMISTRY GROUP

Minutes of Annual Meeting

Following a special OGG luncheon in the Hotel Commodore, New York City, the annual meeting of OGG was held at 1:15 p.m., November 18, 1963. John Hunt, chairman, presided.

The results of the election of officers for 1963-64 were announced by the secretary as follows:

Chairman: Raymond Siever

Chairman Elect: Irving A. Breger

Editor: William R. Hanson

Secretary: J. R. Vallentyne

The secretary made his report, noting the following growth in membership during the past year:

	USA	All Other Countries	Total
November 1962	201	96	297
November 1963	215	100	315

He also stated that OGG now had a fund of $63.39 from individual donations

to be used to sponsor memberships of persons living in countries with currency exchange restrictions. Nominations, with the consent of the nominee, should be sent to the secretary of OGG.

Richard D. McIver reported briefly on the Gordon Research Conference on "Origin of Petroleum" held at Tilton, New Hampshire, USA, Aug. 19-23, 1963. The Conference was chaired by Frederick D. Rossini and Harold M. Smith. Papers were presented on a variety of interests, and following this there was a panel discussion attempting to synthesize the new facts and ideas presented. McIver noted that while no revolutionary ideas were put forth, the breadth and depth of material presented did provide an extremely wide and informative picture of the current status of the problem.

Irving A. Breger reported on a conference held in London, England, on July 8-9, 1963, in connection with the International Union of Pure and Applied Chemistry. He summarized briefly the topics covered: chemical structure, enzymatic synthesis and transformations of lignin; nature of humic acids; the nature of organic matter in shales and coals; spectroscopy of lignin, etc. A total of nine papers was presented. These are to be sent to Geochimica et Cosmochimica Acta for publication as a group.

Warren Meinschein summarized the content of a symposium held at the University of Texas in October, 1963, honoring H. L. Lochte on the eve of his retirement. Papers by Oro, Breger, Meinschein, Hoering, and others were presented on the topic of "Organic Geochemistry and the Origin of Petroleum."

E. Eisma reported on the Organic Geochemistry Panel Meeting at the Sixth World Petroleum Congress at Frankfurt-am-Main, June 25, 1963. The topics presented were: radiation effects on hydrocarbons (Colombo, Denti, and Sironi); extractable organic substances in pelites and carbonate rocks of the Vienna basin (Buchta, Leutner,and Wieseneder); organic matter in shales (von Gaertner and Schmitz); organic geochemistry and formation of petroleum (Abelson); and extra-terrestrial hydrocarbons (Mueller). Eisma noted that Marcel Louis, chairman of the European branch of OGG, would shortly announce a meeting on organic geochemistry to be held in Paris, September 28-30, 1964, under the auspices of the European branch.

R. Siever reported that the next meeting of OGG would be held in Miami in autumn 1964 in conjunction with The Geological Society of America. It is tentatively planned to have a morning symposium on "Organic Geochemistry in the Sea" followed by a program of contributed papers in the afternoon. Siever requested that either he or Irving Breger be informed of suggestions as to possible speakers.

Under items of new business, Harold Smith informed the group that there was to be a symposium on the Geology of Fluids, January 26-27, 1964, in Texas with Noland, Erdman, Thode, and others participating. Peter Given outlined an American Conference on Coal Science to be held June 23-26, 1964, at Pennsylvania State University. This conference is to be confined to basic science and will cover a wide range of interests. He noted that it might be useful for OGG to act as an official sponsor of such meetings and that some thought should be given to this in the future. Following a suggestion by Breger, Siever agreed to communicate with the World Petroleum Congress re possible common interests, program speaker suggestions, etcetera.

The meeting closed with 28 present.

J. R. Vallentyne
Secretary

GEOCHEMISTRY IN AGI'S TRANSLATIONS PROGRAM

The literature of geochemistry in Russian is voluminous and important. The Geochemical Society has sponsored the cover-to-cover translation of GEOKHIMIYA starting with the volume for 1956 and continuing through the volume for 1963, and has had a number of books translated (listed in Geotimes volume VI, 13-14, 1962). Access to the Russian geochemical literature is also provided in large measure by the translations program of the American Geological Institute. The following describes the extent of geochemical coverage afforded by that program.

Geochemist Earl Ingerson was chairman of the AGI Advisory Committee on Translations from early 1959 to 1961 and is currently The Geochemical Society's liaison representative to that committee. The Geochemical Society is closely associated with AGI's Translations Committee. Committee members who are also members of The Geochemical Society include the present chairman, Herbert E. Hawkes, Jr., and five of the other eleven committee members: E. C. T. Chao, John M. Hunt, John Lemish, W. S. White, and Paul A. Witherspoon. The liaison representative to the committee from SEPM, J. J. W. Rogers, is also a member of The Geochemical Society.

AGI'S translation of the Doklady of the Academy of Science (published six times a year) includes all papers in geochemistry from that journal. In the first 18 issues published by AGI (volumes 124 through 141 of the Russian original) there appear 127 papers in geochemistry.

The principal medium of publications of the AGI translations program is International Geology Review. Any significant Russian paper in geochemistry not appearing in either GEOKHIMIYA or the Doklady AN SSSR can be, and many are being, published in English in IGR.

An analysis of the first five volumes of International Geology Review shows for volume 1 (1959), 5 geochemical papers; volume 2 (1960), 18 papers; volume 3 (1961), 22 papers; volume 4 (1962), 6 papers; and in the first eight issues of 1963, there have appeared seven papers of significant geochemical interest. It should be noted that any geochemistry papers originally appearing in either Sovetskaya Geologiya or Izvestiya Akademiya Nauk SSSR, Seriya Geologiya, which are not published in IGR, are available in English from AGI at fifteen cents translation page.

Through International Geology Review, the AGI Translations Office provides services to geochemists, which include the following: 1) screening of Russian publication notices and purchase of significant monographs, 2) book reviews, 3) listing of geologic contents of foreign journals (Russian, East European, and Chinese), and 4) cataloguing and giving notice of availability of pertinent translations from all sources.

With respect to the last, it is significant to note that the "Catalogue of Translations of Russian Papers in Geology, Solid-earth Geophysics and Related Sciences through 1961" (IGR special supplement volume 4, no. 10, pt. 2) lists 358 separate translations in geochemistry.

As a member society of the American Geological Institute, The Geochemical Society shares responsibilities in, and benefits from, the AGI translations program. AGI's program is intended to provide coverage that is complementary to The Geochemical Society's own coverage. Geochemists are urged to become more familiar with both programs and to give them their support.

Martin Russell, Managing Editor
AGI Technical Publications

CHEMICAL ABSTRACTS, SEC. 25 (MINERALOGICAL AND GEOLOGICAL CHEMISTRY) IN 1962 AND 1963

As has been customary, data on coverage and country of origin are given in Tables 1 and 2 below. Figures for 1962 and 1963 are not directly comparable with those for preceding years because in 1962 Chemical Abstracts reorganized its arrangement, changing from 50 sections plus subsections to 73 sections. This affected Sec. 25 in that many abstracts dealing with crystal structure now appear in Sec. 8; on the other hand, some papers on soils and on the atmosphere which formerly appeared in other sections are now in Sec. 25. The net effect has been a loss of about 200 abstracts a year.

This is the main cause of the decrease noted in 1962, the first in many years. It was also caused by growing backlogs; these were largely eliminated in 1963, accounting for the large increase. The speed of coverage improved despite this increase; it is hoped that we can hold these gains.

Table 2 shows the countries of origin of the papers abstracted. The percentage of Russian papers decreased slightly for the first time in many years. This was partly due to the clearing of large backlogs of papers from the USA and Japan.

We estimate that close to six thousand abstracts will be printed in 1964. As usual, more than half of these will be prepared by twenty-five or thirty abstracters. We always need more abstracters. We can also always use constructive criticism.

Michael Fleischer
Gerald M. Friedman
Editors, Section 25

Table 1. Year of Abstract Compared to Issue Year, Sec. 25

(by percentage of total)

		1963	1962	1961	1960	1959	1958
	Total no. of abstracts	5256	4509	4806	3764	3622	3069
1.	Dated same yr.	29.5	28.7	22.5	25.5	27.8	26.3
2.	Dated 1 yr. later	49.6	47.8	49.6	49.5	51.0	52.1
3.	Dated 2 yr. later	14.3	16.2	18.2	14.3	12.4	13.4
4.	Dated 3 yr. later	4.8	5.1	6.7	8.6	5.2	4.7
5.	Dated > 3 yr. later	1.8	2.2	3.0	2.1	3.6	3.5
	1 + 2	79.1	76.5	72.1	75.0	78.8	78.4

Table 2. Country of Origin of Papers Abstracted in Sec. 25.

(Leading Countries)

	1963		1962		1961	
	No.	%	No.	%	No.	%
USSR	2322	44.2	2168	48.1	2093	43.6
USA	970	18.5	620	13.8	749	15.6
Germany (West & East)	275	5.2	218	4.8	257	5.3
Japan	238	4.5	161	3.6	95	2.0
France	166	3.2	163	3.6	173	3.6
India	119	2.3	82	1.8	104	2.2
Australia	112	2.1	100	2.2	97	2.0
England	110	2.1	112	2.5	127	2.6
Czechoslovakia	100	1.9	77	1.7	38	0.8
Italy	79	1.5	64	1.4	66	1.4
Canada	76	1.4	105	2.3	124	2.6
Total all countries	5256		4509		4806	

BOOK REVIEWS

STRATIGRAPHY AND SEDIMENTATION, 2nd ed., by W. C. Krumbein and L. L. Sloss. 660 pages, 190 illustrations, 58 tables. W. H. Freeman and Company, San Francisco, Calif., 1963. $10.50.

A very complete revision of the 1951 edition of STRATIGRAPHY AND SEDIMENTATION having 497 pages, the text expresses a practical view of stratigraphy. It ably documents and integrates the important and relevant features of sedimentation and stratigraphy, stressing regional features of both. Included are the properties of sediments, sedimentary processes, and sedimentary environment along with the definition and principles of stratigraphy, both paleontologic and lithologic. Integration and interpretation is stressed by means of stratigraphic maps and stratigraphic analytical techniques, featuring the philosophy of both surface and subsurface regional analysis.

There is little in the book of interest to the "pure" geochemist whose interest never strays to sedimentary geology; conversely, there is a rich source of information for the low-temperature "wet" geochemist who seeks significance to his work in terms of earth history.

Louis I. Briggs

AN INTRODUCTION TO CLAY COLLOID CHEMISTRY, for Clay Technologists, Geologists, and Soil Scientists, by H. van Olphen. xvi + 301 pages, 39 figures, synopsis, 5 appendices. Interscience Publishers, New York, N. Y., 1963.

As the title implies, this volume is an introduction to its subject, which is, as succinctly stated by the author, "the effect of changes in fluid composition on the forces acting between suspended clay particles, and the consequences of such changes on the bulk physical and mechanical properties of the suspensions." The theoretical principles of the electric double layer theory and the particle interactions promoting flocculation and deflocculation are illustrated by numerous examples taken both from the realm of "science" and the realm of "industry." Particular attention is given to application of theory to the practical problems of stability control. A long chapter considers the interaction of clays and organic matter. The electrokinetic and electrochemical properties of clay suspensions are briefly summarized in the last chapter.

The format of the book suits its introductory purpose ideally, as the volume is divided into a concise twenty-nine page synopsis, a readable text purposely devoid of all but the most necessary mathematical formulae and proofs, and appendices with more rigorous derivations and computations. Thus it is not only useful to those who desire only a cursory survey and those looking for information on specific topics but is also useful to those desiring a sound, comprehensive introduction as a prelude to more intensive study. Perhaps the most valuable feature for many geochemists will be the extensive, up-to-date bibliographies, arranged by subject, following each chapter and in Appendix V.

David G. Nussmann

ROCK FORMING MINERALS, VOL. IV: FRAMEWORK SILICATES, by W. A. Deer, R. A. Howie, and J. Zussman. 435 + ix pages, 118 figures, 53 tables. John Wiley and Sons, Inc., New York, N. Y., 1963. $15.50.

This volume, the fourth of the projected five-volume series on the rock-forming minerals, describes the feldspar group (alkali feldspar, plagioclase, barium feldspar), silica minerals (quartz, tridymite, cristobalite), nepheline-kalsilite, petalite, leucite, sodalite group (sodalite, nosean, hauyne, helvite) cancrinite, scapolite, analcite, and the zeolite group. The format of the descriptions is the same as that utilized so effectively in the first three volumes; namely, introductory statement, structure, morphology and twinning, chemistry, optical and physical properties, distinguishing features, paragenesis, and references. Also for the zeolites, x-ray powder diffraction data are listed.

The quality of treatment and coverage matches that of the first three volumes, and the work represents an outstanding, authoritative and modern synthesis of the descriptive and genetic mineralogy of the major tectosilicates.

E. Wm. Heinrich

ION EXCHANGE COLUMN

SUMMER MSA MEETING

A summer meeting of the Mineralogical Society of America will be held in conjunction with the annual meeting of the American Crystallographic Association in Bozeman, Montana, July 26-31, 1964. Two days of scientific sessions and two or three days of field trips are being planned. Titles of papers to be presented must be received by the secretary by May 15th and abstracts by June 15th.

Detailed announcements have already been mailed to the members of the Mineralogical Society of America. Non-members are also invited to attend and present papers. Anyone wishing information about the meeting should write to George Switzer, Secretary, Mineralogical Society of America, U.S. National Museum, Washington, D. C. 20560.

CLAY MINERALS SOCIETY

The Clay Minerals Society, an outgrowth of the highly successful Clay Minerals Conference sponsored by the U.S. National Academy of Sciences for the past twelve years, was incorporated in the District of Columbia, the United States of America, and became officially operative by consent on October 1, 1963. Like its parent, the purpose of the Society is to promote the advancement of knowledge among individuals from the many diverse disciplines interested in clay mineral science and technology through meetings, discussions, and publications. Annual conferences provide a forum for the presentation and the discussion of current research, and the programs are arranged so that there are no concurrent sessions. Papers presented may be either a part of planned symposia or unsolicited contributions, and they may be published in the annual proceedings, "Clays and Clay Minerals," which is now in its twelfth volume. In the informal atmosphere of these conferences, an individual can attend the presentation of every paper and discuss clay problems with experts whose interests range from paper-making to highway engineering, from catalysis to shale stratigraphy, from mine dusts to grease manufacture, and from soils to pottery.

Through the cooperation of many governments, industries, and the National Science Foundation, outstanding clay specialists from overseas have attended every conference. These have included representatives of clay groups in Europe, Australia, Africa, and Japan.

Individuals interested in clay mineral science and technology are invited to apply for membership in the Society. Charter membership will be available until June 1, 1964, by payment of the annual dues of five dollars (U.S.). After this date membership will be available by payment of the annual dues of five dollars and an initiation fee of five dollars. Student membership is open at any time to individuals duly registered in residence at an institution of higher learning by payment of two dollars annual dues. By payment of an additional seven dollars with your annual membership dues, a copy of the proceedings of the annual conference will be sent to you, commencing with the Atlanta Conference, which will be available late in 1964. Subscription for the proceedings cannot be accepted separately at this reduced rate. Of course, copies of the proceedings of any of the conferences are available at regular prices.

Membership applications or additional information may be obtained from Dr. Richards A. Rowland, P. O. Box 481, Houston, Texas 77001, President; Dr. James W. Earley, P. O. Drawer 2038, Pittsburgh, Pa. 15230, Vice President; and Dr. Haydn H. Murray, 433 Broad Street, Elizabeth, N. J. 07207, Secretary-Treasurer.

The European Branch of the Organic Geochemistry Group of The Geochemical Society is organizing a meeting to be held in Paris on September 28, 29, and 30, 1964. The first day of the meeting will be devoted to a discussion of organic matter in rocks, and subjects for the next two days will be announced as soon as they are chosen. Inquiries or contributions for the program should be addressed, before April 1, to Dr. Marcel Louis, Institut Français du Pétrole, 1 and 4 Ave. de Bois Préau, Rueil-Malmaison (S. and O.), France.

CANNON IS SHIELD FOR NUCLEAR DETECTORS

The newest thing in shields for low-level radioactivity measurements is a surplus World War II U.S. Navy gun barrel. An eight-foot section of an eight-inch gun was recently installed at Isotopes, Inc. to be used as a shield for the low-level gas counters. These counters are used primarily for radiocarbon-dating work.

The gun barrel was obtained from the Supply Disposal Section of the U.S. Naval Gun Factory and had been used on cruiser-battleship class vessels. The piece weighs eight tons and is mounted in a "cradle" type stand. Two new internal gas proportional counters have been designed to take best advantage of the space inside the gun barrel. Each counter is surrounded by a Geiger ring operated in anti-coincidence to detect external radiation.

CALENDAR

June

15-18 American Society of Limnology and Oceanography, Miami, Florida

July

26-31 Mineralogical Society of America, Annual Meeting with American Crystallographic Association, Bozeman, Montana. (George Switzer, Secretary, MSA, U.S. National Museum, Washington, D. C.)

August

3-21 History of Geology Conference, Mackay School of Mines, University of Nevada, Reno, Nevada

CHANGE OF ADDRESS

There will be a new Membership Directory published this summer. Your name and address will be printed in the Directory exactly as shown on the envelope in which you received this copy of the News, unless you mail in this form. If you wish any changes made, mail the form to Wendell Cochran, American Geological Institute, 1444 N St. N.W., Washington, D.C. 20005, U.S.A. The deadline is August 1st. Any changes received after that date cannot be included in the Directory.

(Tear here)

Name (include title) .....

Old Address.....

.....

New Address.....

.....

(Tear here)

William C. Kelly
Editor

Department of Geology and Mineralogy
The University of Michigan
Ann Arbor, Michigan

GEOCHEMISTRY

A Translation of

ГЕОХИМИЯ

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FOR INFORMATION REGARDING SUBSCRIPTION TO GEOCHEMISTRY (ENGLISH TRANSLATION OF GEOKHIMIYA) AND FOR FREE SAMPLE COPY WRITE TO SCRIPTA TECHNICA, INC., 1000 VERMONT AVE., N.W., WASHINGTON 5, D.C.

SOME OF THE PAPERS SOON TO BE PUBLISHED IN

GEOCHIMICA ET COSMOCHIMICA ACTA

JOURNAL OF THE GEOCHEMICAL SOCIETY

February 1964

B. W. Evans: Fractionation of elements in the pelitic hornfelses of the Cashel-Lough Wheelaun intrusion, Connemara, Eire

J. R. Vallentyne: Biogeochemistry of organic matter - II. Thermal reaction kinetics and transformation products of amino compounds

Robert F. Mueller: Phase equilibria and the crystallization of chondritic meteorites

A. A. Smales, T. C. Hughes, D. Mapper, C. A. S. McInnes and R. K. Webster: The determination of rubidium and caesium in stony meteorites by neutron activation analysis and by mass spectrometry

S. R. Taylor and Maureen Sachs: Geochemical evidence for the origin of australites

Geochemical Notes:

R. H. Filby: The contents of several trace elements in some standard rock samples

Fredric D. Leipziger and Willam J. Croft: Geologic age determination by direct lead isotope analysis

Announcement

March 1964

L. H. Ahrens: Element distributions in igneous rocks-VII. A reconnaissance survey of the distribution of SiO_2 in granitic and basaltic rocks

Akimasa Masuda: Lead isotope composition in volcanic rocks of Japan

K. H. Wedepohl: Untersuchungen am Kupferschiefer in Nordwestdeutschland. Ein Beitrag zur Deutung der Genese bituminöser Sedimente

Royal R. Marshall and Jürg Feitknecht: Primitive lead from iron meteorites

Ernest E. Angino: The effects of non-hydrostatic pressures on radiation-damage thermoluminescence

C. D. Curtis: Applications of the crystal-field theory to the inclusion of trace transition elements in minerals during magnetic differentiation

Geochemical Note:

Guenther Karl Hoops: The nature of the insoluble residues remaining after the $HF-H_2SO_4$ acid decomposition (solution B) of rocks