

ASSOCIATION INTERNATIONALE POUR L'ETUDE DES ARGILES
INTERNATIONAL ASSOCIATION FOR THE STUDY OF CLAYS
INTERNATIONALE VEREINIGUNG ZUM STUDIUM DER TONE
МЕЖДУНАРОДНАЯ АССОЦИАЦИЯ ПО ИЗУЧЕНИЮ ГЛИН

AIPEA

NEWSLETTER

JANUARY 1974

NO. 9

1975 INTERNATIONAL CLAY CONFERENCE

The 1975 INTERNATIONAL CLAY CONFERENCE is to be held in Mexico City, Mexico July 16 - 23, 1975. The Conference is being organized by the Instituto de Geologia de la Universidad Nacional Autonoma de Mexico under the auspices of the Association International pour l'Etude des Argiles (AIPEA). Through its technical sessions, field trips before and after the meetings, publications and personal contacts, this Conference will promote, as its predecessors, world cooperation for the study of clays. The Clay Minerals Society (USA) will hold its national meeting concurrently with the International Clay Conference and its officers are cooperating closely with Prof. J. J. Fripiat, President of AIPEA, and the Organizing Committee to make this a very successful and profitable meeting.

Membership of the Conference will be open to all persons interested in clay science, soil science, ceramics and clay technology from all countries. The registration fee for the Conference will be about \$70 (US) for members and \$30 (US) for accompanying persons. Members will receive the Proceedings, detailed program, and book of abstracts.

SCIENTIFIC SESSIONS: The following technical sessions are planned:

1. Geology and diagenesis
2. Crystal chemistry and structures
3. Geochemistry, genesis, and synthesis
4. Colloidal properties
5. Surface chemistry
6. Analytical techniques
7. Interaction between clays and organic and inorganic pollutants

SPECIAL SYMPOSIA: The following symposia will be included:

- S-1 Kaolin
- S-2 Zeolites
- S-3 Clay mineralogy and soil studies
- S-4 Clay mineralogy and soil mechanics

FIELD TRIPS: The following field trips will be arranged before and after the Conference:

- F-1 Kaolin - with a possible connection with a trip to sedimentary deposits in the United States, arranged by The Clay Minerals Society.
- F-2 Hydrothermal kaolin
- F-3 Bentonites
- F-4 Sedimentary zeolites
- F-5 Clays
- F-6 Industry and research laboratories

Detailed program of field trips will be announced in the Second Circular.

LADIES PROGRAM: A special program for ladies accompanying members will be arranged and will include visits to well-known anthropological sites in Mexico.

PRESENTATION OF PAPERS: Manuscripts will only be accepted from registered members who have paid the registration fee. The Reviewing Committee reserves the right to accept papers and suggest minor changes. Abstracts of papers should reach the Organizing Committee before October 30, 1974. Detailed information on the submission of abstracts will be given in the Second Circular. Papers accepted for oral presentation at the Conference will be allowed 20 min. plus 10 min. for discussion.

LANGUAGES: English is recommended as the working language for the Conference. For the Proceedings, English, French, German, and Russian will be accepted but all papers must include an abstract in English.

ACCOMMODATIONS: Comfortable accommodations for members and their families will be available. Information concerning hotels and weather conditions will be included in the Second Circular. Some suitable facilities (hotel and transportation) will be made available within the limits of the financial possibilities to those young members of the international society who have collaborated or presented a paper. Regular members are encouraged to use the facilities provided by the Organizing Committee.

The official travel agency for the Conference is: Wagon-Lits Cook, Ave. Juarez 88, Mexico 1, D. F., Mexico.

EXHIBITS: Facilities will be available for technical exhibits and demonstrations. Detailed information will be given in the Second Circular.

PRELIMINARY REGISTRATION: The First Circular included a preliminary registration form which should have been returned before November 30, 1973 to the Organizing Committee. If you plan to attend the Conference but have not yet completed and returned the preliminary registration form, you should write immediately to: 1975 International Clay Conference
The Organizing Committee
c/o Instituto de Geologia
Universidad Nacional Autonoma de Mexico
Apartado Postal 70-296
Mexico 20, D. F.
Mexico

This will ensure that you are included in the mailing list for future circulars and make it possible for the Organizing Committee to have a better estimate of the number of participants in the specific sessions and field trips.

SECOND CIRCULAR: The Second Circular containing the program of the technical sessions, field trips, accommodations and registration form will be distributed no later than April 30, 1974.

The Organizing Committee sincerely welcomes all comments and suggestions related to the 1975 International Clay Conference from their international colleagues. All correspondence should be addressed as follows:

1975 International Clay Conference
The Organizing Committee
c/o Instituto de Geologia
Universidad Nacional Autonoma de Mexico
Apartado Postal 70-296
Mexico 20, D.F.
Mexico

PROGRESS REPORT: Dr. Liberto de Pablo, Secretary General, Organizing Committee (Mexico), reports that the return of preliminary registration forms up to Dec. 17, 1973 indicate that over 180 scientists plan to participate in the meetings. Of this number 168 plan to present papers in the technical sessions and approximately 76 papers will be offered for the symposia.

Considerable interest was shown in the field trips as 159 persons indicated they desired to participate in one or more of the excursions. Field Trip No. 1--Kaolins with possible visit to sedimentary deposits in U.S.--was requested by 46 registrants.

The technical sessions as well as exhibitions and some of the luncheons or dinners will be held in Hotel Camino Real.

A.I.P.E.A.
1975 INTERNATIONAL CLAY CONFERENCE

A.I.P.E.A. COUNCIL

President:

Professor J. J. Fripiat
Laboratoire de Physico-Chimie Minérale
42 de Croylaan
3030 Heverlée, Belgique

Past President:

Professor F. V. Chukhrov
IGEM, Academy of Sciences
Staromonety 35
Moscow Zh 17, Soviet Union

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D-8050 Freising-Weißenstephan
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Warszawa, Poland

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1, rue Blessig
67 Strasbourg, France

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Glen Osmond, South Australia

Professor Fernando Veniale
Istituto di Mineralogia, Petrografia
e Geochimica, Università
via Bassi, 4
Pavia, Italy

Professor J. L. Martín-Vivaldi
Departamento de Cristalografía y
Mineralogía, Facultad de Ciencias
Sección de Geología, Ciudad Universidad
Madrid-3, Spain

ORGANIZING COMMITTEE (MEXICO)

| | | | |
|-------------------|---|---------|--|
| Chairman | Diego A. Córdoba | Members | Héctor Alonso Nicolás Aguilera Octavio Cano Juan A. Careaga Marcos de Teresa Fausto García Jerjes Pantoja Manuel Patino Rubén Pesquera Javier Garfias Jacobó Gómez Robert Hanson Daniel Resendiz |
| Secretary General | Liberto de Pablo | | |
| Advisers | Hans Fetter José F. Herrán Juan B. Puig Roberto Olvera Guillermo P. Salas Enrique Tamez Lorenzo Torres Isabal | | |

The Local Committee as regards the Clay Minerals Society consists of Dr. Richards A. Rowland of the Baroid Division of National Lead Industries, Inc. in Houston, Texas, Dr. Liberto de Pablo of the Institute of Geology in the University of Mexico, and Dr. Edward C. Jonas, Dept. of Geology, University of Texas, Austin, Texas. Dr. Rowland, a past president of CMS, is chairman.

1972 INTERNATIONAL CLAY CONFERENCE PROCEEDINGS NOW AVAILABLE

Dr. J. M. Serratosa, Editor-in-Chief of the 1972 International Clay Conference Proceedings, states that the National Research Council of Spain is the publisher and distributor of the 1972 International Clay Conference Proceedings. Orders should be addressed to:

Division de Ciencias C.S.I.C.
Serrano, 113
Madrid-6, Spain

The publication price is \$45.00 (US). Participants in the Conference should receive their copies (gratis) in the mail soon. The Proceedings publication has been beautifully printed and is one that you will be proud to have on your bookshelf.

The members of AIPEA are very much indebted to Dr. Serratosa and his associates for their dedicated service in the preparation and publication of the Proceedings. The Editorial Committee for the Proceedings consisted of:

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| R. E. Grim | George Brown |
| W. D. Johns | Jean Chaussidon |
| J. L. Ahlrichs | B. B. Zvyagin |
| J. A. Rauseil-Colom | A. Hidalgo |

A. Sanchez, Assistant Editor

RECENT DEATHS

Professor Dr. J. L. Martín-Vivaldi, Departamento de Cristalografía y Mineralogía, Ciudad Universitaria, Madrid, Spain, died unexpectedly the evening of January 6, 1974 of an apparent heart attack. Professor Martín-Vivaldi was Secretary General for the 1972 International Clay Conference and was responsible for directing the work of the Organizing Committee which arranged for the excellent facilities, meetings, publications, excursions, and cultural events enjoyed by the participants in that Conference.

He was active in clay mineralogy throughout his professional career and was personally acquainted with a large number of clay mineralogists through his participation in international clay conferences (CIPEA and AIPEA) as well as in many national clay meetings. He was a leader in promoting interest in clay research and served as Secretary of the Spanish Clay Group (Grupo Español de Minerales de la Arcilla) when it was organized in 1959. He served as first President when this Group became an independent society (Sociedad Española de Arcillas) in 1969.

His warm and friendly smile and his enthusiastic comments and discussions will be sorely missed by his many friends and associates. Perhaps it may be appropriate to consider that the personal contacts, the scientific exchanges, the Proceedings, a glimpse of the culture and people of Spain which we experienced during the 1972 International Clay Conference in Madrid are a part of the generous legacy bequeathed to us by Professor Martín-Vivaldi.

A more complete memorial statement will be published in the next Newsletter.

Dr. Jacques Mering died on March 29, 1973 in Paris after being ill for many months. Dr. Mering was active in the early days of CIPEA and continued to be active in AIPEA as well as several national clay groups. He made notable contributions to clay mineralogy through his outstanding work on x-ray diffraction by disordered layer silicates, his many electron-optical studies of clay minerals with A. Oberlin and other collaborators, and his very careful studies of swelling of bi-ionic smectites with R. Glaser. He also carried out significant work on graphite. He was head of the recently established C.N.R.S. Laboratory for the Study of Imperfect Crystalline Solids in Orleans. His contributions to the development of clay mineralogy over the last 20 years go far beyond the papers bearing his name. He was always very generous in the help he gave to other investigators in his laboratory and many others far afield.

On November 22, 1973 many of his friends and colleagues met to consider his many scientific contributions and to honor his memory. A report of this meeting follows on the next page.

The Société Française de Minéralogie et de Cristallographie, the Groupe Français des Argiles, the Groupe Français d'Etudes des Carbones, and the Association Française de Cristallographie met jointly at the Centre national de la Recherche scientifique, 15, Quai Anatole France, Paris on November 22, 1973 to honor the memory of Jacques Mering. This meeting, under the presidency of Jean Wyart, was consecrated to the scientific works of Jacques Mering. The following contributions were presented:

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| The scientific thought of Jacques Mering | by Jean Wyart |
| The scientific methods | by André Guinier |
| Structure and reactivity of clays | by Georges Pedro |
| Structural aspects of graphitization | by Jacques Maire |
| Actual studies and perspectives | by Denise Tchoubar et Lucien Gatineau |

CALENDAR OF MEETINGS

March 13-15, 1974 GROUPE EUROPEËNS DES ARGILES, Second Meeting, Strasbourg, France. (Dr. Hélène Paquet, Institut de Géologie, 1 Rue Blessig, 67084-Strasbourg, France)

March 28-29, 1974 CLAY MINERALS GROUP, Spring Meeting, University of Southampton, Southampton, England. Subject: Quantitative Determination of the Composition of Mineral Mixtures. (Mr. J. A. Bain, Secretary, Institute of Geological Sciences, 64-78 Grays Inn Road, London WC1X 8NG, England)

Sept. 3-11, 1974 INTERNATIONAL GEOLOGICAL CORRELATION PROGRAM: CORRELATION OF KAOLIN GENESIS AND AGE, Symposium and Field Trip in South West England and Brittany area of France. (Dr. E. C. Freshney, Institute of Geological Sciences, Hoopern House, 101 Pennsylvania Road, Exeter, England)

Sept. 18-19, 1974 SOUTH AFRICAN CERAMIC SOCIETY, Annual Meeting, Johannesburg, South Africa. Symposium: Recent and Future Developments in the Ceramics Industry. (Dr. E. R. Schmidt, Secretary, South African Ceramic Society, c/o N.B.R.I., P.O. Box 395, Pretoria, South Africa)

Oct. 7-10, 1974 CLAY MINERALS SOCIETY (USA), Annual Meeting, Cleveland, Ohio. (Dr. John Hower, Local Chairman, Dept. of Geology, Case Western Reserve University, Cleveland, Ohio 44106 USA).

NEWS OF NATIONAL CLAY GROUPS

GROUPE BELGE DES ARGILES

The composition of the new committee of the Belgian Clay Group elected in December 1972 is:

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|-------------------------|-----------------------------------|
| President: | Prof. J. B. Uytterhoeven (Leuven) |
| Secretary-treasurer: | Dr. J. Thorez (Liège) |
| Members of the Council: | Prof. De Coninck (Gent) |
| | M. Della Faille |
| | M. Fourneau |
| | Dr. P. Rouxhet (Heverlée) |
| | Prof. R. Wollast (Brussel) |

M. M. Lepingle was named Honorary Administrator. The new address of the Secretary is:

Dr. J. Thorez
Institut de Minéralogie
9, place du 20 Août
B-4000, Liège, Belgique

6th CONFERENCE ON CLAY MINERALOGY AND PETROLOGY IN CZECHOSLOVAKIA, OCT. 2-5, 1973

The Conference on Clay Mineralogy and Petrology is held every third year, with the participation of experts from the whole of Czechoslovakia as well as foreign guests. This was the sixth conference (the first one being held in 1958) and was sponsored jointly by the Faculty of Science, Charles University in Prague, the Group for Clay Mineralogy and Petrology of the Czechoslovak Society

of Mineralogy and Geology, and by the Institute of Raw Materials in Kutná Hora. The Organizing Committee consisted of: Ing. Z. Borovec, Dr. A. Cimbáliková, Prof. Dr. J. Konta (Chairman), Dr. K. Melka, Asst. Prof. Ing. J. Neužil, Dr. J. Petříček, M. Reichelt, B.Sc., Dr. J. Šindelář (Secretary), Dr. J. Šrámek and Ing. J. Vtělenský.

The Conference was held at the Faculty of Science, Charles University, Albertov 6, Praha 2 (Oct. 2, 1973) and in Kutná Hora (Oct. 3-5, 1973). A program guidebook containing abstracts of lectures (44 pages) and a list of participants with addresses was published by the Faculty of Science, Charles University, prior to the Conference. Manuscripts of the lectures are in press and are to appear in 1974 as Proceedings of the 6th Conference on Clay Mineralogy and Petrology in the Acta Universitatis Carolinae, series Geologica, Praha (approximately 400 pages).

Professor Dr. Udo Schwertmann, Secretary General of AIPEA, addressed the Conference in its opening session. The first three days were primarily devoted to lectures and discussions while the fourth day was devoted to excursions. Of the 36 communications presented, three dealt with the crystallography and crystal chemistry of phyllosilicates, three papers were concerned with the method of quantitative determination of minerals in natural or artificial mixtures, three papers described the interlayer materials in phyllosilicates, 14 papers covered the mineralogy, petrology or geochemistry of residual rocks and sediments and their conditions of genesis; the results of a number of these papers were aimed at the practical use of clay raw materials especially in the ceramic industry. Fissure clay minerals of hydrothermal origin were the subject of two papers; two papers dealt with the clay minerals derived from volcano-clastic deposits, eight papers covered soil studies, and one paper was on curative mud. An exhibition of papers published by Czechoslovak authors from 1969 to 1973 as well as their experimental materials (clay minerals and argillaceous rocks) was arranged in the Conference Hall.

The technical part of the Conference was complemented by a cultural program. The Conference participants visited the Vlašský Courtyard in Kutná Hora on the afternoon of Oct. 2 where they saw historical buildings of the Vlašský Courtyard, including medieval mints of Czech kings where well-known silver Czech groschen were coined from the ore mined in the Kutná Hora mines and refined in smelting works. The participants saw the original way in which groschen were coined in medieval times and each received a hand-coined copy of a Czech groschen as a souvenir. Other events included an evening dinner party and an excursion to the "Hrádek" Municipal Museum where exhibits showing the medieval way of mining in Kutná Hora and an exposition of minerals and rocks of the Kutná Hora district were seen. An evening sight-seeing tour through the gothic cathedral of St. Barbara—a pearl of East Bohemian architecture—was a highlight of the cultural program.

Several laboratories of the Institute of Raw Materials in Kutná Hora were visited on the 4th day of the Conference; the study of clay raw materials for different practical purposes is under way in these laboratories. A short visit to the Kostnice historical charnel-house in Sedleč followed. The participants then visited two deposits of kaolinite claystones of Cretaceous age in Brník and Vyšehořovice situated between Kutná Hora and Prague. The raw material, used mainly as refractory white-fired ceramic material, is mined in open pits of a length of several hundred meters. Because of their megascopic appearance these sediments are sometimes mentioned in literature as "flint clays", yet they are free of any siliceous material which is characteristic of sedimentary cherts. These materials were described and discussed by Ing. J. Franče, Geoindustria.

There were 122 participants in the 6th Conference including 15 guests from abroad as follows: Bulgaria (2), France (2), the German Democratic Republic (2), the German Federal Republic (1), Hungary (1), Italy (1), Poland (4), U.S.S.R. (1), and Yugoslavia (1).

The 7th Conference will be held in May 1976.

--Jiří Konta
Department of Petrology
Charles University
Albertov 6
Praha 2, Czechoslovakia

GROUPE FRANÇAIS DES ARGILES

The Groupe français des Argiles holds two meetings per year in April and November. The Groupe français des Argiles publishes a journal, the Bulletin du Groupe français des Argiles, which has two issues per year. These issues contain communications presented at the two annual meetings as well as other communications that have been submitted to the Editorial Board.

The latest issue of the Bulletin, t. XXV, fasc. 2, 1973, had the theme "Organic matter--clay bonding".

Persons who wish to subscribe for an abonnement to the Bulletin du Groupe français des Argiles (30 FF for two issues) are invited to write to Dr. Michel Robert, C.N.R.A., Laboratoire des Sols, Route de Saint-Cyr, 78000-Versailles, France.

Officers of Groupe français des Argiles are:

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|---|---|
| President: Georges Pedro C.N.R.A. Laboratoire des Sols Route de Saint-Cyr 78000-Versailles, France | Vice-President: Raymond Wey E.S.C.M. Laboratoire de Chimie Minérale 3, Rue Alfred Werner 68200-Mulhouse, France |
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Secretaires:

| | | |
|---|--|--|
| Michel Robert (Trésorerie-Administration) C.N.R.A. Laboratoire des Sols Route de Saint-Cyr 78000-Versailles, France | Hélène Paquet (Publication) Institut de Géologie 1, Rue Blessig 67084-Strasbourg Cedex France | Jeannine Berrier (Secrétaire adjointe) C.N.R.A. Laboratoire des Sols Route de Saint-Cyr 78000-Versailles, France |
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GERMAN CLAY AND CLAY MINERALS GROUP

The German Clays and Clay Minerals Group met in Regensburg October 26-27, 1973. The main purpose of the meeting was the discussion of the results of a special research program on clay mineralogy sponsored by the Deutsche Forschungsgemeinschaft. Twenty-two papers were presented covering among others the following general subjects:

- Processing and technological behavior of clays
- Clay mineral formation and transformation in nature
- Surface chemistry and catalytic properties
- Chemical, structural, and textural analysis of clays

Following the termination of the research program in 1974 the main results of the project will be summarized in a special publication.

--H. v. Reichenbach, Secretary

CLAY MINERALS GROUP OF GREAT BRITAIN AND IRELAND

The British Clay Minerals Group (founded in 1947) is one of three constituent groups of the Mineralogical Society of Great Britain and Ireland that cater for specialist interests in mineralogy--the other two relate to Applied Mineralogy and Geochemistry. Membership of the Group entails full membership of the Society and payment of the annual subscription of 9 Pounds (\$22) entitles each member to receive five issues (one an index) of Mineralogical Abstracts, four of Mineralogical Magazine and two of the Group's own journal, Clay Minerals. News and information about the activities of the Group appear in the Mineralogical Society Bulletin which is distributed quarterly. The Society has also published a successful series of monographs dealing mainly with clays and clay minerals; the most recent, "The Clay Mineralogy of British Sediments" and "The Electron-Optical Investigation of Clays" are soon to be followed by volumes covering infrared absorption spectroscopy and the chemistry of clays.

The Clay Minerals Group normally meets twice a year, the Spring meeting usually being held outside London. Joint meetings with other societies are common since clay investigations infringe on many other disciplines. At a joint meeting with the British Society of Soil Science in April 1973 on "Soil-Clay Mineralogy" an introductory lecture was given by Professor J. P. Quirk on soil clays and oxides and their surface characteristics. Papers were then presented on the value of scanning electron microscopy and electron probe microanalysis, and the pedological significance of interstratified expanding clay minerals, the weathering of chlorite, and clay mineral formation from serpentinite and gabbros.

A joint two-day meeting with the British Ceramic Society in December 1973 covered aspects of the composition, structure and surface properties of clays. The program included reviews dealing with X-ray diffraction and infrared spectroscopy of clays as well as papers on ion beam thinning, electron microscope microprobe analysis, electron spin resonance and Mössbauer spectroscopy in addition to contributions on the mineralogy and properties of fireclays, ball clays and china clay. Several papers examined the effects of surface active agents on the behavior of clay suspensions, their

mechanism of adsorption, and the influence of external factors such as pH. The application of research results to ceramics technology, e.g. in the modification of green strength and casting behavior, is an important feature of some of the contributions.

The group is responsible for organizing the 1974 Spring meeting of the parent Society. This will be held at the University of Southampton on 28-29 March 1974 and the subject for discussion will be the Quantitative Determination of the Composition of Mineral Mixtures.

Although members of the Group reside in over 40 countries, approximately half the current membership of 302 are in Britain. The journal Clay Minerals, which is now in its 26th year of publication, accepts papers, technical notes and letters from non-members of the Group and many foreign scientists have made valuable contributions in its pages.

The current Chairman and Secretary of the Group are, respectively, Dr. R. C. Mackenzie, Macaulay Institute for Soil Research, Craigiebuckler, Aberdeen AB9 2QJ, Scotland, and Mr. J. A. Bain, Institute of Geological Sciences, 64-78 Grays Inn Road, London WC1X 8NG, England.

--J. A. Bain, Secretary

ITALIAN GROUP OF A.I.P.E.A.

An International Seminar on CLAY MINERALOGY AND CERAMIC PROCESSES AND PRODUCTS was held in Milan, Italy September 12-14, 1973. The Seminar was organized by the Italian Group of A.I.P.E.A. in cooperation with the ASSICERAM (Associazione Italiana Ceramica), and under the auspices of the USA-Italy Cooperative Science Program (sponsored by the Consiglio Nazionale delle Ricerche of Italy, and the National Science Foundation of the USA). Coordinators for the Seminar were F. Veniale (Italy) and G. W. Brindley (USA). The aim of the Seminar was to discuss the advances and developments made during recent years in the field of clay mineralogy and in the study of the thermal behavior of clays and individual clay minerals, and to integrate them with ceramic technology.

Distinguished experts in clay mineralogy and ceramic technology from the USA (G. W. Brindley, R. E. Grim, P. Chuka, H. Murray, G. Phelps, W. O. Williamson) and from Europe (A. Baudran - France, J. Korta - Czechoslovakia, and E. Galan Huertos - Spain) presented invitational lectures; other contributions were presented by Italian and Spanish participants.

The Seminar was concerned with main areas of study involved in the raw materials, processing and properties of clay ceramic products. Three general lectures on mineralogy, structure and composition of clay minerals as related to ceramics were delivered. Five papers were given on thermal behavior of clay minerals and mixtures of clay materials; four papers discussed clay-water interactions and texture of pre-fired clay bodies as related to methods of preparation; three papers considered properties of products as related to industrial and technological processes. One paper described Spanish ceramic clays; a monograph on the occurrences of ceramic clays in Italy was published by the organizers of the Seminar.

About thirty Italian observers were present as well as nationals from other countries, including S. P. Latapie (France), A. Heydemann (Germany), P. Duran, J. Espinosa and J. M. Martin-Pozas (Spain) and J. L. White (USA). The Proceedings (including the contributions to the discussions) and the Monograph "Occurrences of Ceramic Clays in Italy" will be published in two special issues of the Bulletin LA CERAMICA during the first third of 1974.

A forthcoming meeting organized by the Italian Group of A.I.P.E.A. will be the Tavola Rotonda STANDARDIZATION OF CLAY PREPARATION FOR X-RAY DIFFRACTOMETRIC ANALYSIS to be held in Palermo (Sicily) c/o Istituto Mineralogia-Petrografia-Universita, via Archirafi 36 (information can be obtained from Prof. P. Ferla at this address).

--Fernando Veniale, President

CLAY SCIENCE SOCIETY OF JAPAN

Activities in clay research in Japan were last reported in the Newsletter of May 1968. Topics of symposia held at the general annual meetings since 1968 are as follows: 12th meeting (1968) at Hokkaido University: "Clay Minerals Originated from Volcanic Ash"; 13th meeting (1969) at Hall of Japan Plate Glass Company: (a) "Properties and Utilization of Clay-Organic Complexes", and (b) "Crucibles for the Glass Industry and Their Raw Materials"; 14th meeting (1970) at the Hall of the Chemical Society of Japan: "Clays and Thermal Analysis"; 15th meeting

(1971) at Akita University: "Properties and Utilization of Montmorillonitic Clays"; 16th meeting (1972) at Ehime University: "Clay Studies by Means of the Electron Microscope"; and 17th meeting (1973) at the Tokyo Institute of Technology: "Recent Progress and Results of Ways and Means for the Study on Minerals of Low Crystallinity".

Since the first meeting, the general annual meeting of the Society has been held under the auspices of other societies related to clay studies, such as geosciences, soil science, civil engineering, chemical, ceramic and petroleum industries, with an average of 200-300 participants and 50 papers from a wide scope of clay studies. Most of the papers read at the meetings have been printed in "Clay Science" or "Nendokagaku", both of which are the periodical journals of the Society, or in other scientific journals related to clay studies. Professor S. Iwao, Tokyo University is currently president of the Society. Correspondence related to the Clay Science Society of Japan should be addressed to: The Clay Science Society of Japan, c/o Sankyo Building, 3-20, Kandanshiki-cho, Chiyoda-ku, Tokyo, Japan.

The 1969 International Clay Conference was held in Tokyo; the results of the Conference were reported in the AIPEA Newsletter as well as in several journals.

The U.S.A.-Japan Cooperative Science Program sponsored the following symposia concerning clay studies: (a) "Non-crystalline Clay Minerals" (Japanese coordinator: Professor S. Aomine, Kyushu University; U.S.A. coordinator: H. van Olphen, Natl. Acad. Sci.) held in Fukuoka Sept. 11-19, 1969, immediately following the 1969 International Clay Conference, (b) "Clay-organic Complexes" (Japanese coordinator: Professor M. Koizumi, Osaka University; U.S.A. coordinator: G. W. Brindley, Pennsylvania State Univ.) held in Kyoto August 24-27, 1971, (c) "The Occurrence, Origin and Utilization of Zeolites in Sedimentary Rocks of the Circum-Pacific Region" (Japanese coordinator: Professor M. Koizumi, Osaka University) held at Nikko July 19-24, 1971. Invited participants from Japan, the U.S.A. and several other countries met and discussed the above problems.

The Japanese Ministry of Education has granted funds for scientific research to selected scientists every year in addition to the ordinary budget for universities and research institutes belonging to the Ministry of Education. These grants have been called "Grant-in-Aid for Science Research of the Ministry of Education" and grouped into several kinds. One is "Grant-in-Aid for Cooperative Research" which is to promote cooperation among scientists of a speciality branch in different universities. In 1973 a cooperative research project in the mineralogy branch (Chairman: Professor H. Shirozu, Kyushu University) was selected to receive a 3-year grant. It is entitled "Relation Between the Property and the Environmental Conditions for the Formation of Natural and Artificial Minerals". The Shirozu cooperative research project was divided into two research subgroups; one is concerned with the electron probe microanalysis and the other with interstratified clay minerals. The members of the clay mineral subgroup of the Shirozu cooperative research project, about 30 in number, have held seminars every year and discussed the property and origin of the interstratified clay minerals such as the combinations of chlorite--montmorillonite or montmorillonite--kaolin minerals. Some samples of each of the above interstratified clay minerals have been distributed to different workers and the results of the study have been discussed and will be published in an appropriate journal.

The research project "Kaolin Genesis and Age" was approved as one of the projects of the International Geological Correlation Program--IGCP (Chairman: Professor M. Kuzvart, C.S.S.R.). Professor H. Minato (Tokyo University) was elected to act as a Councilor and Japan is taking over a portion of the research project.

--Professor Toshio Sudo
Geological and Mineralogical Institute
Faculty of Science
Tokyo University of Education
Tokyo, Japan

CLAY ACTIVITIES IN THE NETHERLANDS

In The Netherlands clay mineralogy is not a separate field of research. It is always tied up with disciplines such as geology, sedimentology, geochemistry, soil chemistry, etc. Regarding clay activities in the Netherlands, the following meetings may be mentioned (chronologically):

June 25, 1973 Meeting organized by the Netherlands Soil Survey Institute. Dr. A. Breeuwsma discussed some results of a study of the chemical and mineralogical composition of the clay fraction of the marine sediments (from 0 to 4000 years old) in the northern part of the Netherlands. Special attention was paid to the

characterization (interstratification, charge density, chemical composition, etc.) of the main constituent of the clay fraction, namely the illite-smectite complex.

- Oct. 11, 1973 Meeting of the Mineralogical Division of the Netherlands Geological and Mining Society (KNGMG). Dr. Quakernaat (TNO, Delft) reported on the identification of swelling clay minerals in the sediment-petrological analysis.
- Nov. 27, 1973 Meeting of the Netherlands Soil Science Society. Three papers were of particular interest with regard to clay minerals. Dr. L. van den Plas (Agricultural Univ. Wageningen) discussed the use of petrochemical calculation methods in soil formation. The chemical analysis of the soil may be recalculated in terms of a (quantitative) normative mineralogical composition. This can provide a better understanding and detection of soil formation processes (e.g. formation of clay minerals) as was demonstrated by Dr. J. van Schuylenborgh (Univ. of Amsterdam) in a paper on soil formation in oxisols. Finally, Ing. N. van Breemen (Agricultural Univ. Wageningen) made a contribution on chemical equilibria in soils, with special attention to the buffering phenomena (pH-stat, chemo-stat). It was shown that pH values calculated for aqueous dispersions of clay minerals at given P_{CO_2} correspond well with pH values found in soils that are rich in these minerals.

--Dr. A. Breeuwsm
Netherlands Soil Survey Institute
11, Marijkeweg
P.O.B. 98
Wageningen, The Netherlands

NORDIC SOCIETY FOR CLAY RESEARCH

The Nordic Society for Clay Research was constituted on May 16, 1973 from the 25 year old Swedish Society for Clay Research. Representatives from all the member countries, Denmark, Finland, Iceland, Norway and Sweden were present at the constitutional meeting. This was held in Stockholm and was arranged as a Nordic clay day. On the program was a presentation of the clay research in the different countries.

The idea of a Nordic Clay Society has been discussed from time to time. The impetus this time was the decision to coordinate the West-European clay societies by electing a committee with representatives from the national clay groups. A common representation of the Norden countries was considered as most appropriate. Thus the step from a Swedish to a Nordic Clay Society was easy to take and the reaction among clay people seems to be most positive.

The board of the Swedish Clay Society was to serve until a new board with representatives from all countries could be elected. Initially Dr. Ann Marie Byström-Brusewitz, Geological Survey of Sweden, Fack, 104 05 Stockholm 50, served as president and Arvid Jacobsson, Geological Institute, University of Stockholm, Kungstengsgatan 45, 113 86 Stockholm, as secretary.

On November 20, 1973 the Society held its first meeting after the constitutional meeting in May 1973. A new board was elected with representatives from the five member countries Denmark, Finland, Iceland, Norway and Sweden. The board consisted of the following:

| | |
|--|--|
| Chairman: Ann Marie Byström-Brusewitz representative for Sweden (proxy Sven Snäll) | Representatives: |
| | Denmark: Poul Graff-Petersen (proxy Jan Bondam) |
| | Finland: Kalevi Punakivi (proxy Raimo Uusinoka) |
| Secretary: Tom Lundgren Geotechnical Institute | Norway: Ivan Th Rosenqvist (proxy Per Jørgensen) |
| | Iceland: Hrefna Kristmannsdóttir (proxy vacant) |
| Treasurer: Erk Burton Ceramics Consultant | |

The scientific part of the meeting had the following program:

Prof. H. Harder, Sedimentpetrographisches Inst., Göttingen
"Clay mineral formation at surface temperatures"

Lic. agro. S. Storgaard-Jørgensen, Kgl Veterinaer og Landbohøjskole, Copenhagen
"Experimental studies on the reaction between silicate minerals and o-diphenols and its relation to mineral reactions in nature"

Fil. lic. Raimo Uusinoka, Inst. of Water Research, Helsinki
"Clay minerals and chemical weathering in fracture zones in the Precambrian bedrock of Finland (preliminary notes of a recent study)"

Tekn. Dr. Gunnar Jacks, Dept. of Land Improvement and Drainage, Royal Inst. of Technology, Stockholm
"Chemistry of some ground waters in silicate rocks"

A discussion followed each paper.

--Ann Marie Byström-Brusewitz

ROMANIAN GROUP FOR CLAY STUDY

The First Working Assembly of the Romanian Group for Clay Study took place May 18, 1973 in Bucharest, bringing together specialists from geological institutes, ceramic and refractory industries, pedology and agriculture, building materials research institutes, petroleum research institutes, prospecting enterprises, hydrotechnical studies institutes and from university centers.

The aim of this Assembly was to discuss and coordinate research activities of different laboratories in problem areas such as: inventory of clay deposits and clay ores, collaboration on the operational details for the most used laboratory methods, Romanian clay standards, and some Romanian nomenclature problems.

For the above reasons three working committees were elected: one for methodological problems (chaired by Dr. Gh. Gâță), one for Romanian clay standards (chaired by Dr. Gh. Neacșu), and one for nomenclature problems which included the activity for inventory of clay ores (chaired by Dr. O. Anton).

The First National Clay Conference of the Romanian Group for Clay Study was held Nov. 29-30, 1973 in Bucharest. The Conference was chaired by Prof. Dr. V. Ianovici, first vice-president of the Geological Sciences Society, Dr. O. Anton, president of the Romanian Group for Clay Study, and Dr. V. Lăzărescu, general secretary of the Geological Sciences Society. This Conference provided the occasion for several specialized laboratories to present their scientific results. Papers on the following topics were presented: mineralogical studies of hydrothermal alteration phenomena in andesitic rocks, mineralogical and technological considerations on pyrophyllitic deposits in Meridional Carpathian range, mineralogical and geochemical studies of the "black" schists in the East Carpathian range, characterization of clay fractions and clay minerals from soils using X-ray diffraction patterns and specific surface area, problems of clayey materials used in water-tight zones of dams, thermal dilatation of clays in characterizing materials used in ceramic industry, physico-chemical properties of some Romanian clays in the preparation of drilling muds, mineralogical and geotechnical investigations in the glide regions and in the problems of land ameliorations, and K-Ar age determinations on clay minerals from some fault gouges.

A general paper on characterization of clay mineral structures by infrared spectroscopy and the technological implications of infrared studies was presented by Dr. O. Anton.

Dr. Jacques Thorez, secretary of the Belgian Clay Group, visited in Bucharest on the occasion of a scientific exchange between Bucharest and Liège and was invited to confer about problems of preparation and X-ray determination in clay mineralogy.

A working meeting for X-ray diffraction problems was established for the end of January 1974 in Bucharest.

--Dr. Gh. Neacșu, Secretary
Romanian Group for Clay Study
Geological Prospecting Enterprise
Str. Caransebes 1
Bucharest 8, Romania

More detailed information regarding the Romanian Group for Clay Study may be obtained by writing to Dr. Neacșu at the above address, or to Dr. O. Anton, Geological Institute, Sos. Kiselef 55, Bucharest, Romania.

SOUTH AFRICAN CERAMIC SOCIETY

The Society organized symposia for the years 1970, 1971, 1972 and 1973. These were very well attended and very successful. Well known speakers from overseas on these symposia programs included Prof. J. P. Roberts of Leeds University in 1971, M. H. W. H. West of B.C.R.A. and Messrs. H. Lingl and O. H. Cross from the U.S.A. in 1972, and Mr. H. Richardson of B.C.R.A. and Dr. H. J. Schmidt from Clausthal in 1973.

The theme for the 1974 Symposium is still tentative but it will most probably be "Recent and Future Developments in the Ceramics Industry". It will be held on the 18th and 19th of September 1974 in Johannesburg.

In addition to the symposia and the Annual General Meeting, visits to works and four evening meetings are planned. The theme for the 1973 Symposium Sept. 19-20, 1973 was "Properties and Testing". The following talks were also presented before the Society during 1973:

| | |
|----------------|---|
| April 26, 1973 | "History of Sanitaryware" by Mr. G. T. Forrester |
| May 24, 1973 | "Tile Adhesives" by Mr. J. F. Smidt |
| July 12, 1973 | "Ceramics Research in the C.S.I.R.O. Australia" by Mr. E. Tauber |
| Sept. 6, 1973 | "The Performance and Behavior of Blast Furnace Refractories" by H. Richardson |
| Nov. 15, 1973 | "Glass a Bright Future" by Dr. D. J. Lloyd |

--E. R. Schmidt, Secretary
South African Ceramic Society
c/o N.B.R.I.
P.O. Box 395
Pretoria, South Africa

THE CLAY MINERALS SOCIETY (USA)

The 22d Clay Minerals Conference was held Oct. 7-11, 1973 in Banff, Alberta, Canada. A total attendance of 175 was recorded with about 40 wives being present.

Prof. George Brindley outlined the many accomplishments of our late president, William F. Bradley, in the presentation of the society's Distinguished Member Award to Dr. Bradley's daughter, Mrs. John Nabors during the annual banquet. Robert R. Legget, retired from the National Research Council of Canada, was guest speaker at the banquet and he traced the Mackenzie River from north of Banff to its discharge into the Beaufort Sea, pointing out its growing importance to Northwest Canada.

Field trips in the Canadian Rockies were well attended. Of particular interest was the stop at Moraine Lake, which was formed when a landslide dammed the small valley stream. The rock forming the dam is not typical of landslide deposits, and one theory suggests that the rock was first deposited on a glacier, which moved the rock to its present site and left it there when the ice melted.

J. E. Gillott of the University of Calgary was chairman of the meeting, which was well organized and efficiently managed. It is impossible to mention all of the fine papers presented at the meeting so a few highlights will be abstracted.

The technical sessions were led off by D. H. Everett of the University of Bristol, who discussed the nature and origin of forces between small particles and their modification under different environments.

A symposium on clay fabric followed, with several papers that made use of X-ray, scanning electron microscope, electron microscope and electron diffraction patterns in determining fabric conditions. The term "fabric" was defined as 'the orientation of crystals relative to a reference plane' and was discussed in terms of structure and ordering of crystal deposition. Deposition by flocculation leads to a cardhouse structure in which a great deal of disorder results. One author noted a greater random orientation for illite than kaolinite and that floccs were generally made up of bundles of crystals with the cardhouse or edge-to-face configurations. Studies of undisturbed

samples can be confusing if sample preparation is not carefully controlled. This includes the method by which the sample is obtained and its subsequent treatment in the laboratory. Any stress that may be applied at any time will alter the natural fabric of the clay, thus affecting the final observations.

Walter D. Keller described a strikingly different type of kaolin found in mideastern Mexico. This particular clay is very dense and resists disintegration by hydraulic means. It was found in a stream where water flow had little or no effect on its physical stability.

L. M. Kozak and A. D. Scott described the effect of heating on the exchange rate of potassium by using $<50 \mu$ muscovite. Maximum effect was observed with samples heated to 800°C , in which case exchange took place in less than 2 weeks. At lower temperatures, exchange would require about 2 years.

A. J. Beltagy reported on the composition of recent marine sediments from the Gulf of St. Lawrence: deep-water samples contained twice as much chlorite as shallow-water samples, but illite and kaolinite concentrations did not vary significantly.

A. E. Foscolos and H. Kodama investigated clay minerals found in outcrops of the Lower Cretaceous Buckinghorse Formation (3,250 ft. thick): the upper and middle parts of the formation (2,250 ft.) fall within the middle stages of diagenesis, and the lower 1,000 ft. are believed to be in the beginning of late diagenesis.

John Hower and others have been involved in studies of diagenetic reactions in argillaceous sediments; among the major minerals they found was an illite/smectite intergrade that had undergone conversion from less than 20% to about 80% illite layers over the interval 6,000 - 12,000 ft. No change in illite layer concentration was noted at deeper depths. Argon⁴⁰ release from the samples was used in one study and the Argon⁴⁰ content markedly decreased with depth of burial. Conversely, K₂O content increased from 1.6% to 4.8% over the same depth range.

E. Booy and Paul Kerr studied slope failures in Wyoming; several landslides that disrupted highways were investigated and in most instances montmorillonite was found. However, it was almost entirely absent where 3 slides occurred, with illite and kaolinite being the predominant clays; thus, presence of montmorillonite is not essential for unstable conditions.

R. L. Handy and others reported on their findings concerning d₀₀₁-spacings of montmorillonite under pressures to 3,200 kg/cm²; spacings gradually decreased with pressure and the pressure required to attain a certain spacing greatly exceeded the swelling pressure of the clay. Usually 2 hydration states were found at any particular pressure. They also found that the cation associated with the clay greatly changed the results. This was particularly noted for the sodium and calcium clay; the sodium clay retained more water at comparable pressures.

The 23rd ANNUAL CLAY MINERALS CONFERENCE will be held October 7-10, 1974 at the Natural History Museum at the edge of the Case Western Reserve University, Cleveland, Ohio. The theme of the meeting will be: "Clay Minerals as Related to our Environment". Inquiries may be addressed to:

Dr. John Hower
Department of Geology
Case Western Reserve University
Cleveland, Ohio 44106

More information on the meeting will be sent out soon by Dr. Hower. Contributors will be invited to submit papers on the general theme or other topics.

Meeting places for the 1975, 1976 and 1977 Annual Clay Minerals Conferences are as follows:

1975 - Mexico City: This will be a joint meeting with AIPEA.

1976 - Corvallis, Oregon: This meeting will be during the summer vacation period at Oregon State University.

1977 - Kingston, Jamaica: This meeting will be in August and will give us a contrasting setting for field trips to visit bauxite deposits and other geological and soils features. Hotel and meeting facilities are excellent.

--Wayne F. Hower
Halliburton Services
Duncan, Oklahoma

GROUPES EUROPÉENS DES ARGILES

The second meeting of the European clay groups will be held in Strasbourg, France, March 13-15, 1974. The registration fee for membership is 60 FF. The meeting will involve two and one-half days for scientific sessions and one-half day for sight-seeing.

The meeting has no special theme and all communications relative to clays and clay minerals may be submitted. Authors who wish to present a communication are invited to send an abstract of about 300 words in french or english in duplicate before Dec. 1, 1973, if possible to:

Dr. Hélène Paquet, Institut de Géologie
1 Rue Blessig
67084-Strasbourg, France

For all additional information concerning this meeting, please write to Dr. Hélène Paquet.

REPORT ON FIELD TRIP TO FRENCH KAOLIN DEPOSITS, SEPT. 1973

As a part of the International Geological Correlation Program: "Correlation of Kaolin Genesis and Age", J. Esteoule and J. Esteoule-Choux led a field trip to various kaolin deposits in France during September 1973. The field trip began in Paris on Sept. 11, and ended near Valene (Drôme) on Sept. 14 and included the following participants:

Dr. J. Bondam (Denmark), Dr. C. M. Bristow (England), Dr. Castaldo and Mrs. Castaldo (Italy), Prof. E. M. El Shazly (Egypt), Prof. Dr. J. Esteoule and Dr. J. Esteoule-Choux (France), Dr. E. C. Freshney (England), Dr. and Mrs. P. L. Grubb (Rhodesia), Prof. Dr. H. Minato (Japan), Prof. Dr. H. M. Köster (Germany), Prof. Dr. J. L. Martin-Vivaldi (Spain), Prof. Dr. P. Y. Chen (Taiwan), Mr. G. Prevost and Prof. Dr. J. Prouvost (France).

The quarries visited were chosen in order to show deposits of different types:

1. Primary kaolins considered as hydrothermal
2. Kaolinitic and feldspathic sands
3. Kaolinitic sands
4. Kaolinitic clays

The trip began with a visit to the kaolinitic clay deposits of Provins, which were deposited during the Sparnacian in a system of lagoons in the southern part of the Bassin de Paris. The second day was devoted to primary kaolin deposits coming from hydrothermal alterations of two types of granite in the Massif Granitique des Colettes (N.W. of Massif Central). The third day at Fleury-sur-Loire, in the Saint-Pierre-le-Moutier (Nièvre) area, the participants visited quarries of feldspathic and kaolinitic sands, intercalated between the lower red marls (Keuper) and upper red clays (undated). The field trip ended in Hostun, in the Royans (Drôme), in a quarry of kaolinitic but not feldspathic sands (lower Eocene). These sands are backed against the Cretaceous wall which forms the western boundary of the Vercors.

INTERNATIONAL GEOLOGICAL CORRELATION PROGRAM: CORRELATION OF KAOLIN GENESIS AND AGE SYMPOSIUM AND FIELD TRIP IN SOUTH WEST ENGLAND AND BRITANNY SEPT. 3-11, 1974

It is proposed to hold a symposium on kaolin deposits at Exeter, England, Sept. 3-11, 1974. This will follow on from those held in Prague in 1968 and in Madrid in 1972. The following is the preliminary program:

| | |
|---------------------|---|
| Tuesday, Sept. 3 | Assembly in Newquay, Cornwall, connected by rail and air with London. |
| Wednesday, Sept. 4 | Field trip by bus to the main Cornish China Clay deposits at St. Austell. Refining plant and laboratories. Night stop at Newquay. |
| Thursday, Sept. 5 | Field trip by bus to the North Devon Ball Clay basin and the South Devon Ball Clay basin. Night at Exeter. |
| Friday, Sept. 6 | Symposium at Exeter University. Night at Exeter. |
| Saturday, Sept. 7 | Symposium in the morning, afternoon free, possibly for sightseeing. |
| Sunday, Sept. 8 | Travel by air from Exeter to Dinard with possibility of visiting St. Malo and the tidal generating station on the Rance. |
| Monday, Sept. 9 | Leave Dinard at 8 a.m. - Visit to the kaolins of Quessoy and lunch in the vicinity - Visit to the Plemet deposit - Dinner and night stop at Lorient. |
| Tuesday, Sept. 10 | Visit to the kaolins of Arvor and Morbihan Pits and quality control laboratories - Lunch at Lorient and departure for Rennes. Dinner and night at Rennes. |
| Wednesday, Sept. 11 | Departure from Rennes at 8 a.m. - Visit to laterites in the Chateaubriant |

region. Lunch at Rennes. Closing session at the National Institute of Applied Sciences at Rennes. Closing reception and dinner.

The fees for the symposium and excursion (including registration, transport, all meals and accommodation) will be around 90 Pounds (UK). Payment of this will be requested when the final registration forms are sent out around May 1974.

Those interested may obtain further information from Dr. E. C. Freshney, Institute of Geological Sciences, Hoopern House, 101 Pennsylvania Road, Exeter, England.

--Dr. Edward C. Freshney

NEW AND FORTHCOMING BOOKS

"The Chemistry of Clay Minerals" by C. E. Weaver and L. D. Pollard. Elsevier Scientific Publishing Co. Amsterdam, London, New York, 1973. Developments in Sedimentology 15. A review of the chemistry of clay minerals originally prepared for inclusion in a new edition of Data of Geochemistry.

"Selected Powder Diffraction Data for Minerals", prepared by the Minerals Subcommittee, Joint Committee on Powder Diffraction Standards, 1601 Park Lane, Swarthmore, Pennsylvania 19081, 1974. Published in two volumes, the Data Book and the Search Manual. The Data Book consists of images of the Powder Diffraction Data cards arranged in card number sequence, and includes an index by mineral names and groups. The Data Cards listed therein represent nearly 1900 mineral species found in Sets 1 to 23 of the Powder Diffraction File. The Search Manual provides for quick access to entries in the Data Book and includes an alphabetical Mineral Name section listing the three most intense d-spacings and intensities, chemical formula, and the Powder Diffraction File card number; an alphabetical-KWIC Chemical Name section, and a Hanawalt Numerical section.

"X-ray Identification and Crystal Structures of Clay Minerals" by G. W. Brindley and George Brown, Co-Editors, Mineralogical Society, London, 1975. This classic reference work is being completely rewritten and updated. It is hoped to have the published book on display at Mexico City in 1975.

NEWS OF MEMBERS

Dr. G. W. Brindley was elected a Councilor of the Mineralogical Society of America in 1973. Dr. Brindley has been appointed Emeritus Professor but will continue his research at Pennsylvania State University, University Park, Pennsylvania.

Dr. S. W. Bailey, a Past-President of the Clay Minerals Society, was elected President of the Mineralogical Society of America for 1974.

MEMBERSHIP DRIVE IN AIPEA

There are many workers in clay science and technology who are not members of AIPEA. The cost of membership in AIPEA is very low and is within the reach of most workers. If your colleagues are not members of AIPEA please encourage them to complete an AIPEA Membership Application Form and return it to the Treasurer along with dues (\$2.30 per year) payment.

Aim of AIPEA

The aim of AIPEA is to promote international cooperation in clay research and technology. To this end the activities of AIPEA include: the organization of meetings--such as the International Clay Conferences every three years--of field excursions, and of visits to centers of clay research and technology; the issue of publications on clay research and technology and of discussions thereon; cooperation with other organizations having an interest in clay research and technology.

Brief History

During the 18th International Geological Congress, London, 1948, Comité international pour l'étude des argiles (CIPEA) was established. Professor Ralph E. Grim, University of Illinois, USA, was elected the first president of the executive committee. Scientific sessions were arranged by CIPEA at the International Geological Congresses in Algiers 1952, Mexico City 1956, and Copenhagen 1960. In cooperation with other organizations scientific sessions were arranged in Amsterdam 1950, Paris 1954, and Brussels 1958.

In 1960 Professor Ivan Th. Rosenqvist, Oslo, Norway, was elected president. CIPEA arranged

the 1963 International Clay Conference in Stockholm, Sweden, and the 1966 International Clay Conference in Jerusalem, Israel.

At the conference in Jerusalem Association internationale pour l'étude des argiles (AIPEA) was founded. The 1969 International Clay Conference was arranged in Tokyo, Japan. This was followed by the 1972 International Clay Conference in Madrid, Spain.

The 1975 International Clay Conference will be held in Mexico City, Mexico July 16-23, 1975.

AIPEA Council 1972 - 1975

President: J. J. Fripiat, Belgium; Past President: F. V. Chukhrov, USSR; Secretary General: Udo Schwertmann, Germany; Treasurer: Joe L. White, USA; Editor-in-Chief: S. W. Bailey, USA; Members: J. E. Brydon, Canada, A. Langer-Kuzniarowa, Poland; G. Millot, France; K. Norrish, Australia; F. Veniale, Italy; and J. L. Martin-Vivaldi, Spain.

Membership

AIPEA accepts as members clay scientists, institutions, and companies. Members may join individually or through cooperating national scientific societies. Please fill in the attached form for joining AIPEA and send it along with your dues payment to the Treasurer.

The annual membership fee is as follows:

Individual membership \$2.30
Institutional membership \$5.75
Company membership \$23.50
Sustaining membership \$115
Patron membership \$1,150

Your cooperation in observing the following suggestions in paying your membership fee will be appreciated:

1. Pay fee by (a) check drawn on a New York or Chicago bank, payable in US dollars, or (b) international postal money order, payable in US dollars.
2. Pay membership fee for three or five-year periods.
3. Make check or money order payable to AIPEA and mail to:

Dr. Joe L. White
Treasurer AIPEA
Dept. of Agronomy
Purdue University
West Lafayette, Indiana 47907 USA

A.I.P.E.A. MEMBERSHIP APPLICATION FORM
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