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

JULY 1967 NO. 1

CIPEA 1948 → AIPEA 1966

During the 18th International Geological Congress in London 1948 the clay scientists present met to discuss international co-operation and exchange of information within their common field of research. It was decided that a committee should be set up under the International Geological Congress. This was approved by the congress, and the committee was named COMITE INTERNATIONAL POUR L'ETUDE DES ARGILES (CIPEA). Professor Ralph E. Grim, University of Illinois, USA, was elected as the first president of the committee and he presided until 1960. In the years 1960 to 1966 the president was Professor Ivan Th. Rosenqvist, University of Oslo, Norway. The secretaries were Dr. W. F. Bradley, Illinois State Geological Survey (now The University of Texas) USA, (1952–1956), Dr. Simone Caillère, Muséum National d'Histoire Naturelle, France, (1956–1960), and Dr. Poul Graff-Petersen, University of Copenhagen, Denmark, (1960–1966).

Scientific sessions arranged by CIPEA were held during the International Geological Congresses in Algiers 1952, Mexico City 1956, and Copenhagen 1960. In co-operation with other organizations scientific sessions were arranged in Amsterdam 1950, Paris 1954, and Brussels 1958.

At the meeting in Copenhagen 1960 it was decided that CIPEA should arrange its own conferences and the first, the 1963 International Clay Conference, was held in Stockholm, Sweden, with four days of scientific sessions followed by field trips to clay localities in Sweden, Norway, and Denmark.

At the 1963 International Clay Conference it was decided that CIPEA should cease being a committee under the International Geological Congress, that an international association should be established, and that this association should seek affiliation to the International Union of Geological Sciences. The 22nd International Geological Congress in New Delhi 1964 agreed that the committee should no longer be under the congress. At its meeting in January 1966 the Executive Committee of the International Union of Geological Sciences agreed to the affiliation.

During the 1966 International Clay Conference in Jerusalem, Israel, a meeting of the General Assembly was held on June 24th 1966. At

this meeting statutes and by-laws were adopted for ASSOCIATION INTERNATIONALE POUR L'ETUDE DES ARGILES (AIPEA), and the Council was elected.

Since 1948 great assistance has been rendered by the International Geological Congress and by the International Union of Geological Sciences. This assistance is greatly appreciated.

The AIPEA Newsletter

The AIPEA Newsletter, of which this is the first number, will be published at irregular intervals and will be distributed to all members of the association. The Newsletter is not meant as a scientific journal but as an international link between the clay scientists throughout the world.

The term 'clay scientists' is used in its widest sense as it covers a very large and varied group, with representatives in the cement industry, ceramics industry, civil engineering, cosmetics industry, crystallography, foundry technology, geology, geotechnics, medicine, mineralogy, paint industry, paper industry, pedology, petroleum industry, rubber industry, et cetera.

Individuals, research groups, national and international scientific societies, institutions, and companies are invited to send contributions to the AIPEA Newsletter. These should be sent (in 2 copies) to the Secretary General of AIPEA whose address will be found at the end of the Newsletter.

La Newsletter de l'AIPEA

Les Newsletters de l'AIPEA, dont celle-ci est la première, seront publiées à temps irréguliers et seront distribuées à tout les membres de l'association. Le but de cette Newsletter n'est pas d'être un journal scientifique, mais de former un lien international entre les différents spécialistes qui s'intérressent aux argiles.

Le terme 'spécialiste qui s'intéresse aux argiles' est employé dans sa signification la plus vaste et couvre un groupe très varié et grand, qui a des représentants dans l'industrie de la céramique, l'industrie du ciment, l'industrie du caoutchouc, l'industrie de la cosmétique, la crystallographie, la technologie des fonderies, la géologie, la géotechnique, les ingenieurs civils, la médicine, la mineralogie, l'industrie du papier, la pédologie, l'industrie de la peinture, l'industrie du pétrole, et cetera.

Pour être effective comme moyen de liaison, la Newsletter de l'AIPEA invite des communications de personnes individuelles, de groupes de recherche, de sociétés scientifiques nationales et internationales, d'institutions et de compagnies. Prière d'envoyer les contributions (en 2 exemplaires) au Secrétaire Général de l'AIPEA, dont l'adresse est indiquée a la fin de cette Newsletter.

Die AIPEA Newsletter

Die AIPEA Newsletters, deren erste Nummer dies ist, werden mit unregelmässigen Abständen erscheinen und allen Mitgliedern der Vereinigung zugestellt werden. Der Newsletter ist nicht als eine wissenschaftliche Zeitschrift gedacht, sondern als ein Bindeglied zwischen den Tonspezialisten der Welt.

Der Term 'Tonspezialist' wird hier sehr weit gefasst und deckt eine grosse und vielfältige Gruppe, deren Representanten in vielen verschiedenen Zweigen der Forschung und Industrie tätig sind: Bauingenieur Wissenschaft, Bodenkunde, Farbindustrie, Geologie, Geotechnik, Giessereitechnik, Gummiindustrie, Keramische Industrie, Kosmetikindustrie, Kristallographie, Medizin, Mineralogie, Papierindustrie, Petroleumindustrie, u. a. m.

Um als verbindendes Glied wirksam zu sein, lädt AIPEA Newsletter einzelne Personen, Forschungsgruppen, nationale und internationale wissenschaftliche Vereinigungen, Institutionen und Gesellschaften ein, Mitteilungen (in 2 Kopien) an den Generalsekretär der AIPEA zu senden. Die Adresse des Generalsekretärs findet sich am Ende des Newsletter's.

In the last twenty years

Ralph E. Grim

University of Illinois, Urbana, Ill.

It is now about twenty years since a small group of persons interested in clay mineralogy met in London at the time of the 18th International Geological Congress and the International Committee for the Study of Clays (Comité International Pour l'Etude des Argiles), the predecessor of the International Association for the Study of Clays, came into being under the Chairmanship of the present author. At that time, clay mineral groups in various countries had been or were in the process of developing formal organizations, and it was the general concensus that some type of international association of the national groups had merit.

In the twenty years since that first meeting, there has been a tremendous growth of interest in clay mineralogy, and with it a very substantial increase in our knowledge in this area. Concurrently the national clay mineral groups have flourished and in many cases, have developed into formal independent societies.

Anyone who follows the literature is aware of the contributions to clay mineralogy that have come from many different disciplines. It would be impossible to mention even a major number of the important advances that have been made in this period, but I would like to point out a few that are outstanding.

In the case of the atomic structure of the clay minerals, the work of Radoslovich (1962, 1963), Bailey (1963), Zvyagin (1960), and others have presented some extremely important refinements of the structure of the layered silicates. The arrangement of the silica tetrahedra in the silica sheet, the surface of the silica sheet, the relation of lattice substitutions to over-all structural attributes, for example, are now better understood.

There has been tremendous advance in the application of infrared absorption to clay mineral investigations particularly in the work of Farmer and Russell (1964) and Stubican (1963). Infrared absorption data are no longer just a fingerprint, but have been tied into the structure and composition of the clay minerals so that they can be used along with other analytical data in fundamental studies of the characters of the clay minerals.

In no area has there been a larger amount of research than in the study of clay mineral-organic reactions. The outstanding work of Wada (1961) and Weiss (1961) on the intercalation of organic molecules in the kaolin minerals immediately comes to mind. A large number of investigators, too numerous to mention individually, have studied the character of the organic molecules that may be adsorbed on the surfaces of the clay minerals. The nature of the bond between the organic molecule and the clay mineral surface, and the exact orientation of the organic molecule on the clay mineral surface have been studied in great detail.

The general nature of the crystalline phases that develop when the clay minerals are heated to elevated temperatures has been known for a long time, but in recent years the work of Brindley and Nakahira (1959), Roy et al (1955), Wahl and Grim (1964), and many others, have greatly expanded the knowledge in this area. For the first time the exact nature of the structural reorganizations that take place in the development of the high temperature phases and the influence of traces of impurities on such modifications is becoming understood.

Geologists and students of soils have provided a vast literature in recent years on the occurrence of various types of clay minerals in sediments and in soils. Soils of all types and Recent sediments, as well as ancient sediments, have been studied in great detail with the result that the fundamental factors that control the origin of the clay minerals and their distribution in soils and sediments is coming to be understood. In this connection, the work of Millot (1964) and his associates on the neoformation of the clay

minerals should be mentioned. Only in recent years has it been appreciated that substantial amounts of the clay minerals in sedimentary rocks are not detrital, but have been formed in place by precipitation from solutions or by crystallization from colloidal materials.

Clay materials have very great practical and economic value in agriculture, in engineering, and as raw materials for use in ceramics, the petroleum industry, the paper industry, the rubber industry, etc. In each of these situations, or industries, some particular property of the clay minerals is important. For example, in the ceramic industry it may be the high-temperature phases that are formed; in the petroleum industry where clays are used in drilling muds, it may be the colloidal properties; in the petroleum industry when catalysts are manufactured from some clay minerals, it may be the reaction of the clay minerals with alkalies; in the paper industry it may be the viscosity of clay-water suspensions and the brightness and gloss of the film of clay on the surface of a sheet of paper. Always these pertinent properties of the clay minerals are determined fundamentally by such attributes of the clay minerals as their atomic structure, their surface characteristics, their composition, etc. Therefore, the fundamental advances in clay mineralogy have greatly advanced what might be called clay mineral technology. Again, many specific examples could be given but I should like to mention only a few. Intercalation studies of the kaolinite minerals have led to processes for varying and controlling the plastic and other ceramic properties of kaolins (Erbsloh, 1966). Studies of clay-mineral reactions with alkalies have led to the synthesis of atomic sieves using various clay minerals as starting components. Some of these atomic sieves have zeolitic structures and have found important use in new types of catalysts for the petroleum industry. A particularly interesting application of fundamental studies in technology is the finding that the occurrence of a particular ion in a "bridge" or "cage" position in the atomic structure has reportedly a significant influence on the stability of the structure as it is used in a catalyst (Broussard et al, 1966).

To me the most fascinating feature of clay mineralogy is in the application of fundamental data to problems in technology. Why is it, for example, that one kaolinite clay is entirely satisfactory for use as a coating agent in the manufacture of printing papers, whereas, another kaolinite clay which seems to be similar in all of its compositional and structural attributes, is not satisfactory. Why is it that certain clays composed largely of attapulgite, yield a color reaction with certain organic liquids that makes them suitable for use in NCR (No Carbon Required) paper, whereas, other clays which seem to have the same structure and composition are not suitable. Why is it that certain clays composed of the smectite clay minerals have the property of decolorizing oils or can be activated by acid treatment for decolorizing, whereas, other clays which seem to be similar in composition and character neither have this property nor can be acid activated. All of this means that there is much still to be learned in clay mineralogy.

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ASSOCIATION INTERNATIONALE POUR L'ETUDE DES ARGILES

Statutes and By-laws

Statutes

I Name and aim

1. The name of the organization is ASSOCIATION INTERNATIONALE POUR L'ETUDE DES ARGILES (AIPEA).

   AIPEA shall be affiliated to the International Union of Geological Sciences.

2. The aim of AIPEA is to promote international co-operation in clay research and technology. To this end the activities of AIPEA shall include:

   a) the organization of meetings – such as the International Clay Conferences – of field excursions, and of visits to centers of clay research and technology;

   b) the issue of publications on clay research and technology and of discussions thereon;

   c) co-operation with other organizations having an interest in clay research and technology.

II Membership

3. AIPEA accepts as members clay scientists, institutions, and companies. Members may join individually or through co-operating national scientific societies.

III Administration

4. The affairs of AIPEA shall be administered by the General Assembly (articles 5–9), and on behalf of the General Assembly by the Council (articles 10–12). The General Assembly may recommend to the Council to appoint Committees.

5. The General Assembly. The General Assembly, consisting of individual members and representatives of member institutions and companies present at the business meeting, is the highest authority of AIPEA.

   Ordinary meetings of the General Assembly shall be held at each International Clay Conference. Special meetings may be held during a congress or session arranged by the International Union of Geological Sciences if deemed

necessary by the Council or requested by 25 % of the members of AIPEA.

Notice of meetings of the General Assembly shall be given to the members at least 6 months in advance.

6. Transactions of the General Assembly shall include:

a) reports from the officers and the Council;

b) reports from the chairmen of Committees, and from persons to whom special tasks have been entrusted by the General Assembly or the Council;

c) presentation of and voting on amendments to the statutes and to the by-laws, if any;

d) election of officers and Council;

e) any other competent business.

7. All members have the right to attend the General Assembly and to participate in the debates.

In voting, each member of AIPEA has one vote and may appoint any other member of AIPEA present at the General Assembly to act as his proxy. Authority to act as proxy must be given in writing and have the prior acceptance of the Council. Each member institution and company may appoint one representative who has one vote.

8. Decisions of the General Assembly shall be by simple majority of votes, except for those on amendments to the statutes and on dissolution of AIPEA which shall be transacted as determined by article 28.

If requested by at least one third of the members present or by the Council, voting shall be by ballot.

9. The president and the secretary general of the Council shall be the chairman and the secretary of the General Assembly, respectively.

10. The Council. The Council consists of not more than 14 members. The president, the vice president who is also president elect, the secretary general, the treasurer (hereafter referred to as the officers of AIPEA), the immediate past president, six ordinary members, the editor-in-chief appointed by the Council, and two representatives appointed by the clay scientists of the host country for the next International Clay Conference. All the ordinary members must be from different countries. The ordinary members elected by the General Assembly may be re-elected for only one additional term. The secretary general and the treasurer may be re-elected for further terms.

The term of office of the Council is from the end of one meeting of the General Assembly until the end of the next meeting.

If the office of president becomes vacant between meetings of the General Assembly, the vice president shall act as president. If the offices of secretary general or treasurer become vacant between General Assemblies, an acting secretary general or treasurer, respectively, shall be appointed by the Council to serve for the remainder of the term of office.

11. At least one year ahead of a meeting of the General Assembly the Council shall appoint a nominating committee that shall present to the General Assembly a list of candidates for the next Council. The nominating committee shall consist of five members: the president, two members of the Council, and two members of AIPEA not presently on the Council.

Additional nominations for the Council may be made from the floor of the General Assembly.

12. The Council conducts the work of AIPEA between meetings of the General Assembly in accordance with the statutes, by-laws, and recommendations of the General Assembly.

The Council is empowered to suspend a by-law temporarily, subject to approval of the General Assembly.

Decisions of the Council are by simple majority. Each member has one vote. If there is a parity of votes, the president (in his absence the vice president, or in his absence the secretary general, or in his absence the treasurer) has the casting vote. A quorum shall be at least half the members of the Council and include at least one of the officers.

The Council has the power to conduct its business by post.

IV Domicile and representation

13. The legal domicile of AIPEA shall be the place where the secretary general conducts his business.

All contracts and agreements involving AIPEA shall be signed by the president and one of the officers.

The president is the official representative of AIPEA, but he may appoint a proxy to represent AIPEA at certain functions.

V Finances

14. Membership fees shall be as laid down in the by-laws.

15. The income of AIPEA, such as membership fees and contributions from other sources, shall be held in custody by the treasurer.

Funds in excess of the equivalent amount of 500 Swiss francs shall be deposited in banks or postal accounts in the name of AIPEA, and such banks are hereby empowered to honour cheques on the said account signed by the treasurer and by the secretary general.

The treasurer shall hold the AIPEA funds in such a way that they are readily available for the activities of AIPEA.

16. AIPEA is under no obligation to pay expenses which are incurred without the sanction of the treasurer and the president.

The members of Council shall receive no salaries.

Items that may properly be charged as expenses include office expenses, printing expenses, and publishing expenses.

17. The accounts of AIPEA shall be balanced as at December 31 each year by the treasurer and shall be presented before May 1 to the Council.

A recognized scientific society in the country of the treasurer shall be requested to appoint two of its members to audit each year the accounts of AIPEA. The report of the two auditors shall be quoted in the balance-sheet presented to the Council. If auditing cannot be carried out in this way, the International Union of Geological Sciences shall decide on the auditing.

18. At the General Assembly two members outside the Council and from countries other than that of the treasurer shall be elected to report on the accounts submitted by the treasurer.

VI International Clay Conference

19. AIPEA shall promote International Clay Conferences to be held about every three years. Each conference shall be held in a country different from those in which the preceding two were held.

20. Invitations from a country willing to act as host for the next conference must be given in writing to the president. Acceptance will be decided upon by the General Assembly, which may entrust the selection of the next host country to the Council.

21. The host country for the next International Clay Conference shall appoint an Organizing Committee to be responsible for all arrangements in connection with the conference, apart from the Proceedings.

The officers of AIPEA shall be advisory members of the Organizing Committee, but may not hold office in this committee.

22. The Council shall support the Organizing Committee in every possible manner.

23. Matters concerning the publication of the conference Proceedings shall be decided upon by the Council.

An editor-in-chief is appointed by the Council, who may also appoint an editorial board.

24. For activities in the host country the International Clay Conference shall have accounts separate from those of AIPEA.

The Organizing Committee shall present to the Council the accounts of the conference, which must be audited by a properly qualified accountant in the host country. The accounts must be presented not later than one year after the conference.

If the Organizing Committee has any surplus after all expenses concerning the International Clay Conference are paid, such surplus shall be transferred to AIPEA funds.

VII Amendments to the statutes, and dissolution of AIPEA

25. The statutes of AIPEA can be amended only by the General Assembly. Proposals for amendments must be received by the secretary general at least four months before the General Assembly.

26. Any proposal for the dissolution of AIPEA must be received by the president and the secretary general at least six months before the General Assembly.

27. Proposals for amendments of the statutes and for dissolution of AIPEA shall be sent to the members not later than two months before the General Assembly.

28. A two-thirds majority of the votes cast at the General Assembly shall be required for amendments of the statutes and for dissolution of AIPEA to be accepted.

29. In the event of dissolution of ASSOCIATION INTERNATIONALE POUR L'ETUDE DES ARGILES, its property shall pass to the International Union of Geological Sciences.

By-laws

1. Annual membership fees are fixed as follows:

a) individual membership
5 Swiss francs,

b) institutional membership
25 Swiss francs,

c) company membership
100 Swiss francs,

d) sustaining membership
500 Swiss francs.

e) patron membership
5000 Swiss francs
or more,

or the equivalent amounts in any other exchangeable currency.

2. To maintain membership of AIPEA the annual fee must be paid before June 30 of the calender year to which it relates.

3. All AIPEA announcements, circulars, etc., shall be distributed to each member of AIPEA.

4. Scientists who are not members of AIPEA may join the International Clay Conference by payment of the registration fee of the conference, but do not have any voting rights.

5. The by-laws can be amended only at a meeting of the General Assembly. Amendment of the by-laws shall be by simple majority of votes.

Outside the 1966 International Clay Conference Building in Jerusalem. Discussing in the centre background Professor I Th. Rosenqvist (left), CIPEA president 1960–1966, and Dr. R. C. Mackenzie (right), AIPEA Nomenclature Committee chairman. To the left Professor T. Sudo, chairman of the Organizing Committee for the 1969 International Clay Conference. (Phot. Dr. G. M. Idorn).

1966 International Clay Conference

At the request of the Secretary General of the International Union of Geological Sciences, Professor W. P. van Leckwijck, a report on the conference was prepared by Professor W. D. Keller. The report was published in the IUGS Circular Letter No. 17, October 1966, and it is reproduced here (without the section giving the names of the members of the Council):

The International Clay Conference of the older CIPEA, now AIPEA, concluded a very successfull scientific meeting and field trip on June 30, 1966 in Israel. Registration, which began on June 20, was followed by three and one-half days of technical sessions held on the campus of the Hebrew University at Jerusalem. A 3-day field trip to the Negev Desert as far south as Eilat on the Gulf of Aqaba of the Red Sea, followed by one and one-half days north to the Sea of Galilee, completed the group activities.

Approximately 150 participants were registered from 21 countries. Technical sessions were organized about the following topics: (1) Nomenclature, structural properties, and composition of clay minerals, (2) Origin and geochemistry of clays, (3) Colloidal properties of clays, (4) Physical methods in clay research, (5) Clay organic compounds, and (6) Industrial applications of clays and clay minerals. Two sessions were needed for the geochemistry and origin of clays.

Approximately 50 papers were presented. These had already been published in Volume 1 of the Proceedings, copies of which had been distributed before the meeting. Therefore, papers were ready for discussion after summary presentation. The quality of papers

Field trip during the 1966 International Clay Conference. To the left, explaining, Professor Y. K. Bentor, chairman of the Organizing Committee and leader of the field trip. To the right Dr. Lisa Heller, AIPEA Editor-in-Chief. (Phot. Dr. G. M. Idorn).

were generally high and comments were unrestrained. Probably no one or two papers can be singled out as being markedly superior, especially since the spectrum of topics embraced by clay studies is so broad.

At this point, the writer wishes to observe that this breadth is commonly not known or appreciated by many geologists, mineralogists, chemists, ceramists, agronomists, and others, who incorrectly think of clay mineral science as a narrow, highly specialized field. For example, papers at this conference ranged at high level across disciplines that included crystal structure, isotopic geochemistry, solid state transformation, mineral synthesis, inorganic-organic reactions, ion exchange and adsorption, infrared absorption, chemical kinetics, sedimentational facies, surface chemistry, radioactive wastes, pedologic mineralogy, structural ceramics, weathering, classical clay mineralogy, and mineral nomenclature. Moreover, the conference was small enough that scientific and personal interaction was possible between most individuals. Each participant could meet and share ideas with a high percentage of contemporary world-wide active workers in the field of clays. Attendance at Clay Mineral Conferences is highly and richly rewarding.

The formal discussions of the papers, along with additional shorter contributions, and the transactions at the Business Meeting, will be published as Volume 2. This procedure was likewise followed at the Stockholm meeting in 1963. Official languages for presentation and discussion were English, French, German and Russian. Simultaneous translation, via individual headphones, was provided for all meetings.

At the last session, summary reports were given by session chairmen of the papers presented at their respective technical sessions, and important formal business was transacted. From the old CIPEA, a new organization, a scientific society in its own right, the Association Internationale Pour l'Etude des Argiles, AIPEA, was formed.

The field trips following the Jerusalem gathering were outstandingly excellent. A new guide book, The Clays of Israel, 121 p., had been prepared by Y. K. Bentor. It was accompanied by recently completed, two, full-color, geologic maps of the north and south halves of Israel, each 65 cm × 90 cm in size, scale 1:250,000. The itinerary, technical stops, 'tourist' or cultural-scientific stops, overnight stops, and other data were overprinted on the geologic maps.

Israel abounds in archeological sites, historic Holy Land locations, and abundant remains and records of ancient habitations, battle fields, trade routes, civilizations and not-so-civilized ancient practices, and ruins, in addition to esthetically beautiful spots. Many of these were associated intimately or closely with geological features.

Probably for its relatively small size, Israel contains a wider spectrum of geologic features than any other country. Besides those which are normally expected, Israel possesses (and which were seen) the great rift, the Dead Sea (and a swim in it for clay Conferees), a currently rising Pleistocene-age salt mountain, rocks from Pre-Cambrian to Recent, the spectacular 'makhtesh' structures (erosionally breached structural domes), alkalic igneous rocks, the still problematical 'mottled-zone' occurrence in which high-temperature calcium silicates and derivatives, such as spurrite, tobermorite, portlandite, ettringite, and others, occur with zeolites in sedimentary rocks not associated with igneous intrusions, 3-layer clay-mineral facies in sediments, palygorskites, glauconite, volkonskoite, flint-clay, hydrothermally altered clay deposits, hyaloclastites, a wide spectrum of desert environment and geomorphology, cemented sand dunes, and a long Mediterranean-marine shore line. To the credit of Professor Bentor and his colleagues, the logistics of the trip were completely prearranged and organized – they were so well done that the trip was carried out apparently without effort, the criterion of maximum attention to detail in planning.

The atmosphere of the meeting and associated gatherings was conducive to good fellowship. Each evening and at free time during days, activities or trips were planned, such as receptions by the Hebrew University, the Israel Academy of Science and Humanities, the Mayor of Jerusalem, and visits to the Israel Museum and Shrine of the Book, an Arab village, a folk lore display, and at individual homes.

In summary, the International Clay Conference in Israel maintained the high standard set for it in Stockholm, and left in the minds of participants a firm resolve to attend the next one, in Japan in 1969.

W. D. Keller
University of Missouri
Columbia, Missouri, USA.

Proceedings of the conference in Israel

The Proceedings of the 1966 International Clay Conference were published by Israel Program for Scientific Translations, volume 1 (vii + 439 pages) in 1966 and volume 2 (xxiv + 309 pages) in 1967.

A limited number of copies of volumes 1 and 2 of the Proceedings are still available, at the reduced price of US $ 10.– per volume, and may be obtained from: Organizing Committee, 1966 International Clay Conference, c/o Geological Survey of Israel, 30 Malchei Israel Str., Jerusalem, Israel. The guide-book 'The Clays of Israel' (121 pages) by Y. K. Bentor may also be obtained from the Organizing Committee at a price of US $ 2.– per copy. The Geological Map of Israel (1:250,000, 2 sheets) is available from The Survey of Israel, 1 Lincoln Str., Tel-Aviv, Israel, at the price of US $ 2.– per set.

Proceedings of the conference in Stockholm

The Proceedings of the 1963 International Clay Conference were published by Pergamon Press, Oxford, volume 1 (ix + 376 pages) in 1963 and volume 2 (x + 443 pages) in 1965. The prices are £ 5 and £ 7, respectively, and the Proceedings may be obtained through booksellers.

Membership of AIPEA

All individuals, institutions, and companies interested in the present state and the future progress of clay research are invited to enter the AIPEA as members.

AIPEA acknowledges five classes of membership as set up in article 1 of the by-laws (inserted elsewhere in this Newsletter).

The application form included in this Newsletter should be completed and forwarded to the Treasurer of AIPEA together with the membership fee.

Affiliation à l'AIPEA

Toutes personnes, institutions ou compagnies intéressées dans l'état actuel et les progrès futurs des recherches sur les argiles, sont invitées de devenir membre de l'AIPEA.

L'AIPEA reconnait cinq catégories de membres, spécifiées dans l'article 1 des règlements (inclus dans cette Newsletter).

Prière de remplir le formulaire d'inscription ci-joint, et de l'envoyer avec la cotisation au caissier de l'AIPEA.

Mitgliedschaft bei der AIPEA

Alle Personen, Institutionen und Gesellschaften, die am gegenwärtigen Stand und am zukünftigen Fortschritt der Tonforschung interessiert sind, werden eingeladen, der AIPEA als Mitglieder beizutreten.

Aus Artikel 1 der Satzungen, die an anderer Stelle im Newsletter eingefügt sind, geht hervor, dass die AIPEA fünf Arten der Mitgliedschaft kennt.

Wir bitten Sie den Anmeldeformular, der diesem Newsletter beiligt, auszufüllen und an den Kassierer der AIPEA, and den auch die Mitgliederbeiträge zu entrichten sind, zu schicken.

ASSOCIATION INTERNATIONALE POUR L'ETUDE DES ARGILES

Membership Application Form (Please print or type)	Formulaire d'inscription (Prière d'écrire lisiblement)	Mitgliedschaft Anmeldeformular (Bitte Druckbuchstaben verwenden)

Name:
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Title
Titre:
Titel: .....

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Area of special interest in clay research and technology:
Domaine d'intérêt particulier dans la recherche et la technologie des argiles:
Specielles Interesse innerhalb der Tonforschung und Tontechnologie:

.....

Type of membership: (By-laws, article 1)
Catégorie de membre: (Règlements, l'article 1)
Typ des Mitgliedschaft: . . . . . (Satzungen, Artikel 1)

Date — Date — Datum

Signature — Signature — Signatur

Cheques or money orders should be made payable to AIPEA, and should be sent to the Treasurer together with this form.

Chèques ou mandats doivent être payables à l'AIPEA. Prière de les envoyer avec le formulaire d'inscription au Caissier.

Schecks oder Postanweisungen müssen auf die AIPEA lauten und den Kassierer mit diesem Anmeldeformular gestellt werden.

The AIPEA Council

According to article 10 of the statutes the Council has 14 members. 11 were elected at the meeting of the General Assembly, and they appointed the Editor-in-Chief of the Proceedings. 2 members have been appointed by the clay scientists of the host country for the next International Clay Conference.

President:
Dr. Poul Graff-Petersen, University of Copenhagen, Denmark.

Vice President:
Professor F. V. Chukhrov, Academy of Sciences, USSR.

Secretary General:
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Treasurer:
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Dr. R. C. Mackenzie, The Macaulay Institute for Soil Research, Great Britain.

Professor E. Nemecz, University of Budapest, Hungary.

Professor Y. Shiraki, Tokyo Institute of Technology, Japan.

Professor T. Sudo, Tokyo University of Education, Japan.

Dr. G. F. Walker, Commonwealth Scientific and Industrial Research Organization, Australia.

1969 International Clay Conference

The kind offer from Japan to act as host for the next International Clay Conference has been gratefully accepted by the Council. The conference will be arranged by AIPEA and the Clay Science Society of Japan in co-operation with the Science Council of Japan and the Geological Survey of Japan. The conference will be held in Tokyo, Japan, from September 5th to 10th 1969, and it will be followed by four or five days of field trips. An Organizing Committee has been appointed under the chairmanship of Professor Toshio Sudo, Tokyo University of Education.

The conference will have the following sections:

1, Clay mineral structures.

2, Clay mineral genesis.

3, Clay-water systems and ion-exchange.

4, Clay-organic compounds.

5, Industrial application of clays and clay minerals.

6, General.

Contributions to the following sub-fields will also be accepted:

a, Interstratified clay minerals, structure and origin.

b, Non-crystalline minerals in soils.

c, Wall-rock alteration.

d, Infrared study of clay minerals.

The First Circular has been published and may be obtained from:

1969 International Clay Conference
Organizing Committee
c/o Geological and Mineralogical Institute
Faculty of Science
Tokyo University of Education
3-chome, Otsuka, Bunkyo-ku,
Tokyo, Japan.

Nomenclature Committee

One of the activities of the former CIPEA was to examine the problems of clay mineral nomenclature. For this purpose a Nomenclature Sub-Committee was appointed under the chairmanship of Dr. R. C. Mackenzie. The General Assembly of AIPEA recommended that this work should be continued, and the Council appointed a Nomenclature Committee with the following members:

Chairman:
Dr. R. C. Mackenzie
Head, Pedology Department
The Macaulay Institute for Soil Research
Craigiebuckler
Aberdeen
Scotland.

Secretary:
Dr. G. W. Brindley
Professor of Solid State Technology
126 Mineral Sciences Building
Pennsylvania State University
University Park, Pennsylvania 16802
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Members:
Professor F. V. Chukhrov, USSR.
Professor P. Gallitelli, Italy.
Professor J. Konta, Czechoslovakia.
Dr. G. Pedro, France.
Professor T. Sudo, Japan.
Dr. G. F. Walker, Australia.

International conference on thermal analysis

AIPEA has been informed that the Second International Conference on Thermal Analysis (2nd ICTA) will be held at Holy Cross College, Worcester, Massachusetts, USA, during the period 18–24 August 1968.

As with 1st ICTA, first circulars regarding this conference will be distributed through Liaison Officers in various countries and regions, but should you be interested and not receive such a circular by September 1967 please contact the Liaison Officer in your country, or the chairman of the organizing committee:

Dr. C. B. Murphy
Manager, Materials Analyses Area
Xerox Corporation
P. O. Box 1540
Rochester
New York 14603
U S A.

AIPEA addresses

President:
Dr. Poul Graff-Petersen
Institute of Mineralogy and Geology
University of Copenhagen
Ostervold 7
Copenhagen K
Denmark

Vice President:
Professor F. V. Chukhrov
IGEM, Academy of Sciences
Staromonetny 35
Moscow Zh-17
Soviet Union

Secretary General:
Professor U. Schwertmann
Institut für Bodenkunde der Technisches Universität
Engler-Allee 19–21
1 Berlin 33
West Germany

Treasurer:
Professor J. L. White
Department of Agronomy
Purdue University
Lafayette, Indiana 47907
U S A

Editor-in-Chief of the conference Proceedings:
Dr. Lisa Heller
Geological Survey of Israel
30 Malchei Israel Str.
Jerusalem
Israel

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