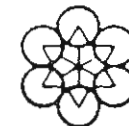


# aipea



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

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## 1. REMARKS FROM THE SECRETARY GENERAL

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*Hello fellow clay scientists,*

*1998 was a quiet year for the AIPEA secretariat, a transition period between the Ottawa meeting and the start of the preparatory activities of the Bahia Blanca meeting in 2001. The official start of preparation of AIPEA activities in Bahia Blanca, Argentina will be given in September 1999, when the council meets in Cracow at the occasion of Euroclay 99. Jan Srodon has put together a very nice meeting in Cracow and I hope to meet many of you in that beautiful Polish town. Information about Euroclay can be found in this Newsletter. At its meeting in Cracow, council will discuss the launch of the Bradley Award, the AIPEA Medal Award and the student travel grants.*

*The clay science community has now three strong pillars: AIPEA, the European Clay Group Association ECGA and the Clay Minerals Society of America, CMS. Cooperation between these three organizations should be organized with the goal to help and stimulate clay research and clay scientists in less favoured regions of the world. Suitable linked websites of AIPEA, ECG and CMS should be a good starting point here. The AIPEA WEB site is available, but not the manpower to keep it up to date.*

*(its address is: <http://www.agr.kuleuven.ac.be/intorg/aipea/aipea.htm>).*

*These are some of the items to be discussed at the Cracow meeting. I solicit the opinions of all clay scientists about these and other topics. They will be considered seriously and brought to the council's floor.*

*I hope, dear fellow clay scientists, that 1999 will be a prosperous year for you with exciting clay research and - above all - a good health for you and your family!*

*Robert Schoonheydt  
Secretary-general AIPEA*

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## 2. COUNCIL

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The 1997-2001 AIPEA council is composed as follows :

president: E. Roaldset, Norway  
past president: H. Murray, USA  
vice president: R. Kühnel, The Netherlands  
treasurer: P.M. Huang, Canada  
secretary-general: R. Schoonheydt, Belgium  
second term councillors: T. Eggleton, Australia  
A. Banin, Israel  
H. Hayashi, Japan  
first term councillor: J. Dixon, USA  
J. Percival, Canada  
G. Lagaly, Germany  
teaching committee chair: D. Schulze, USA  
nomenclature committee chair: S. Guggenheim, USA  
two representatives of the organizing committee of the 12th ICC:  
E. Dominguez, Argentina  
F. Cravero, Argentina

### Addresses of the council members

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## 2. Committees

### Nomination Committee

E. Roaldset, president  
J. Wilson, UK  
A. Yamagishi, Japan  
H. Murray, USA  
M. Formoso, Brasil

#### Bradley Award Committee

E. Roaldset, president  
J. Churchman, Australia  
H. Kodama, Canada  
C. Johnston, USA  
A. Banin, Israel

#### AIPEA Medals Committee

E. Roaldset, president  
R. Kühnel, vice-president  
H. Murray, past-president  
E. Galan, Tolsa representative  
V. Drits, Russia  
H. Chamley, France  
H. Minato, Japan

Teaching Committee: chair D. Schulze

Nomenclature Committee: chair S. Guggenheim

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### **3. NOMENCLATURE COMMITTEE**

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There are no outstanding nomenclature problems presently being considered by the AIPEA Nomenclature Committee. If you have recognized a problem, or would like clarification about a nomenclature issue, please write to the Chair.

The Committee would like to remind members that a regularly interstratified clay mineral can be given species status only if it passes the required criteria for defining the degree of regularity of alternation of the different layer types. Layer chemistry, type, proportions, and regularity must be well documented, and at least ten 001 summation peaks (even and odd orders) must be observed. These peaks must have a coefficient of variation in breadth of less than 0.75. Interstratifications with imperfect types of layers which would not qualify for names by themselves in the noninterstratified state are not candidates for species names. A complete discussion of the criteria and examples of accepted species are given by Bailey, 1982, American Mineralogist, 394-398.

S. Guggenheim, Chair

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### **4. AIPEA MEDALS**

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AIPEA medals were established by the general assembly of AIPEA to honour active clay scientists in recognition of their contributions to clay science. The following rules were established:

- 1) The AIPEA medals are established to award clay scientists for their outstanding contributions to the advancement of knowledge of clays and clay minerals. A maximum of two medals will be awarded every four years at the occasion of the International Clay Conference.
- 2) Candidates must be active clay scientists. Active means a minimum of three publications in refereed and internationally recognized journals in the two years preceeding the year of the international Clay Conference at which the medals will be awarded.
- 3) Candidates can be proposed by affiliated societies, by AIPEA members or by at least three individual AIPEA members. Candidates may submit their own application with their Science Citation Index.
- 4) Each application consists of:
  - the curriculum vitae of the candidate;
  - his/her list of publications of the last ten years
  - letters of support from those who propose the candidate.
- 5) The applications are judged by the AIPEA medal committee consisting of the president (chairman), the vice-president, the past-president and four members, three appointed by the council and one by the sponsoring company.
- 6) The applications must be submitted to the secretariat of AIPEA, from which all information concerning the AIPEA medals can be obtained. The closing date of submission of candidates is November 1, 2000.

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### **5. BRADLEY AWARD**

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The Bradley award will be presented during the 12th International Clay Conference in Bahia Blanca. The closing date for submission of manuscripts is November 1, 2000. All correspondence must be addressed to Prof. Robert Schoonheydt, secretary-general AIPEA, Center for Surface Chemistry and Catalysis, K.U.Leuven, Kardinaal Mercierlaan 92, 3001 Heverlee, Belgium  
All AIPEA members should encourage entries of high quality. You are therefore requested to circulate the regulations and the application form among possible candidates.

## Rules

1. The objective of this award is to offer financial assistance to the recipient to enable him or her to participate in an International Clay Conference for the purpose of presenting his or her paper.
2. Candidates must submit five copies of a paper of approximately 4000 words in English, French, German, Russian or Spanish on a topic relevant to one of the sessions at the Conference. Papers written in a language other than English must be accompanied by an extended summary of not less than 1000 words in English. The paper should be written in a format acceptable for international journals. Assessment will be on scientific content only and the winning entry shall form the substance of a paper to be presented by the successful candidate at the Conference to which the award relates.
3. The award will normally be made at four-yearly intervals and initially will not exceed 1000 \$, although the value will be reviewed from time to time. An award shall not be made if it is considered that candidates do not reach the required standard.
4. Persons eligible for the award shall be under 35 years of age on the closing date for submission: no restriction is placed on the sex or nationality of the candidate or the nature of his or her employment. Every application must be supported by two members of AIPEA.
5. The selection committee shall consist of the President of AIPEA and four members nominated by the Council of AIPEA. The paper must be in the hands of the selection committee at least six months before the Conference to which it relates.
6. A suitably inscribed certificate will be presented to the successful candidate during a plenary session to be followed by the oral presentation of the winning paper. A portion of the prize may be sent to the successful candidate in advance in the form of a ticket enabling him or her to travel to the Conference.
7. The attached form must be completed and returned with each entry to arrive before the official closing date (see end of newsletter). The candidates must note that the deadline will be strictly observed.
8. The winning paper must be submitted for publication in the Conference proceedings.

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## 6. STUDENT TRAVEL FUND

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The following rules are adopted for support of students to travel to the 12th International Clay Conference, Bahia Blanca, Argentina;

1. The student submits an abstract and his/her curriculum vitae
2. This submission is supported in writing by his/her supervisor
3. Both the student and the supervisor are members of AIPEA
4. The student is under 35 years of age.
5. The financial support can only be used to attend an International Clay Conference and its associated excursions, field trips and workshops.
6. Student can only apply for one International Conference
7. The amount of money can be up to \$ 500,- per student.

Address for submission: AIPEA secretariat

The selection committee will consist of H. Murray, J. Percival and G. Lagaly.

For the 12th ICC the deadlines are as follows:

- submission of abstract + CV + letter of support: October 1, 2000
- notice of decisions: January 1, 2001.

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## 7. 12th INTERNATIONAL CLAY CONFERENCE

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**Bahia Blanca, Argentina**

**July 29- August 4, 2001**

The Conference will be held in the Universidad Nacional del Sur, Bahia Blanca, Argentina under the auspices of the Association Internationale pour l'Etude des Argiles (AIPEA) with the participation of the International Society of Soil Science (Commission VII). Bahia Blanca is a city with 300.000 inhabitants located 700 km southeast of Buenos Aires (capital of Argentina). It has one of the most important ports on the Atlantic Ocean.

The organizing Committee is formed of research scientists and professors from local Universities.

The program will include current sessions, symposia, posters displays, field excursions and social activities. We are open to include other topics in the current sessions and symposia. The suggestions will be considered if they arrive at the Secretary of the Congress before March 31, 1999.

#### Current Sessions

Clays in Geology  
Clays and the Environment  
Colloidal properties and surface chemistry  
Crystal Chemistry, structure and synthesis  
Poorly crystalline clays and accessory minerals  
Clays in Industry  
Methods

#### Symposia

Soils (International Soil Science, Commission VII)  
Teaching Clay Mineralogy  
Clay barriers and waste management  
Clays in hydrothermal deposits  
Clays in ceramics  
Clays resources in the Mercosur

#### Field Excursions

Precambrian-Paleozoic clays deposits. Sierras Septentrionales (Buenos Aires Province)  
Bentonitic and kaoline deposits. Extra-Andean Patagonia (Neuquén Province)  
Kaolin Deposits of Patagonia (Chubut Province)  
Lateritic-Tropical soils. NE Argentina (Misiones Province)  
Buenos Aires Province Soils.  
Brasil kaolin deposits. Rio Jari, Brasil

#### Social Program

The social program will include sightseeing tours around the city, visiting the port with a typical seafood lunch and an industrial petrochemical area. A cocktail reception and a typical Argentinian asado (barbecue) with folklore music and a dinner with tango dancers will be offered to all the delegates and accompanying persons. For accompanying persons, a visit to a ranch located in

a nearby area is planned. Fishing and horse riding excursion could also be arranged.

#### First Circular

The first circular will be presented at EUROCLAY '99, September 4-10, Krakow, Poland and will be mailed to AIPEA and CMS members.

#### Website

A website for the meeting will be set up by the time the first circular is presented.

#### Chairman

Dr. Eduardo DOMINGUEZ  
Departamento de Geología, Universidad Nacional del Sur, San Juan 670, 8000 Bahía Blanca, Argentina.

#### Secretary General

Dra. F. Cravero

For more information contact the secretary general :  
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## 8. EUROCLAY 99

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Conference of the European Clay Groups Association  
Krakow, Poland  
September 4-10, 1999

#### Scientific program

Contributions from all fields of clay science are welcome. They will be grouped into appropriate oral and poster sessions, depending upon submissions, or they will be included in the following symposia, intended to present overviews of specific topics, which will be organized by the conveners:

1. New techniques of clay research (Jean-Pierre Muller and M.J. Wilson)

2. Order-disorder features of clay minerals (Victor Drits and Robert C. Reynolds)
3. Particle size analysis in clay science (Dennis D.Eberl and Françoise Elsass)
4. Hydrotalcite-type anionic clays (layered double hydroxides) (Angelo Vaccari and Ewa Serwicka)
5. Surface modification of clay minerals and applications of such materials (Faiza Bergaya and Gerhard Lagaly)
6. Illite and mica formation and transformation in continental environments (Dominique Righi and Arieh Singer)
7. Comparison between alterations of sea-floor and land-based basalt (José Honnorez and Suzanne Schmidt)
8. Low-grade metamorphism of sheet silicates (Martin Frey and Laurence Warr)
9. Clay minerals as tools in basin analysis (Norbert Clauer and Juraj Francu)
10. Clays in hydrocarbon reservoirs (Andrew Hurst and Paul Nadeau)
11. New development in the traditional industrial application of clays (Haydn Murray and Marek Tokarz)
12. Clay barriers and waste management (Kurt Czurda and Jean-Frank Wagner)

A workshop entitled "Clays in Environment" will be offered in Banská Štiavnica, Slovakia. It will take place after the conference, and it will be combined with visits to several Slovakia clay deposits and acid mine sites. The workshop will cover three main topics:

1. Clays under acid conditions (chaired by M.J. Wilson and M. Robert)
2. Clay-toxic element interactions (chaired by E. Rybicka and W. Gates)
3. Clay barriers (chaired by D. Tessier and R. Push)

Important dates:

March 15, 1999 Abstract deadline

May 30, 1999 Deadline to register if presenting a paper and to reserve accommodations

June 30, 1999 Last day for cancellation of reservations

July 30, 1999 Last day for 80% refund of the registration fee

Internet

The second circular, registration and accommodations reservation forms, as well as updated information about the conference is available on the EUROCLAY '99 web site at: <http://www.ing-pan.krakow.pl>.

Address for correspondence

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Euroclay 1999

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## 9. REPORTS OF THE NATIONAL CLAY GROUPS

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### BRAZIL

Dr. Pérsio de Souza, Liaison Officer for AIPEA Brasil announces the foundation of the Brazilian Group of Clays.

A clay-related activity in 1998 was

#### International Workshop of activated clay

6-8 december 1998 in La Plata, Argentina

The presentations were:

- Activated clays by *N. Jackson*
- Modification of bentonite with different polycations for the uptake of aromatic hydrocarbons from water by *G.J. Churchman*
- Studies on the acid activations of Brazilian smectitic clays: a review by *P. de Souza Santos*
- Influence of preparation variables on structure and texture of different mixed pillars *M.R. Sun Kou; P. Cañizares, J.L. Valverde and C.B. Molina*
- O<sub>2</sub>, CH<sub>4</sub> and CO<sub>2</sub> gas adsorption by di- and tri-octahedral smectites *C. Volzone and J. Ortiga*
- Mesoporous alumino-silicates derived from kaolins by *I.R.D. Mackinnon*
- Thermal activation of Brazilian Nickel-, Iron-smectite clays by *A. Vieira-Coelho, G.Poncelet and J.Ladrière*
- Some properties of montmorillonite intercalated with aluminum oxocations according to the preparation processes by *M. Sergio and W.Diano*
- "Las Barrancas" ball clay deposit, Santa Cruz, Argentina by *D.L.Badino, F.Craverio, J.C.Factorovich and EA.Dominguez*
- Bentonites in Argentina by *C.R. Marconi*



## THE AUSTRALIAN CLAY MINERALS SOCIETY

The 16<sup>th</sup> Biennial Conference of the ACMS was held in Brisbane in June-July 1998. The outgoing committee of the society under Ray Frost of the Queensland University of Technology put together the essentials for a friendly, enjoyable and productive meeting. The scientific program covered nearly all aspects of the study and application of clay minerals, including: why halloysite curls, how red mud neutralises acid sulphate, the application of clays for coating fertilisers, the characterisation of clays with a general area detector diffraction system, synthetic clays for catalysis, the characterisation of new nontronites, effect of boiling on basalt weathering, and molecular aspects of the intercalation of kaolins.

At the Brisbane meeting, a new committee was elected. It comprises Jock Churchman (CSIRO Land & Water) as Chairman; John Keeling (Primary Industries and Resources, South Australia), Secretary; Mark Raven (CSIRO Land & Water), Treasurer, and, as committee members, Lew Barnes (Commercial Minerals Ltd), Will Gates (CSIRO Land & Water) and Peter Self (University of South Australia), as well as Ray Frost, as Past Chairman, and Tony Eggleton (Australian National University), as a member of the AIPEA Council and the "public officer" for ACMS. The committee is based in Adelaide, with its chief task being the organisation of the next biennial conference, to be held at the Waite Campus from 10-12 April 2000. The following have been co-opted on to the committee to assist with this objective: Rob Fitzpatrick (CSIRO Land & Water), Marek Zbik (University of South Australia), Rob Murray (University of Adelaide) and Malcolm Wright (private consultant).

In addition to the organisation of the 2000 conference and associated field trips, the new committee has set itself a number of new and exciting challenges. These are:

- Production of a regular newsletter, "The Interlayer",
- Development and maintenance of a website,
- Planning for the production of a book on the sources, locations and uses of clay minerals in Australia and New Zealand,
- Production of a special issue of "Applied Clay Science" to feature clay research in Australia and New Zealand,
- Organisation of a workshop on techniques in association with the biennial conference in 2000.

People, including committee members, but also some New Zealand clay scientists, have now been invited to carry out the many tasks involved in these projects. The ACMS has interesting times ahead in the next year or more. We'd be very happy to share them with our colleagues in the wider clay world. In particular, any would be most welcome to attend our conference in April 2000. For further information contact: Jock Churchman, CSIRO Land & Water, Fax 00-61-8-8303-8550, or [jock.churchman@adl.clw.csiro.au](mailto:jock.churchman@adl.clw.csiro.au). (e-mail). In any case, we invite visitors to our web-site at: <http://unisa.edu.au/acms>.

Jock Churchman  
President

## CHINA

The national Symposium on industrial minerals was held in Wuchang city, Hubei province, from 2-5 November, 1998. The Symposium was organized by the Nonmetallic Minerals Affiliated Society of the Chinese Ceramic Society. A total of 60 papers were presented. All participants were greatly interested in the following topics:

1. Purifying, bleaching and selected flocculation of kaolin minerals.
2. Calcination, delamination and superfine pulverizing of kaolinitic clay in Permo-Carboniferous coal mines in North China.
3. Attapulgite clay of Anhui and Jiangsu provinces and the processing method.
4. Changing the viscosity of Suzhou kaolin.

Forty-three papers were published in the special issue of "Non-metallic Minerals" vol 21.

The "International Industrial Minerals' Products and Equipment Trade Exhibition" will be held in July 14-17, 1999 at Beijing Exhibition Centre, China. Supporters are China Mining Association. Sponsors are China National Non-Metallic Minerals Industry Corporation (Group) and China National Non-Metallic Minerals Industrial Import and Export Corporation.

Zhi Zheng

## BELGIAN CLAY GROUP (B.C.G.)

A meeting of the G.C.A. Groupe de Contact Argiles (the French section of the B.C.G.), granted by the F.N.R.S. (Fonds National de la Recherche Scientifique), was held at the Faculty of Agronomical Sciences in Gembloux on November 26, 1998, with as invited lecture: "Minéralogie et pétrographie des sols volcaniques indurés en Amérique latine by Dr. Paul Quantin (ORSTOM). The other lectures of the meeting were:

- "L'halloysite des cryptokarsts néogènes de l'Entre Sambre et Meuse: proposition d'un modèle de néoformation" by Dr. D. Nicaise
- "Sols andiques dérivés de granite dans le massif bohémien d'Autriche" by Prof. B. Delvaux
- "Assemblage minéralogique d'un andosol perhydraté de Guadeloupe" by Dr. S. Ndayiragije
- "Minéraux interstratifiés halloysite-smectite dans une séquence de sols dérivés de matériaux pyroclastiques" by Dr. Píneros-Garcet.

Dr. Annick Anceau  
e-mail: A.Anceau@ulg.ac.be

## CLAY MINERALS GROUP (United Kingdom)

### Committee

The following committee was elected at the 1998 AGM for 1999:

Chairman:	Dick Merriman, British Geological Survey, Keyworth
Past Chairman:	Andrew Parker, University of Reading
Treasurer:	Nick Elton, English China Clays plc, Central R & D
Secretary:	Stephen Hillier, Macaulay, Aberdeen
Principal Editor:	Derek Bain, Macaulay, Aberdeen
Associate Editor:	Chris Breen, Sheffield Hallam University

### Members

Meryl Batchelder	Natural History Museum, London
David Doff	Department of Geology, Trinity College, Dublin

Simon Kemp	British Geological Survey, Keyworth
Jeremy Hooper	English China Clays plc, Central R & D
Noel Thomas	Watts Blake Bearne & Co plc, Newton Abbot
Iain Scotchman	Statoil UK, London
Kevin Murphy	Executive Secretary - Mineralogical Society Representative

### 1998 Meetings

Two meetings were held in 1998 at Cambridge and Bath. The Spring Cambridge Meeting was organised by Chris Jeans on the theme of "*Mineral Diagenesis & Reservoir Quality: the Way Forward*". The Cambridge Diagenesis Meetings, initiated in 1981, are now an established event on the international scene. They bring together active researchers from different scientific disciplines who are studying and predicting the diagenesis of siliciclastic reservoirs. The Sixth Cambridge Meeting was attended by well over a hundred participants, many from overseas. The Conference programme was packed: 39 papers in single session over two days and, for the first time, there were poster displays. Topics and papers were a match for the ambitious Conference title. Subjects ranged from general field studies through isotope geochemistry, sequence stratigraphy controls, tectonic effects, analytical methods, theoretical and practical clay mineralogy to thermophillic bacteria. Presentations were generally very good and discussions were vigorous. The conference volume - a special issue of Clay Minerals to be published late in 1999 - will contain many of these papers. The Conference volume can be ordered at the pre-publication cost of £20 and a few sets of conference abstracts are still available at a cost of £10. These may be obtained from Chris Jeans, Department of Earth Sciences, Downing Street, Cambridge CB3 3EQ, UK.

The Autumn Meeting was held at the University of Bath on the 7 - 8 September 1998 and was on the theme of "*Physical and Chemical Characterisation of Mineral Suspensions*". The Conference Organiser were Nick Elton and Dave Skuse of English China Clays. The meeting was a success with 63 registrants, 21 talks, 7 commercial exhibits and 16 poster displays. The scope of 'mineral suspensions' may be very broad, including both aqueous and non-aqueous dispersions and ranging from the very dilute to the highly concentrated, including pastes and gels. Mineral suspensions are important in many industrial processes and their study draws on many scientific disciplines. This richness and diversity was reflected in the conference programme. The organisers would like

to thank ECC International for a contribution towards the student bursary scheme, for the conference wallet and for administrative support, and to Malvern Instruments Ltd for kindly sponsoring the drinks reception. Thanks also to Jeremy Hooper for invaluable assistance with the conference organisation and Janet Preston for help during the conference itself.

### 1999 Meetings

**Spring Meeting** - will be held at Trinity College, Dublin from the 25 - 26 March 1999. This is an open meeting and offers of papers and posters on any aspect of clay mineralogy are welcome and should be made to the Meeting Organiser, Dr David Doff, Geology Department, Trinity College, Dublin 2, Ireland (Tel 00 353 1 608 1419, Fax 00 353 671 1199, e-mail [ddoff@tcd.ie](mailto:ddoff@tcd.ie)). Should any student wish to give a paper, some financial assistance will be available to attend the meeting. Participants should make their own accommodation arrangements. Details of local hotels, guesthouses, etc., are available on request from the organiser and will also be posted on the Meeting Webpage at <http://www.tcd.ie/Geology/cmj.html>. On the Friday afternoon there will be a 'field trip' to the Guinness Visitor Centre in Dublin.

**Autumn Meeting** - There will be no Autumn Meeting. It is planned that the Group will take part in a Millennium Meeting to be held at Reading University - details will be available later.

For further information on the activities of the Clay Minerals Group please contact the new Secretary, Dr. Stephen Hillier, Macaulay Land Use Research Institute, Craigiebuckler, Aberdeen, AB15 8QH, UK (Tel 01224 318 611, Fax 01224 311 556, e-mail [mi418@mluri.sari.ac.uk](mailto:mi418@mluri.sari.ac.uk)).

Ian Wilson

## THE CLAY SCIENCE SOCIETY OF JAPAN

### 1. Committee

The following officers were elected for fiscal year 1999-2000

President: Dr. K. Tomita, Kagoshima University  
Vice president: Dr. K. Tazaki, Kanazawa University

Dr. K. Torii, National Industrial Research Institute of Tohoku

Secretary: Dr. N. Sakamoto Okayama Science University

Treasurer: Dr. H. Yamada, National Institute for Research in Inorganic Materials

Principal editors: Dr. R. Kitagawa, Hiroshima University (Nendo-kagaku)  
Dr. T. Henmi, Ehime University (Clay Science)

### 2. Annual meeting 1998

The 42nd annual meeting of the Clay Science Society of Japan was held at Gunma University, Gunma from October 6 to 7, 1998. A total of 128 papers including 86 poster presentations were presented. The program also included two guest lectures and four symposium presentations.

The guest lectures were:

- An overview of bentonite technology by *Dr. M. Kondo*, Hojun-Yoko Co, Ltd.
- Computer modeling in clay science" by *Dr. M. Sato*, Gunma University.

The symposium presentations were:

- Natural water-silicate mineral interaction by *Dr. N. Shikazono*, Keio University.
- Some topics of environmental geotechnology by *Dr. T. Sueoka*, Taisei Co. Ltd.
- A clay-bio polymer foam replacing plastic insulator by *Dr. H. Nakazawa*, National Institute for Research in Inorganic Materials.
- Use of clays in decontamination of environments by *Dr. Y. Kitagawa*, Niigata University.

At the occasion of the annual meeting, the society presented awards to the following members:

- Clay Science Society of Japan Award was made to Dr. K. Okada, Tokyo Institute of Technology
- Distinguished Service award was made to Dr. S. Kanaoka, Chukyo Junior College
- Encouraging Young Scientist Award was made to Dr. S. Satokawa, Tokyo Gas Co. Ltd
- Clay Technology Award was made to Telnite Co. Ltd.

### 3. Publication

Clay Science Society of Japan published four issues of Nendo-kagaku (Japanese Journal of Clay Science Society of Japan), vol. 37, Nos. 2, 3 and 4, and vol. 38,

No. 1. The society also published two issues of Clay Science, Vol. 10, Nos. 3 and 4.

S.-I. Wada

## CZECH NATIONAL CLAY GROUP

On September 6-10, 1998 the Czech and Slovak National Clay Group (Czech part) organized its 15th Conference on Clay Mineralogy and Petrology. It took place on the campus of Masaryk University in Brno.

Principal themes of the meeting covered:

- Clay Mineralogy and petrology
- Applied research of clay minerals
- Clay minerals and the environment
- Clays in soil research
- Zeolites and their use

Two workshops "Role of Clay Minerals in Weathering" and "Weathering of Industrial Waste" were held on the last day of the conference.

About 100 people attended the conference, one half from Czech Republic and Slovakia and one half from other countries. Roughly 50 papers were presented in oral form and 40 were exhibited as posters.

At the plenary session Prof. R.C.Mackenzie, Aberdeen, Scotland, was awarded the honorary membership of the Czech and Slovak National Clay Group in his absence.

Recipients of Young Argilologist Award were D. Janeba (for his paper "*Structure of intercalated phyllosilicates*") and M. Janek (for his paper: "*Acidity of proton saturated and autotransformed smectites characterized with proton-affinity distribution*")

The program of the conference was enriched with the field trip to Olomoucany near Blansko (eluvial clay on karst), Ivancice (miocene bentonite), Hrubšice (serpentinite weathering) Unanov (kaoline deposit - open pit mining and processing).

Book of Abstracts (published in the special issue of Scripta Fac. Sci. Nat. Univ. Masaryk Brunensis) was for disposal to all participants at their registration. Conference Proceedings of selected contributions are being prepared for the edition in the same journal in 1999.

- The new council of the Czech National Clay Group was elected for the future period: Dr. K. Melka (chairman)
- Prof. J. Konta
- Dr.M. St'astrný
- Dr. B. Krelina
- Dr. P. Sulovský
- Prof. Z. Weiss
- Dr. L. Aron
- Ing. R. Rychlý (a representative of the Zeolite Subgroup)

The former Zeolite Society asked for the affiliation to the Czech National Clay Group. This wish was approved and colleagues have been accepted as a subgroup. In the new council they are represented by one member.

During the Conference, two sessions of the Interrepublic Board were held. On the suggestion of the Czech part, respecting new laws of the Czech Republic, the Czech and Slovak Clay Group, jointly working from 1993 to 1998 has been split now into a separate Czech Clay Group and a separate Slovak Group.

The Czech National Group organized two seminars in the year 1998. Both of them took place in Prague.

The spring meeting was held at the Faculty of Sciences of Charles University on June 2 with the following program:

- L.Aron: Mining and processing of T-bearing kaolins
- Konta: The present investigation and exploration of clay matter (1990-97)

The second seminar was held on December 1 at the Czech Geological Survey. Two lectures were delivered:

- G. Koudelková: The correlation of the chemical composition with technological properties of clays from the Cheb Basin.
- J.K. Novák: Bentonite deposits in the area Cabo de Gata (southern Spain)

Karel Melka  
fax : 00-420-2-20922670

## DTTG (GERMAN-, AUSTRIAN-, SWISS CLAY GROUP ASSOCIATION)

The annual meeting of the German Clay and Clay Mineral Group (DTTG) was held at the University of Greifswald from the 3rd-5th September 1998, organized by K.-H. Henning and J. Kasbohm/Greifswald. A total of about 80 scientists, as well as scientists from Austria and Switzerland, participated in this most successful meeting. On the conference theme "Clays in Geotechnical and Civil Engineering" 16 lectures and almost 20 posters dealing with a great variety of entitled and related clay problems were presented at the highest scientific standard. The following excursion to the world famous cretaceous chalk sediments and deposits of the Isle of Ruegen was guided by E. Herrig.

During the meeting of the committee it was decided that our next meeting will be held in Zurich, at the Geotechnical Institute, ETH Zurich in September 2000. The conference will be organized by Guenther Kahr, ETH Zurich.

Again we could honour and grant the scientific work of a young clay scientist by the "Jasmund Award": Dr. R. Dohrmann. The new committee elected in Greifswald consists of Kurt A. Czurda (Chairman), Jean-Frank Wagner (Treasurer), Reiner Haus (Secretary) and six associated members.

For any further information please contact the DTTG Secretary, Reiner Haus, Karlsruhe University, Dept. of Applied Geology, Kaiserstr. 12, D-76128 Karlsruhe.

Reiner Haus

Tel.: 0721/608-4177, Fax : 0721/606279  
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www: <<http://agksun1.bio-geo.uni-karlsruhe.de>>

## HUNGARY

Papers on clay mineralogy were presented in sessions and meetings of the Hungarian Geological Society and the Hungarian Soil Science Society, held normally in Budapest. The following lectures were read:

January 19, 1998

Weiszburg, T.: Report on the 11th International Clay Conference, Ottawa, June 1997.

Kristóf, J., Tóth, M., Gábor, M.: A study of intercalated kaolinites by the FTIR method.

May 11

Raucsik, B.: Clay Mineralogy of the Komló Calcareous Marl Formation (Bajocian, Mecsek Mts).

December 7

One-day meeting on "Recent Tendencies in Clay Research"

The meeting was devoted to the celebration of the 150th anniversary of the Hungarian Geological Society.

Viczián, I. reviewed the history of the Hungarian Clay Group. The following lecturers reported on recent trends in various fields of clay research were reported:

- *Mineralogy, crystal structure, methods of investigation:*

Modulated structures (Dódonny, I.), mixed-layer clay minerals (Viczián, I.), Mössbauer and FTIR spectroscopy (Weiszburg, T.), extrapolated decomposition temperatures in thermal analysis (Földvári, M.).

- *Applied clay mineralogy:*

Palaeoclimatology and diagenetic history (Raucsik, B.), clay-organic maturity studies (Hetényi, M., Tóth, M., Szabó, P.), soil science (Stefanovits, P.), new trends in the 16th Meeting on Soil Mineralogy, India, 1998 (Szendrei, G.), effect of tensides on isolation properties (Patzkó, Á.).

István Viczián

e-mail: [viczian@mafi-2.mafi.hu](mailto:viczian@mafi-2.mafi.hu)

## CLAY MINERALS SOCIETY (North America)

The Clay Minerals Society's 35th Annual Meeting was held at the Marriott Downtown at Key Center Hotel in Cleveland, Ohio on 6-10 June 1998. The meeting was hosted by the Department of Geological Sciences, Case Western University, and it was organized by Dr. Samuel M. Savin. The George W. Brindley lecture was presented by Dr. Bruce Velde, l'Ecole Normale Supérieure, and entitled "Smectite to illite: A journey in time, temperature, composition space". Dr. Murray B. McBride, Cornell University, received the Jackson Mid-Career Clay Science Award and presented a lecture entitled "Understanding metal bonding by minerals: Putting spin on the science". Dr. Robert C. Reynolds, Jr., Dartmouth College, presented the Pioneers in Clay Science Lecture on "What

is illite/smectite? New problems and old problems that will not go away". Dr. Brij L. Sawhney, Connecticut Agriculture Experiment Station, was awarded the Distinguished Member Award. This was the last year that this award will be given; in the future, the Bailey Award will be given for distinguished research.



CMS incoming president Dave Bish presents CMS literature to Hitsuo Sate, President of Clay Minerals society of Japan, at CMS' 98 banquet, Cleveland, Ohio, June 9, 1998.

There were a total of 115 papers, including 31 posters. Sessions included the following areas:

General sessions:

Geological studies of clays (7 papers)

Clay structure/chemistry studies I. (11 papers), II. (11 Papers), III. (5 papers)

Clay sorption studies (6 papers)

Symposia:

Smectitic soils (7 papers)

Applications of molecular modeling techniques I. (5 papers), II. (11 papers)

New developments on the geochemistry of clays, zeolites, and oxides (10 papers)

Clay applications in the petroleum industry (11 papers)

Posters:

Molecular simulations (4 posters)

Smectitic soils (4 posters)

Oilfield applications (4 posters)

Sorption studies (11 posters)

Others (8 posters)

The field trip extended for one afternoon on 9 June and covered the "Coastal and bedrock geology of Northern Ohio". The pre-meeting workshop was on "Molecular Modeling of Clays". There is no volume planned for this workshop.

Student awards for research and presentation went to the following: For poster sessions, first place awardee was Winnie Mathes (Swiss Federal Institute of Technology), "Sorption of zinc, lead, copper, and cadmium by Al- and Zr-pillared montmorillonites and their uncalcined precursors" and second-place awardee was Youjun Deng (Texas A&M University), "Adsorption of polyacrylamides onto smectite, illite, and kaolinite". For oral presentations, the first-place winner was Kevin M. Rosso (Virginia Tech University), "Investigating molecular-scale surface dynamics and reactivity: combining UHV STM/STS and theoretical calculations" and the second place winner was Jennifer L. McKay (University of British Columbia), "Tracking stream-floods through the stable isotope variations of clay minerals on the Alberta Oil-sands."

The next annual meeting will be held at Purdue University, West Lafayette, Indiana from 26 June to 1 July 1999. The workshop is entitled: "Electrochemical properties of clays". The field trip, organized by H. Murray, is entitled: "Clay occurrences in southern Indiana" Special symposia include: Chemical and biological processes at clay surfaces. Electrochemical reactions at clay interfaces, Clays in materials sciences applications, Processing and properties of industrial clay, Molecular modelling of clay minerals and materials, and Applications of clay materials in concrete. Dr. Cliff Johnston is the general chair. Inquiries may be addressed to Dr. Cliff Johnston, Crop, Soil & Environmental sciences, Purdue University, 1150 Mimmy Hall, West Lafayette, In 47907-1150, USA; phone 00-765-496-1716, fax 00-765-496-1368, e-mail: clays@purdue.edu, meeting home page at: <http://shadow.agry.purdue.edu/clay/claymin/cms1999/purdue1999.html> or visit through the CMS home page

S. Guggenheim

## CLAY STUDIES GROUP OF KOREA

Clay activities in our country in 1997:

The joint meeting of the Clay Studies Group of Korea and the Mineralogical Society of Korea was held on May 8, 1998 at the Jeonbuk National University in Jeonju, Korea. The papers delivered at the meeting were:

- Lee, J.H. and Lee, S.W.: Mineralogical study of the diagenesis in shale of the Sindong Formation, Gyeongsang Basin.
- Lee, S.J., Moon, H.S. and Kim, Y. J.: Phase transition in kaolinite.
- Lee, S.H. and Kim, S.J.: Formation of halloysite from weathering of biotite.
- Kim, S.J., Choo, C.O., Lee, D.J. and Lee, S.R.: Textures and their genetic significances of claystones of the Cheonunsan Formation in the Hwasoon area.
- Lee, S.J., and Kim, S. J.: Formation of hydroxy-Al interlayered vermiculite by soil acidification in granite in the Onsan industry area.
- Kim S.G. and Hwang J.Y.: Clay minerals occurring in the land-sliding area.

Soo Jin Kim

email: saejung@plaza.snu.ac.kr, phone: 82-2-880-6729; fax: 82-2-877-3062

## GRUPPO ITALIANO AIPEA

Several Italian clay scientists attended the Second Mediterranean Clay Meeting held in Aveiro on 15-21 September, 1998. Oral and poster presentations were given by Italian scientists dealing with a great variety of clay problems. Two invited papers were presented by Dr. Bruno Fabbri ("Characteristics, uses and behaviour of the illitic-chloritic clays for ceramics") and Dr. Noris Morandi ("Archeometry of roman ceramics from Suasa-Italy: evidences of local and foreign production").

A training course will be held in Tito (Potenza) in September 1999 on "Determinative methods in clay mineralogy" (Chairman Dr. Saverio Fiore, Istituto di Ricerca sulle Argille of the National Research Council). A Symposium on "Argille e fanghi peloidi termali e per trattamenti dermatologici e cosmetici" will be held in Montecatini Terme in May 1999 (Chairman Prof. Fernando Veniale). A "Catalogue of Healing Clays" will be presented at the Symposium. The 1999 Luigi Dell'Anna award, sponsored by the Italian AIPEA Group will be offered to young Italian clay researchers to promote their participation in the

EUROCLAY '99, which will be held in Krakow (Poland from 5- 10 September 1999.

The Third Symposium ISMOM2000 of the Working Group MO entitled "Soil Mineral-Organic Matter-Microorganisms Interactions and Ecosystem Health" will be held in Naples and Capri (Italy) on 23-27 May 2000. The Working Group MO entitled "Interactions of Soil Minerals with Organic Components and Microorganisms" was established by the International Society of Soil Science in 1990. The first two Symposia of the Working Group MO were held in 1992 in Edmonton (Canada) and in 1996 in Nancy (France). The Working Group MO serves as a forum for the interactions of soil mineralogists with soil chemists, soil microbiologists, soil biochemists, and environmental scientists. The technical program of the third Symposium ISMOM2000 will consist of special sessions (oral and poster sessions), including invited lectures by scientists of international stature. People interested to receive detailed information on the Symposium may contact prof. Antonio Violante, Chairman of the Symposium (e-mail: [violante@unina.it](mailto:violante@unina.it)).

The website (<http://www.pz.cnr.it/aipea>) will provide information on the scientific activities of Gruppo Italiano AIPEA.

Antonio VIOLANTE  
[violante@unina.it](mailto:violante@unina.it)

## RUSSIA

Problems related to clay science and clay objects were presented at two conferences: "To-day X-ray mineralogy", Klyazma (near Moscow), 7-10.04.1998, and at the National crystallochemical conference, Tshernogolovka (near Moscow), 24-29.05.1998. The programs included: high-pressure (B.A. Fursenko), high-temperature (S.K. Filatov) and low-temperature (E.I. Erenburg) structural states and transformations, development of electron diffractometry revealing the innercrystalline potential distribution (B.B. Zvyagin), computerization of qualitative and quantitative analyses of multiphase specimens (V.S. Fundamentsky), crystal chemistry of volkonskoite pseudomorphs over buried wood remains (Yu.S. Simakova), features of clay minerals in deep lake Baykal sediments (E.P. Solotchina).

Boris Zvyagin  
e-mail: "Boris B. Zvyagin" <[Zvyagin@igem.msk.su](mailto:Zvyagin@igem.msk.su)>

## POLAND

The activity of the Polish Clay Minerals Group has been limited chiefly to the organization of the EUROCLAY 99 in Cracow, September 5-9, 1999. The second circular has been distributed.

Prof. Dr. Anna Langier-Kuzniarowa  
Polish Geological Institute, Rakowiecka 4, 00-975 Warszawa, Poland

## THE NORDIC SOCIETY FOR CLAY RESEARCH.

The Council for 1998

Chairman: Ole Björnslev Nielsen.  
Secretary: Per Nörnberg.  
Address: Geol. Inst., University of Aarhus, DK-8000 Copenhagen

Treasurer: Lars-Ove Lång  
Address: Geological Survey of Sweden  
Guldhedsgatan 5 A, S-413 81 Göteborg

Liaison Officer: Dr. P.-A. Melkerud, Associate professor  
Department of Forest Soils  
Swedish University of Agricultural Sciences,  
Box 7001, S-750 07 Uppsala, SWEDEN  
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### 1997 Meetings

During 1997 the activity of the Nordic Society of Clay Research has been quite limited.

The spring meeting planned to be held in Denmark was canceled.

*November 1997.* The annual meeting was held on the 27<sup>th</sup> of November 1997 at the Royal Institute of Technology and arranged by Prosun Bhattacharya. After election of the 1998 council, this meeting was continued with the following lectures:

- Deep weathered bedrock below Mesozoic sediments, the northern North Sea. (Elen Roaldset, Fridtjof Riis & Sven Ola Johnsen, Dept. of Geology and Rock Techniques, NTNU, Trondheim, Norway).

- The fundamental mechanisms of weathering and the podzolization process - Information about a comprehensive project about podzolization and review of the article Rock-eating fungi, *Nature*, vol 389, issue no. 6652, 16 October 1997. (Per-Arne Melkerud, Dept. of Forest Soils, The Swedish University of Agricultural Sciences, Uppsala, Sweden.)
- On the surface complexation modelling of ions to soil mineral surfaces- What we know and what we do not know. (Jon-Petter Gustafsson, Dept. of Soil and Water Resources, Royal Institute of Technology, KTH, Stockholm, Sweden.)
- Effects from spruces on soil; a study of soil chemistry, soil formation and clay mineralogy below stands of spruce and deciduous trees in the southern part of the county Småland, Sweden. (Fredrik Nordborg, Southern Swedish Forest Research Centre, The Swedish University of Agricultural Sciences, Alnarp, Sweden.)
- Origin of silt and clay size materials in young Danish wind blown sand soils. (Per Noernberg, Institute of Geology, The University of Aarhus, Aarhus, Denmark.)
- High-arsenic groundwater in India - Recent test of laterite as a filter media. (Maria Larsson, Andreas Leiss, Dept. of Environment and Working Science, KTH) and (Prosun Bhattacharya, KTH, Sweden)
- The sessions was intercepted by the inaugural ceremony of the Geotechnical Laboratory, performed by the principal of the Royal Institute of Technology

Also a confirmation could be added that the first issues of the Newsletter of ECGA and the first part of the Directory of ECGA have been received for distribution between the members of the Nordic Society for Clay Research. For the present there are around 80 members.

Per-Arne Melkerud

## SERBIA

Clay activity in Serbia

Two conferences devoted to clays were held in Serbia in 1998: 1. The Second International Consultation on Open Pit Clay Exploitation (Pozarevac, May 14-16), 2. Conference on Mineral Raw Materials for Ceramic and Brick Industry



(Kanjiza, June 4-7). A few papers dealing with clays and clay minerals from Serbia were presented on XVI Congress of Carpathian-Balkan Association (Vienna, Austria, August 30-September 2) and on XIII Geological Congress of Yugoslavia (Herceg Novi, Montenegro, October 6-9). There is still no national clay group which will organize and follow systematic investigations of clays and clay minerals in Serbia. Therefore, it can be seen as a continuous work only in the study of weathering of minerals and rocks, as well as of serpentine minerals.

Prof. Dr. Vidojko Jovic  
Faculty of Mining and Geology, Djusina 711000 Belgrade Yugoslavia  
e-mail: ljika@helix.chem.bg.ac.yu

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## 10. MEETINGS

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### 31st International Geological Congress

Rio de Janeiro, Brazil  
August 6-17, 2000

Theme: Geology and sustainable Development: Challenges for the Third Millennium.

Secretariat Bureau:-

31st International Geological Congress  
Avenue Pasteur 404, Casa Brazil 2000, Urca,  
Rio de Janeiro RJ, Brazil  
tel: +55-21-295-5847  
fax: +55-21-295-8094  
e-mail: 31igc@31igc.org  
<http://www.31igc.org>

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## 11. BOOKS

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The secretariat received information on

- books of the Theophrastus Publications 1998-1999
- EPISODES, the International Geosciences newsmagazine  
Vol 20, nrs 3 and 4  
Vol 21, nrs 1 and 2

- Asian Ceramics  
June 1998, August 1998
- Newsletter of the International Association of Geochemistry and Cosmochemistry
- Science International  
Newsletter of the International Council of Scientific Unions, Nrs 67 and 68
- Mössbauer Mineral Handbook  
Mössbauer Effect Data Center  
206, Rhoades Hall CPO # 2311  
The University of North Carolina at Asheville  
One University Heights, Asheville, NC 28804-8511, USA  
fax: 828-232-5179  
e-mail: medc@unca.edu  
homepage: [www.unca.edu/medc](http://www.unca.edu/medc)  
price of soft-cover handbook: \$ 290.00
- Catalog of Data & Products  
from National Geophysical Data Center  
<http://www.ngdc.noaa.gov/store/>
- New climatological and geophysical CD releases  
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## 12. MEMBERSHIP INFORMATION

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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 fees are as follow: (in US dollars)

	1 year	4 years
Individual member	7.50	30.0
Institution/Company	25.00	100.0
Student member	3.75	15.0

Affiliated societies: 50% reduction per member. All members are then automatically AIPEA members.

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

AIPEA membership dues can be paid by using a VISA card system. Please state your VISA card number and the expiration date along with authorization for Dr. P.M. Huang, AIPEA Treasurer, to charge your AIPEA membership dues to your VISA card.

1. Pay fees by
  - a) bank money order, payable in US dollars or
  - b) international postal money order, payable in US dollar
2. Pay membership fees for four-year periods
3. Make check or money order payable to AIPEA and mail to:

Prof. Pam M. HUANG, treasurer AIPEA  
Department of Soil Science  
University of Saskatchewan, ,  
51 Campus Drive, Saskatoon, SK S7N 5A8, Canada  
tel: +1-306-966-6823  
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## AIPEA MEMBERSHIP APPLICATION FORM

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Title: \_\_\_\_\_

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Amount of dues enclosed: \$ \_\_\_\_\_ for \_\_\_\_\_ years

Type of membership: \_\_\_\_\_

if you are an individual member of an Affiliated Society, give the name of  
the Society \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

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## CHANGE OF ADDRESS NOTICE

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Name: \_\_\_\_\_

New Address: \_\_\_\_\_

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Date effective: \_\_\_\_\_

Please mail to the AIPEA Treasurer:

Prof. Pam M. Huang

Department of Soil Science

University of Saskatchewan

51 Campus Drive, Saskatoon, SK S7N 5A8, Canada