Meetings: It is a great pleasure to address you once more, in my capacity of President of AIPEA. The year 2019 promises to be very busy with many activities in the Clay World, most important the EUROCLAY Conference (Paris, France, July 1st to 5th, 2019) among many other technical events listed in this newsletter. 2019 will also be important for the preparation of ICC-17 which will be held in Istanbul (Turkey) in 2021 (see some information inside this newsletter).

Awards: Prepare yourselves to participate in all the proposed activities and be alert about the several awards that AIPEA traditionally delivers at ICC conferences: AIPEA medals, Bradley Award, AIPEA Fellows, Student travel funds and Student best speaker & poster awards (see www.aipea.org). At Euroclay 2019 awards are to be presented to the best student poster and best oral presentations (winners and runners-up). Final results and cash prizes will be announced at the end of the conference as well as recognized in Elements Magazine. The following specifications apply: (1) only oral and poster presentations with a student as the first author (and as the presenting author) will be considered; (2) all students presenting at Euroclay are eligible; (3) a first and second prize will be given for each category (both oral and poster); (4) all student oral and poster presentations will be evaluated by members of AIPEA Council and their designates attending the conference. http://www.aipea.org/studfund.html

NCGs: AIPEA has now 22 active Affiliated Societies or groups from worldwide with a growing participation form Asia. AIPEA would like to expand its activities to countries without formal clay societies/groups. Unfortunately, we have received no news from some of them in the last years. We would like yet to learn if these societies / groups are still in activity and willing to cooperate with AIPEA in the promotion of clay science. In 2019 we plan to encourage the formation of new national or regional clay groups (NCGs), the revitalization of “sleeping” and the affiliation of existing active clay groups. The new candidates should fill the form available at the AIPEA website (www.aipea.org) and send their application to secretary@aipea.org. Meanwhile most of our affiliat-
ed societies contributed to our 51st Newsletter. AIPEA has published a data protection policy and distributed that to all AIPEA members via email. This ensures that members have control about the use of their email addresses. We have received many email lists of members of NCGs, however, some groups still did not send. It is important to share information on past and future activities, projects with clay scientists around the world. We encourage all national society representatives to respond promptly to our Secretary-General’s and Treasurer’s requests for information. Please take some time to check if your society / group has effectively sent report to AIPEA. If not, I would like to encourage you to contact your representative and reinforce the importance of doing this small gesture of international cooperation. AIPEA continues publishing reports on the society’s life on Elements as a powerful means to communicate with the mineralogical and geochemical community. Please let Prof. Peter C. Ryan, our Secretary-General, or me know if you have information that deserves the attention of the scientific societies. We can include it on our six-month report to this journal. AIPEA also continues to be an affiliated society to the International Union of Geological Sciences (IUGS) and provides information for the IUSG bulletin, another excellent way to communicate with the scientific societies all around the world and to integrate AIPEA into international geological activities.

Registration of AIPEA: In 2018 we started an initiative to register AIPEA as a non-profit society. Consistent with AIPEA’s Statutes and By-laws, the AIPEA council unanimously elected to carry out an electronic vote that will allow all members of AIPEA to either support or oppose becoming a legally registered society. This e-voting will be used in 2019 for the first time.

With best wishes

Reiner Dohrmann / February 2019
The AIPEA Council has been elected during the 16th International Clay Conference at Granada (Spain), in July 2017. The Officers and Councillors who will work for AIPEA during 2017-2021 are as follows:

**AIPEA Executive Officers for 2017-2021**

**Dr. Reiner DOHRMANN, President**  
Technical Mineralogy, Sedimentology  
State Authority of Mining, Energy and Geology (LBEG)  
Federal Institute for Geosciences and Natural Resources (BGR)  
Stilleweg 2 - D-30655 Hannover - Germany  
Phone: +49+511-643 2557  
Email: president@aipea.org

**Prof. Jocelyne BRENDLE, Vice President**  
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CNRS UMR 7361  
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Phone: +33 (0) 3896801 - Fax: +33 (0) 389336885  
Email: jocelyne.brendle@uha.fr

**Dr. Saverio FIORE, Past President**  
Microminerals, Health & Environment Research Group,  
Head Institute of Methodologies for Environmental Analysis  
National Research Council of Italy  
c/o Department of Earth & Geoenvironmental Sciences  
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Phone: +39 080 5442618  
Email: saverio.fiore@cnr.it

**Prof. Peter RYAN Secretary General**  
Middlebury College  
Department of Geology  
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Email: pryan@middlebury.edu

**Dr. Alberto LOPEZ GALINDO, Treasurer**  
Instituto Andaluz de Ciencias de la Tierra, Director  
CSIC - Universidad de Granada  
Av.da de las Palmeras- 18100 Armilla (Granada) - Spain  
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**Dr. Victoria KRUPSKAYA, Councillor** (2nd term)  
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119017, Staromonetniy per., 35 - Russian Federation  
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Email: krupskaya@ruclay.com

**Prof. Makoto OGAWA, Councillor** (2nd term)  
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**Dr. Jana MADEJOVÁ, Councillor** (1st term)  
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Prof. Cliff T. JOHNSTON, Councillor (1st term)
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Prof. Chun Hui ZHOU, Councillor (1st term)
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Zhejiang University of Technology (ZJUT)
Hang Zhou, 310032, Zhe Jiang - China
QYIM-ZJUT Joint Research Center for Industrial Minerals
Qing Yang Institute for Industrial Minerals (QYIM)
You Hua Township, Qing Yang County, 242804
An Hui - China
Email: clay@zjut.edu.cn | chc.zhou@aliyun.com

Prof. Stephen GUGGENHEIM
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Dr. Saverio FIORE
Chair Hazardous Minerals Committee
Microminerals, Health & Environment Research Group,
Head Institute of Methodologies for Environmental Analysis
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Dr. Jeanne B. PERCIVAL
Chair Teaching Committee
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Prof. Dr. Asuman TÜRKMENOGLU
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Email: t.asuman@gmail.com
The AIPEA Website at http://www.aipea.org continues to be the most important means of communication for the international community dedicated to clays and clay minerals since its creation. It provides extensive information about many aspects of AIPEA and the clay sciences, and thus it is an important tool to help AIPEA fulfills its main purposes.

AIPEA website was created to provide dynamic and continuous announcement of activities directly related to clay sciences. General information about the organization of AIPEA can also be easily found, such as: mission, purposes, organization, statutes and by-laws, membership, council, publications, newsletters, committees, affiliated societies (name of the person who is responsible for contact with AIPEA), awards and medals (list of winners), and historical overview. Also available are links to several National Clay Groups (NCG) websites as well as to the International Union of Geological Sciences (IUGS), to which AIPEA is affiliated. It also includes volumes of the AIPEA Newsletter in a searchable way (a few are missing or incomplete and we are working to fill in these gaps). Please inform us if you notice any errors.

Recently, the AIPEA president received an important message from Dr. Bruno Lanson, president of French Clay Group (GFA), providing information related to the early history of CIPEA, the predecessor to AIPEA. Bruno has found a mail exchange from 1979 among Helene Suquet, Simone Caillere, and A. Breeuwsma, who was the AIPEA secretary at the time, about the name of the first president of CIPEA. Accordingly, the first president of CIPEA was Dr. Hénin (1948-1950), followed by Prof. J. Orcel (1950-1952) and finally by Prof. R. Grim. Thus this letter corrects the wrong information published at AIPEA Newsletter 1967, which stated that Prof. R. Grim was the first president of AIPEA. We are thankful to Bruno for his kind interest in keeping a reliable AIPEA historical overview.

Back to our theme… Many relevant technical activities around the world are continuously being announced through the website, updated by the AIPEA Webmaster, Dr. Saverio Fiore. It offers a long list of events (conferences, courses, projects, etc.) in a complementary page (http://www.aipea.org/conferences.html). This list can also be found in the traditional way, at the end of this newsletter.

AIPEA website also presents a link for the payment of the AIPEA annual fee by credit card or PayPal account. Regular members are encouraged to pay quadrennial fees (equivalent to 4-years) in order to benefit for reduced fees to participate in events organized by AIPEA, such as International Clay Conferences (or those endorsed by AIPEA), and to be included in the AIPEA member-list, receiving continuous news from the international clay community. This facility can be found at http://www.aipea.org/membership.html

AIPEA fees for individual members who do not belong to any AIPEA Affiliated Society are:
• Full professional: $30.00 USD (per 4-years).
AIPEA fees for corporate sponsors are: $100.00 USD (per 4-years).

New candidates to become AIPEA Individual Members should download the membership application form at http://www.aipea.org/membership.html and make the payment using the mentioned specific link. After filling the form in, please send it both to the AIPEA Treasurer (treasurer@aipea.org) and President (president@aipea.org). Please notice that students must prove their status through an official document provided by their university.

Members of AIPEA Affiliated Societies are also AIPEA members, as their dues are paid by their national or regional clay groups / societies. However to benefit from the same advantages as those of AIPEA individual members, these groups / societies must provide yearly the corresponding payment.

Applications from National or Regional Clay Societies / Groups wishing to become affiliated to AIPEA shall be made to the secretary-general by addressing the e-mail secretary@aipea.org. The candidates must download the “Affiliation Form for National Clay Groups” at http://www.aipea.org/membership.html and furnish the requested relevant information. The proposal will be submitted to the AIPEA Council and, if approved, the Society shall become affiliated on payment of the appropriate membership fee. The fees are $3.75 USD/year per full member and $2.50 USD/year for each student.

We encourage all AIPEA members and other colleagues to undertake a systematic perusal of the contents of the AIPEA website in order to become updated with the many opportunities that are available around the world. Several technical events related to clays and clay materials and their applications take place continuously. Please remain in contact with us by sending news of relevant activities and events to the AIPEA Webmaster (webmaster@aipea.org) and to the AIPEA Secretary-General Dr. Peter Ryan (secretary@aipea.org).

Finally, we would like to stress that AIPEA is dedicated to keeping its website continuously updated. This is important in order to fill its mission to share all information available on past and future activities with clay scientists around the world. We would recommend that the same disposition be adopted by all AIPEA Affiliated Societies. Some websites are no longer being updated and even their links do not work properly. Ideally, English versions can be made available in order to disseminate information to a wider audience of clay scientists.

Peter Ryan
December / 2018
One of the principal aims of AIPEA is to stimulate and excite excellent young clay scientists. Under ideal circumstances, this would be achieved by face to face interaction between these young scientists and more established clay scientists during the International Clay Conferences (ICC), which take place every four years.

The last three ICCs have included the AIPEA School for Young Scientists (ASYS) in their program. These short courses were dedicated to topics of clay sciences which are of worldwide interest. Unfortunately, it is not always possible for every young clay scientist to attend this conference and/or to the ASYS shortcourse. Consequently, in 2013 AIPEA started its Educational Series (AES) by publishing the material presented during ASYS 2009. By now, this Series has already two volumes linked to the ASYS shortcourses.

The first edition of AES Volume 1 has already been sold out and an electronic copy of it is now available for free download. Just send a request to info@aipea.org and we will provide a link for downloading the file.

In 2015, the AES Volume 2 was delivered to the public and is now available for purchase. More information follows.

**Magnesian Clays**

**Characterization, Origin & Applications**

AIPEA Educational Series - Publication No.2  
Editors: Manuel Pozo & Emilio Galán

Lectures held at the:  
2nd AIPEA School for Young Scientists  
Rio de Janeiro, Brazil, July 6-7th, 2013  
Digilabs Pub., Bari, Italy - pp. 380 + XII  
ISSN: 2283-687X

The book is an overview and update on the main issues related to magnesian clays. It is accessible to students, providing the basics and the latest information on several topics and including key literature references.

**Contents**

1. Introduction to Mg-rich clay minerals: Structure and composition (Stephen Guggenheim)
2. Methodology for the identification and characterization of magnesian clays (Emilio Galán and Patricia Aparicio)
3. Geology of magnesian clays in sedimentary and non-sedimentary environments (José Pedro Calvo and Manuel Pozo)
4. Magnesian clay deposits: Mineralogy and origin (Manuel Pozo and Emilio Galán)
5. Madrid Basin (Spain): a natural lab for the formation and evolution of magnesian clay minerals (Manuel Pozo and José Pedro Calvo)
6. Geochemical pathways to Mg-silicate formation (Nicholas Tosca)
7. Properties and applications of magnesian clays (Julio Santarén)

This book, not in the sale, was financed by Associazione Italiana per lo Studio delle Argille (AISA). AISA distributes personal e-copies and hard copies in return to an economic support to the Association:
e-copy: €5.00
Print copy: €20.00
Shipping costs: Italy: €12.00 (tracking). Other Countries: €15.00 (no tracking) or €25.00 (tracking). The package may contain up to 10 copies.

You can donate by credit card (use the form at www.aipea.org/publications.html) or wire transfer:
Bank name: Fineco Bank
Account name: Associazione Italiana per lo Studio delle Argille - onlus
IBAN: IT81M0301503200000003445310
Swift: UNCRITMM
Details of payment: Donation for AES2
Note: Payment must include all the applicable bank wire fees.

Interstratified Clay Minerals
Origin, Characterization & Geochemical Significance
AIPEA Educational Series - Publication No.1
Editors:
Saverio Fiore, Javier Cuadros & F. Javier Huertas

Lectures held at the:
1st AIPEA School for Young Scientists
University of Bari, Italy, June 12-13, 2009
Digilabs Pub., Bari, Italy - pp. 175
ISSN: 2283-687X

Hard copy sold out (copies printed on demand: € 40.00, international shipping included)

E-copy free of charge - mail info@aipea.org

The book is an overview and update on the main issues related to interstratified (or mixed-layer) clay minerals, with a clear educational scope. It is accessible to students, providing the basics and the latest information on the several topics and including key literature references.

Contents
1. Introduction to Mixed-Layer Clay Minerals (J. Cuadros, S. Fiore and E.J. Huertas)
2. Crystal-Chemistry of Mixed-Layer Clays (J. Cuadros)
5. Identification and Characterization with Microscopic Methods (F. Nieto and X. Arroyo)

Saverio Fiore
December / 2017
The most recent AIPEA Ordinary Council Meeting took place at the 16th ICC in Granada Spain on July 16th 2017 and was chaired by Saverio Fiore. Some highlights of the President’s report include: the classes from the AIPEA School for Young Scientists (ASYS) workshop held during the 16th ICC are expected to be converted into a new volume of AES (AIPEA Education Series) to be entitled: “Computational Modeling In Clay Mineralogy”; three new AIPEA-affiliated societies, the Chinese Association for the Study of Clays, the Clay Minerals Society of India, and the European Clay Groups Association, are welcomed to AIPEA; AIPEA members could make better use of the list-serve to enhance communication of events and ideas. The Secretary’s report recommended that each affiliated society should have its own website (with English version) that includes a link to the AIPEA website. The Treasurer’s report included a reminder to all affiliated societies to pay AIPEA dues annually. Information was presented on the 16th ICC Granada meeting, including 780 registered participants (professionals and students) from 55 countries, with 829 accepted abstracts (427 oral and 402 poster). Council commends the organizers, attendees, and all who worked so hard to make the 16th ICC an excellent meeting. At the General Assembly meeting on July 20th, Prof. Emilio Galán (University of Seville, Spain) accepted the AIPEA Medal Award and gave a thank-you speech. Marwa Akkari (University of Carthage, Tunisia) was awarded the Jose Maria Serratosa Award for the paper ‘ZnO/sepiolite heterostructured materials for photocatalytic degradation of emerging pollutants in wastewater’. The new AIPEA Council for the period 2017-2021 was announced and approved by those assembled, and incoming President Reiner Dohrmann gave an acceptance speech that in particular acknowledged the work done by outgoing council members, while also welcoming new ones. (Current council members are listed in a separate section).

Council has conferred via email periodically throughout 2018 and 2019 to consider options in the ongoing process of legalizing AIPEA as a registered society. Council voted unanimously to endorse an electronic vote to approve (ratify) an amendment to AIPEA Statutes and By-Laws to legalize AIPEA in Spain, and this vote is expected to take place in springtime of 2019. The act of registering AIPEA as a legally recognized society is made necessary by international laws adopted over the past decade. As part of the process, AIPEA President Reiner Dohrmann, Treasurer Alberto López Galindo, and Secretary-General Peter Ryan met in the first week of March 2019 with a legal counsel in Granada, Spain to discuss the legal document, and then signed documents that have begun the process of requesting registered society status in Spain.

Peter Ryan
January / 2019
AIPEA Listserves

The international community of clay mineral researchers has benefitted from two AIPEA list-serves. Established in 2014, they are intended to make information available quickly and broadly pertaining to all areas of clay sciences. The first AIPEA list-serve (members@aipea.org) contains the e-mail address of all AIPEA members and those of its affiliated societies (national and regional clay groups). These e-mails are updated annually, and all members are automatically included in the AIPEA Members List. If you are a member of any AIPEA affiliated society and are not receiving messages, please check whether your affiliated society has sent an updated list of e-mails to the AIPEA webmaster. If your affiliated society is not yet affiliated with AIPEA, please encourage those in charge to make contact with the AIPEA President (president@aipea.org) or Secretary (secretary@aipea.org) for information. Alternatively, please also check the SPAM box to be sure that AIPEA messages have not been misdirected to it.

AIPEA has also organized a “talk list” (talk@aipea.org) for people interested in asking questions or sharing information about clay science but who are not yet engaged in affiliated societies or AIPEA. Those interested in participating in the AIPEA talk listserv should send a message to talk.subscribe@aipea.org. Subscription to the list is completely free and you may remove your name from the list at any time just by sending a message to talk.unsubscribe@aipea.org.

We take this opportunity to remind all AIPEA members about the importance of paying membership dues on time. Payment of AIPEA dues can be done via credit card or PayPal using a link added to the AIPEA website (http://www.aipea.org/membership). AIPEA encourages everybody to pay for the period of four years, making planning and participation easier for a longer period. Of course, members may also pay dues for one year, in which case the member will be in good standing for that year. According to the AIPEA statute and by-laws, if the membership fee is not paid, membership may be cancelled and excluded from the AIPEA Member-List.

Finally, if you wish to share information about any topic related to clay minerals with AIPEA members, please send a message to the AIPEA webmaster (webmaster@aipea.org) and/or to the AIPEA Secretary-General (secretary@aipea.org).

Peter Crowley Ryan
February 2019
AIPEA was the grateful recipient of a financial contribution from the 16th ICC (half of the surplus from the XVI International Clay Conference). The financial situation of the Association therefore continues to be in the black.
We have contributed to Elements magazine, which ensures promotion of the AIPEA among the wider mineralogical community.
During 2018 some steps have been taken to regularize the status of AIPEA and establish the required Tax code identification. The legislation has changed in recent years, and all associations must be officially registered. The AIPEA is not yet a registered association and for operational reasons this will be done in Spain, but its Statutes must first be adapted to the current legal requirements.

National Clay Groups
Dues corresponding to 2017 were received from the French, Australia and Japan societies. The (British) Clay Minerals Group - Mineralogical Society of GB and Ireland has paid for 2018.
No invoices will be sent to the National Clay Groups for 2018 dues until the AIPEA regularization process is finished. National Clay Groups have been informed of this situation, and they will be asked for 2018 payment later. Currently, the number of affiliates to each National Clay Group is as follows: Chinese Association for the Study of Clays: 61; (North American) Clay Minerals Society: 361; Czech National Clay Group: 41; Croatian Clay Group: 16; Groupe Francais des Argiles: 144; German-Austrian-Swiss Clay Group: 99; (British) Clay Minerals Group - Mineralogical Society of GB and Ireland: 124; Israel Society of Clay Research: 17;Associazione Italiana per lo Studio delle Argille: 64; Clay Science Society of Japan: 366; Korean Clay Science Society: 27; Polish Clay Group: 42; Associaçao Portuguesa de Argilas: 29; Russian Clay Group: 32; Slovak Clay Group: 33; Sociedad Española de Arcillas: 115; Turky Clay Science Society: 54; Tunisian Clay Group: 20. No data are available from Algerian Clay Group, Hungarian Clay Group, Clay Minerals Society of India, and Ukrainian Clay Group.

**Individual Membership**
Individual memberships have increased with 1 new affiliate, for a total of 33.

**PayPal**
Payment of membership fees is facilitated through the use of PayPal (treasurer@aipea.org). Dues can be paid in either US dollars or Euros.

**Website Support**
The website is supported by AIPEA. We continue to acknowledge the contributions of Dr. Saverio Fiore and the Italian Clay Group for keeping it up to date.

**Financial Statement**
The Balance Sheet and Profits & Loss statements are provided for 2018.

Alberto López Galindo
February 2019
AIPEA
Balance Sheet
January through December 2018

ASSETS
Current Assets
Chequing/Savings
   Bankia Current Acct. 83,366.75 €
   Paypal 58.84 €
   Total Chequing/Savings 83,425.59 €

Total Current Assets 83,425.59 €
TOTAL ASSETS 83,425.59 €

LIABILITIES & EQUITY
Equity
Unrestricted Net Assets 82,437.30 €
Net income 988.29 €
Total Equity 83,425.59 €
TOTAL LIABILITIES & EQUITY 83,425.59 €

AIPEA
Profit & Loss
January through December 2018

Jan - Dec 2018

Ordinary Income/Expenses
Income
   Program Income
      Contribution from XVI ICC (1) 3,378.29 €
      Membership Dues (2) 2,071.12 €
   Total Program Income 5,449.41 €

   Total Income 5,449.41 €

Expense
   Advertising Expenses 530.29 €
   AIPEA regularization (3) 1,275.69 €
   Bank Charges & Interest 69.70 €
   Operations
      AISA services 2,585.44 €
   Total Expense 4,461.12 €

   Net Ordinary Income 988.29 €

   Net Income 988.29 €

(1): 1/2 final surplus XVI ICC
(2): 2017 dues from France, Australia and Japan societies, 2018 dues from (British) Clay Minerals Group; 3 individual members
(3) Translation into Spanish statutes and bylaws
Name of Affiliated Organization:
Association Internationale pour l’Etude des Argiles – AIPEA

Overall objectives:
AIPEA is an umbrella organization for the world’s national clay societies. The aim of AIPEA is to promote international co-operation in clay research and technology. To fulfill this purpose its activities shall include the organization of:
• Meetings, notably International Clay Conferences;
• Field excursions;
• Visits to centers of clay research and technology;
• Workshops for young clay scientists;
• Publication of issues on clay research and technology;
• Publication of a periodical Newsletter to inform members of activities concerning clay research.

Relate goals to overall IUGS scientific objectives:
• Organize and/or collaborate in the organization of conferences of clay worldwide interest;
• Stimulation of excellence in young clay scientists;
• Rewarding active clay scientists with a brilliant career in clay research;
• Stimulation of communication among clay researchers and technologists.

Structure and organization:
AIPEA is administrated by a council that includes officers (President, Vice-President, Secretary General, Treasurer, the immediate Past-President) as well as six Ordinary Councillors, representatives of the Organizing Committee of next International Clay Conference, and the Chairs of the Nomenclature Committee, Teaching Committee and Hazardous Minerals Committee.

Interaction with other International organizations and projects:
AIPEA has 23 affiliated societies / groups from around the world, including: Algerian Clay Group; Australian Clay Minerals Group; Clay Minerals Group of The Mineralogical Society of Great Britain and Ireland; Chinese Association for the Study of Clays; Clay Minerals Society of India; Clay Science Society of Japan; Croatian Clay Group; Czech National Clay Group; European Clay Groups Association; French Clay Group; German- Austrian-Swiss Clay Group; Korean Clay Science Society; Hungarian Clay Group; Israel Society of Clay Research; Italian Association for the Study of Clays; North American Group (Clay Minerals Society); Polish Clay Group; Portuguese Clay Group; Romanian Group for the Study of Clays and Clay Minerals; Russian Clay Group; Slovak Clay Group; Spanish Clay Society; Tunisian Clay Group;
AIPEA has three committees working on key themes of international interest: Nomenclature, Teaching, and Hazardous Minerals. AIPEA also co-operates in international programs for excellence in Clay Science, such as the International Master in Advanced Clay Science (IMACS), a program jointly delivered by: the University of Poitiers (France); the Technical University of Crete (Chania - Greece); the University of Aveiro (Portugal); the University of Ottawa (Canada); and the Federal University of Rio Grande do Sul (Porto Alegre – Brazil).

Chief products:
The International Clay Conference (ICC), which takes place every four years, is the main AIPEA activity, and the next one is scheduled for Istanbul in July (12-16) 2021. AIPEA continues to improve its website as a source of information and support for the worldwide clay community (www.aipea.org).

AIPEA has published two monographs of the book series AIPEA Educational Series (AES; ISSN: 2283-687):
• Interstratified clay minerals. Origin, characterization & geochemical significance;
• Magnesian clays: Characterization, origin and applications.

Electronic copy of the 1st AES volume, 2nd edition, is available for free download. Information can be found at www.aipea.org

Chief accomplishments 2018 and plans for 2019:

Through AIPEA.org, a members email list and a list-serve, AIPEA continues to serve as a means to communicate updates on news and forthcoming conferences.

AIPEA council will meet at Euroclay in Paris on Sunday 30-June-2019, and AIPEA officers will meet with representatives of national or regional clay groups on Wednesday 3-July-2019.

Specify how any IUGS Allocation was used:
AIPEA is financially independent and receives income from individual members and affiliated societies and from registrations to the International Clay Conferences.

Budget request with justification (only applicable to low income groups):
None.

Does your website have a link to IUGS?
Yes.

Name, address and e-mail of person preparing this report:
Dr. Peter Crowley Ryan
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pryan@middlebury.edu
December 20, 2017
09 MECC
ZAGREB CROATIA
17 - 21 SEPTEMBER 2018

REPORT FROM THE 9TH MID-EUROPEAN CLAY CONFERENCE

ORGANISING COMMITTEE
Anita Grizelj (Croatia) – Chair
Members:
Radovan Avanić (Croatia)
Marko Cvetković (Croatia)
Goran Durn (Croatia)
Zvonka Gverić (Croatia)
Marija Horvat (Croatia)
Nikolina Iljinčić (Croatia)
Marijan Kovačić (Croatia)
Jasmina Martinčević Lazar (Croatia)
Marta Mileusnić (Croatia)
Zoran Peh (Croatia)
Darko Tibljaš (Croatia)
Nenad Tomašić (Croatia)
Biljana Kovačević Zelić (Croatia)
and on behalf of the organising societies:
Martin Šťastný (Czech Republic)
Reinhard Kleeberg (DTTG)
Erzsébet Harman-Tóth (Hungary)
Czesław August (Poland)
Peter Uhlík (Slovakia)

INTERNATIONAL SCIENTIFIC COMMITTEE
Darko Tibljaš (Croatia) - Chairman
Pilar Aranda (Spain)
Czesław August (Poland)
George Christidis (Greece)
Arkadiusz Derkowski (Poland)
Reiner Dohrmann (Germany)
Goran Durn (Croatia)
Liva Dzene (Latvia)
Saverio Fiore (Italy)
Timothy Fischer (USA)
Asuman Günel Türkmenoğlu (Turkey)
Erzsébet Harman-Tóth (Hungary)
Stephen Hillier (UK)
Reinhard Kleeberg (Germany)
Bruno Lanson (France)
Jana Madejova (Slovakia)
Michael Plörze (Switzerland)
Miroslav Pospíšil (Czech Republic)
Béla Raucsik (Hungary)
Fernando Rocha (Portugal)
Martin Šťastný (Czech Republic)
Peter Uhlík (Slovakia)
Bella Zviagina (Russia)

The 9th Mid-European Clay Conference (MECC2018) took place from the 17th to 21st September, in Hotel Dubrovnik in Zagreb, Croatia. The conference was organized by the Croatian Clay Group a section of Croatian Geological Society, Croatian Geological Survey, Faculty of Mining, Geology and Petroleum Engineering and Faculty of Science – University of Zagreb on behalf of clay groups of Czech Republic, Germany-Austria-Switzerland (DTTG), Hungary, Poland and Slovakia. This was the second MECC organised in Croatia, previous one was held 12 years ago, in 2006 in Opatija. This was the opportunity to gather again the clay scientist, not only from Mid-European countries, in the heart of Croatia, in its capital Zagreb. The conference had 123 participants from 28 countries from all over the world. Organizing and Scientific Committee received 106 abstracts and organized them in 11 sessions. A total of 71 lectures (21 given by students) and 36 posters (14 students) were presented, 4 plenary and 2 keynote lectures. Within the scope of the conference NanoMin workshop was organised.

The session list with convenors:
Session A: Crystal chemistry and structure of clay miner-
als (Chairs: Stephen Hillier and Kristian Ufer)
Session B: Physico-chemical properties of clays (Chairs: Reiner Dohrmann and Miroslav Pospíšil)
Session C: Modification and synthesis of clays (Chairs: Pilar Aranda and Liva Dzene)
Session D: Organoclay and nanocomposites
Session E: Clay (and associated) minerals in geological systems (Chairs: Jan Šrodoň and Rafael Ferreiro Mählmann, Asuman Günal Türkmenoğlu and Béla Raucskák)
Session G: Clays in soils and young sediments (Chairs: Goran Durn and Sofia Lessovaia)
Session F: Investigation methods of clays and clay minerals (Chairs: Reinhard Kleeberg and Jana Madejová)
Session H: Clays and environment protection (Chairs: Barbora Doušová and Miroslav Honty)
Session I: Clays in geotechnical applications (Chairs: Biljana Kovačević Zelić and Michael Pöltze)
Session J: Industrial application of clays (Chairs: George Christidis and Peter Uhlik)
M General session (Marta Mileusnić and Franz Ottner, Fernando Rocha and Nenad Tomašić)
NanoMin workshop (Chairs: Ivan Sondi and Goran Durn)
The plenary lectures were given by:
Branimir Šegvić (USA): Clay mineralogy and the origin of unconventional Paleozoic shale reservoirs from the North American midcontinent;
Katja Emmerich (Germany): Thermal reactions of clay minerals and implication for applications;
Pilar Aranda (Spain): Functional nanostructured materials by assembling fibrous clays and other nanoparticles;
Ana Petkovšek (Slovenia): Clays in earthworks-importance of soil water retention curve.
Two keynote lectures were presented by:
Rafael Ferreiro Mählmann (Germany): Preliminary attempt to define grade of diagenesis and incipient metamorphism considering geothermal gradients calibrated with clay mineral, mineral and maceral index data;
Reinhard Kleeberg (Germany): Strategies of background treatment in X-ray powder diffraction analysis of clays.

The George Brown Lecture “Quantitative analysis of clay minerals and poorly ordered phases by prior determined X-ray diffraction full pattern fitting: procedures and prospects” was presented by Stephen Hillier. The Gerhard Lagaly Award Lecture, entitled “About relations of properties and performances of bentonites”, was held by Stephan Kaufhold.

During the conference, the students oral and poster presentations were evaluated and the best contributions were awarded during the closing ceremony. The best student oral presentation with the title “Impact of mineralogy and pore water chemistry on the CEC of the Boom Clay (Belgium)” was presented by Lander Frederickx (Belgium), while the award for the best poster was obtained by Wolfgang Lieske (Germany), for the work “Impact of polymer-characteristics on the hydro-mechanical properties of polycationic modified bentonite”.

The conference was organised with the technical assistance of “Spektar putovanja d.o.o.” agency. Students from the Faculty of Science and Faculty of Mining, Geology and Petroleum Engineering, University of Zagreb assisted during the conference. We appreciate the generous support of our sponsors. We would like to thank you all for the assistance and attendance to make the MECC2018 in Zagreb possible and we hope you enjoyed your stay in Croatia.

By Darko Tibljaš, Anita Grizelj and Nikolina Ilijanić

Katja Emmerich during plenary lecture.
Stephan Kaufhod giving the Gerhard Lagaly Award Lecture.

Stephen Hillier presented the George Brown Lecture.

Conference dinner in Vinodol Restaurant in Zagreb city center

Participants at the excursion to Hrvatsko Zagorje (NW Croatia).

Darko Tibijač, chair of the scientific committee, at closing ceremony.
LOOKING BACK, MOVING FORWARD

THE SECOND WORLD FORUM ON INDUSTRIAL MINERALS (WFIM-2)

Qing Yang Institute for Industrial Minerals (QYIM) and Zhejiang University of Technology successfully organized and held THE SECOND WORLD FORUM ON INDUSTRIAL MINERALS (WFIM-2) on October 20-23, 2018, in Qing Yang, where calcite, limestone and dolomite and clay minerals abound, in Anhui Province, China.

The chairman of WIFM is clay scientist Prof. Chun Hui ZHOU and the co-chairmen are Liang BIAN, Mao Quan CHU, Hai Bo LIU, Ming Xian LIU, Jing OU-YANG, Wen Bo WANG, Yan Min ZHOU, Run Liang ZHU. Prof Georgios CHRISTIDIS acts as the honorary chairman.

The theme of WFIM-2 was ‘Industrial Minerals: Cutting-edge Science and Green High-Tech Industry’. Around 350 attendees consisted of international and China national mineral scientists, experts, technologists, managers, science journalists, and staffs from relevant governmental sectors. International leading clay scientists such as Profs Georgios CHRISTIDIS, Saverio FIORE, Cyril AYMONIER, John KEELING, Will P GATES, Sabine PETIT, Hongping HE and many others deliver speeches, give presentations and chair the sessions.

More than 180 abstracts contributed to the plenary, oral or posters presentations, with an abstract book formally published by a publishing house (CASTP) and distributed to all delegates on-site. The studies therein shed light on exciting advances in technological innovations and increasing commercialization of high value-added industrial minerals-based products with the aid of increasingly deepening scientific insights into clay minerals and other industrial minerals.

During the scientific sessions, internationally leading clay scientists Georgios CHRISTIDIS, Cyril AYMONIER, Sabine PETIT, and Will P GATES, delivered plenary lectures on novel approaches to characterizing industrial minerals and creating industrial minerals-based materials for high-performance catalysts, solar cells, sustainable fuels, functional nanomaterials and green construction materials and so forth. Scientists also took a field trip to the National Geological and Forestry Park, Qing Yang, Anhui Province, China.

The purpose of the WFIM-2 conference is the spread of new knowledge on clay minerals and other industrial minerals. As WFIM-2 Honorary Chairman Georgios CHRISTIDIS pointed out in the opening speech, ‘actually, there is a turning point beyond which the importance of industrial minerals surpasses that of metals for the economy of a country. In industrialized countries the value of industrial minerals is far greater than that of metals. This is reflected in the world production of industrial minerals.’ Such get-together well discusses, debates and shows that deep insights into the geology, mineralogy, chemical composition, texture and structure, and the impurities on industrial minerals will offer many new opportunities to them. As commented by John KEELING in the WFIM-2 closing remark, ‘there are few conferences in the world that focus on research involving industrial minerals and their role in contributing to a sustainable environment. That is what makes this forum unique. Much still needs to be understood about the properties and variability of common natural minerals and how these can be used or modified to benefit society and to improve the environment.’ ‘The research is exciting and new markets will surely be further developed for these unique natural materials.’
Scientists and officials deliver speeches during the WFIM-2 opening ceremony. [photo courtesy of Chui-Hui Zhou]
Pictures: Scientists and Entrepreneurs, Government Officials are listening to presentations, reading posters, discussing science and enjoying coffee breaks during the WFIM-2. [photo courtesy of Chui-Hui Zhou]
Activities during the closing ceremony: leading clay scientists delivers closing remarks and announcing Best Posters Awards, and the WFIM-2 organizers takes pictures together and folk artists perform traditional opera Qing Yang Qian. [photo courtesy of Chui-Hui Zhou]
Now Scientists in the field of clay minerals and other industrial minerals around the world are all welcome to submit latest work to and attend:

The 3rd World Forum on Industrial Minerals (WFIM-3) & The 11th International Symposium on Nano & Supramolecular Chemistry (ISNSC-11)

October 12-16, 2019.

Qing Yang (Jiu Hua Shan), Chi Zhou City, Anhui, China

Theme: Fusion of Supramolecular Chemistry, Nanotechnology and Industrial Mineralogy

Chairs: Chun Hui ZHOU, Yang KIM, Cheng Zhong YU, Martino DI SERIO, Jan J. WEIGAND, Artur STEFANKIEWICZ, Hong Ping HE, Tian Hu CHEN, Hong Ting ZHAO

E-mail: isnsc11@126.com

The activities expect to range from oral and poster presentations, enjoyable social banquets to pleasure one-day field trips to gorgeous National Geological Parks.

For details on WFIM-3 & ISNSC-11, please contact: Prof. Chun Hui ZHOU. Isnsc11@126.com

WFIM-3 & ISNSC-11 is looking forward to meeting you in Oct 2019 just in scenic Jiu Hua Shan geological park!
ICCE 2021
17th INTERNATIONAL CLAY CONFERENCE
NEW INTERFACES: BRIDGING CONTINENTS AND CULTURES WITH CLAYS
JULY 12-16 İSTANBUL-TURKEY
This session of the AIPEA Newsletter brings together the reports about the many activities developed by its Affiliated Societies/Groups up to December 2018. It represents an effort to coordinate communication among all National (Regional) Clay Group (NCG) members and the individual members of AIPEA. It aims to become a key vehicle for communication of all clay scientists.

For this issue, AIPEA Newsletter has received reports or announcements from the majority of AIPEA affiliated societies and groups. We are grateful to all our collaborators, as we believe that sharing information will provide inspiration and ideas for collaboration and initiatives within and among societies. The readers will notice that the content of each report is particular to each society, bringing together their national flavor. Some original reports included many photos and we had to leave some on the cutting room floor in order to keep the size of this edition easy to be accessed by digital means.

All has been done with much care and interest and we wish you a pleasant reading.

Peter Ryan
AIPEA Secretary-General

CHINA
CHINESE ASSOCIATION FOR THE STUDY OF CLAYS (CASC)

The 8th “National Mineral Science and Engineering Conference of China” was held on 6-7 August 2018, in Mianyang, Sichuan, China. This conference was organized by Southwest University of Science and Technology. More than 300 participants attended this conference. Five sections were organized, including ‘Mineral surfaces and nanominerals’, ‘Environmental minerals and green usage of mineral resources’, ‘New minerals and genetic mineralogy’, ‘Analysis methods for minerals and nanomineral materials’, and ‘Functional mineral materials’. About 134 oral presentations were given, and approximately 25% of them were related to the studies on clays and clay minerals.
The Second “World Forum on Industrial Minerals (WIFM)” was held in Qingyang, Anhui China, 20-23 Oct. 2018. This forum was organized by Qing Yang Institute for Industrial Minerals, and Prof. Chunhui Zhou was the president of the forum. More than 200 participants attended the forum. A detailed report is available in the conferences section of this newsletter.

After a decade of unremitting efforts, Prof. Aiqin Wang’s research team at the Lanzhou Institute of Chemical Physics, CAS, has made remarkable progress in the high value utilization of palygorskite clay minerals. They have developed new technologies of disaggregating the rod crystal bundles of palygorskite and converting simultaneously palygorskite and associated minerals to new mesoporous silicate materials. By these technologies, the palygorskite crystal bundles were efficiently dismantled without losing the original length of the rod crystal, realizing the transition from clay minerals to nanomaterials. Thanks to the nanorod structure and nanopores of palygorskite, the nanoscale silicate rods, super-stable organic-inorganic hybrid Maya blue pigment, the high-efficient adsorbent for mycotoxins and mineral gels were developed, and these products have been used in many fields such as reinforcing agents of polymer materials, separator coating of lithium ion batteries, and healthy breeding. In addition, a breakthrough has also been made in the large-scale preparation process of palygorskite products, and a 10,000-ton/year production line of fully automated clay mineral purification, nanocrystallization, functional modification and structural regulation has been established, which effectively guarantees the industrialization of technology and products. This research results won the prize of the National Technology Invention of the People’s Republic of China in 2018.
CROATIA
CROATIAN CLAY GROUP

Croatian Clay Group (CCG) is one of the sections of the Croatian Geological Society. CCG has 17 members, mostly from the Croatian Geological Survey, Faculty of Science and Faculty of Mining, Geology and Petroleum Engineering of the University of Zagreb.

2018 was an active year for the members of Croatian Clay Group (CGG), with organisation of 9th Middle European Clay Conference (MECC). The president of the Scientific Committee was Darko Tibljaš, while the members of the international scientific committee were representatives of the national Mid-European clay groups and other renown international clay scientists. Most of the members of the CCG were included in the Organising Committee, as well as representatives of organising societies, with the president Anita Grizelj. Please see more detailed report about MECC 2018 held in Zagreb (Croatia) in this newsletter.

In 2019 Croatian Clay Group plans to organize workshop on clay mineral research and scientific excursion for students and young scientists.

For further information about CCG, visit our web page, where you can also download the Conference Book of the 9th MECC in Zagreb: http://www.geologija.hr/hr/odsjek_gline.php

We would like to take the opportunity to thank once again to all participants for attending the MECC 2018!

President: Anita Grizelj (Croatian Geological Survey)
Secretary: Nikolina Ilijanić (Croatian Geological Survey)
2018 has seen the French Clay Group focused on the preparation of the next Euroclay meeting to be held in Paris next July 1-5 2019. Sessions are now planned, abstracts are being organized, and practical details are essentially dealt with. We are thus thrilled to host you all for what we expect to be a great meeting with a broad scientific audience and a large variety of fantastic sessions. See you all in Paris next July!!!

As a result, the “usual” activities have been modified and the annual meeting exceptionally merged with the larger “Matériaux” meeting in Strasbourg. In a sustained effort to encourage talks by students and young researchers, a one-day meeting was also organized in Paris (May 15th 2018) to offer a specific audience. On this occasion, Nicolas Michau delivered an invited speech on the challenging scientific questions raised by the current project of underground nuclear waste repository, and on the answers brought by the underground laboratory developed by Andra.

**GFA Students day – Paris, May 15**

In addition to Nicolas Michau’s talk, graduate students gave talks on their Ph.D. thesis or post-doctoral studies, including: Pierre Jacquemot (LAMS, Paris), Dan Eude Kpannieu (LCPME, Nancy), Emilie Emmanuel (IM Jean Rouxel, Nantes), Agathe Fanost (LAMS, Paris), Hani Farhat (ICCF, Clermont-Ferrand), Mathilde Poirier (GET, Toulouse), and Guanzheng Zhuang (LAMS, Paris).

**GFA 16th annual meeting – Strasbourg, Nov. 19-23**

This year, the annual meeting of the French Clay Group was included in the session dedicated to “Porous Materials, granular materials and materials having a large specific surface area” of the congress Materials 2018 held in Strasbourg From November 19-23. This congress gathered more than 1500 attendees. New insights in the fields of porous hydroxylated lamellar matrix, evaluation of the surface heterogeneity of clays and clay minerals, synthesis of organic-inorganic talc-like structures are some examples of the given presentations. An exhibition dedicated to the clays and clay minerals (structure, properties, applications) allowed also all the attendees to discover these compounds.

**Implications in international instances**

After Andrey Kalinichev, Professor at the Ecole des Mines de Nantes, now serves as Vice President and future president of the Clay Minerals Society (USA) (he was elected to the executive committee in 2017), and Bruno Lanson, Research Director at CNRS – Grenoble, was elected in 2018 as the Vice President Elect of the Clay Minerals Society (USA).

Submitted by Bruno Lanson with the assistance of Joce-lyne Brendlé
Grenoble, January 2019
The DTTG, now in the 46th year, has a stable membership base of more than 100 members and is continuing to build its national and international ties. During 2018 there were 2 clay conferences (CMS and MECC) where several members led sessions, gave talks and won prizes. The CMS meeting was held in Champaign, Illinois, USA, where the Reynolds Cup results were announced. The DTTG members again placed very well!! This year the bronze medal was awarded to Michael Plötze and his group at the ETH in Zurich. We are looking forward to what the winner Steve Hillier, James Hutton Institute in Aberdeen, will mix together for the next Reynolds Cup.

Every two years, the DTTG participates in the Mid European Clay Conferences (MECC) which was successfully organized by the Croatian clay group and held in Zagreb. This year more than 20 of our members participated. The MECC is an excellent venue for students to present their research and gather professional experience. One of our students, Wolfgang Lieske of the Ruhr-University Bochum received the best students poster award entitled “Impact of polymer-characteristics on the hydro-mechanical properties of polycationic modified bentonite”. One of our leading clay scientists, Stephan Kaufhold (see picture), was awarded the Lagaly Prize, the highest DTTG award, by Reinhard Kleeberg. Stephan presented his newest insights into bentonites with a presentations entitled: “About relations of properties and performances of bentonites”. In Zagreb we held our biannual assembly of all members, where Reinhard Kleeberg, who had served a president for 2 years handed over the gavel to Matthias Schellhorn. Further Georg Grathoff was elected vice president/secretary, Kristian Ufer was confirmed as treasurer, and Michael Plötze as webmaster. Further details on the general meeting and the composition of the new board can be found on the DTTG website http://www.dttg.ethz.ch/. The 10th MECC will be held in the year 2020 from 13.-17. September in Kliczków, Poland, where we will hold our next DTTG members general assembly. In 2019 the DTTG activities include the 8th International Workshop "Qualitative and Quantitative Analysis of Clays and Clay Minerals", from February 18th to 22th at Greifswald University, hosted by Georg Grathoff and Laurence Warr. The workshop is again fully booked with 16 participants from seven countries. The DTTG will also be involved in the organization of the 5th Autumn School “Moisture measurement in porous mineral materials”, organized by Katja Emmerich at the Karlsruhe Institute of Technology October 8th and 9th 2019. The workshop, taught in English, is mainly dedicated to MSc and PhD students, as well as postdocs, coming from engineering and soil sciences. For more information and application material see http://www.cmm.kit.edu/english/62_953.php.
Meetings in 2018
The 2018 Clay Minerals Group (CMG) Research-in-Pro-
gress (RiP) meeting was convened by Binoy Sarkar and
Francis Clegg and held at the University of Sheffield on
27th June 2018. 48 delegates attended a full day of talks
and posters.  Keynotes were provided by Prof Biqiong
Chen (Queen’s University, Belfast) ‘Clay-based polymer
nanocomposites for engineering and biomedical applica-
tions’ and Prof David Beerling (University of Sheffield)
‘Farming with crops and rocks for climate, food and soil
security’.  Prizes were again awarded for the best student
oral and poster presentations.
CMG-Sponsored Activities
The CMG sponsored a session and speakers at the British
Sedimentological Research Group’s AGM, Heriot-Watt
University and The Lyell Centre, Edinburgh (December
2018).
George Brown Lecture
The 19th George Brown lecture was delivered by Stephen
Hillier at the Mid European Clay Conference (MECC),
Zagreb in September 2018. The lecture was entitled
‘Quantitative analysis of clay minerals by prior-deter-
mined X-ray diffraction full pattern fitting’.
CMG Logo
The Group’s logo was first introduced in 1973 and incor-
This issue of *Clay Minerals* contains papers read at a joint meeting of the Clay Mineral Group of the Mineralogical Society and the *Clay Minerals* Group of the Royal Society of Chemistry (*C* in November, 1983) to acknowledge Dr. R.C. Mackenzie’s lifetime contributions on clay materials and related processes, and subsequent clay association work, both groups were founded in 1943 and 1944, respectively. During this meeting the title of “Distinguished Member” of the Clay Mineral Group was awarded to Dr. Mackenzie and the use of the citation accompanying this award is reproduced below.

Dr. R.C. Mackenzie

*Clay Minerals*, **19**, 679-680

Dr. D.M.C. MacEwan

*Clay Minerals*, **35**, 857-858

Simon Kemp for CMG, February 2019.

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**HUNGARY**

1. Board of the Hungarian Clay Group

The board of the Clay Mineralogy Section, affiliated to the Hungarian Geological Society (HGS) (in the following, for simplicity, *the Hungarian Clay Group, HCG*) worked for its third year in the three-year term 2015–2018. For the 2018 renewal of the President, Secretary and Executive Committee of the HGS, the Election Committee has been formed and Erzsébet Harman-Tóth has been delegated as the representative of the Hungarian Clay Group.

Following the renewal of the leadership of the HGS, the board of the Hungarian Clay Group was renewed in June 2018.

The board consists of the following:

**President:**

Erzsébet Harman-Tóth (Eötvös Museum of Natural History, Faculty of Sciences, Eötvös Loránd University, Budapest)

**Secretary:**

Ivett Kovács (Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences, HAS, Budapest)

**Members of the Committee:**

Brigitta Réka Balázs (Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences, HAS, Budapest)

Izabella M. Farkas (MOL Plc., Group E&P Production Management, Applied Materials, Technologies & Laboratories, Geoscience Thematic Unit, Budapest)

János Kristóf (Department of Analytical Chemistry, University of Pannonia, Veszprém, Hungary)

Tibor Németh (Department of Mineralogy, Eötvös Loránd University, Budapest; Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences, HAS, Budapest)

Béla Raucsik (Department of Mineralogy, Geochemistry and Petrology, Faculty of Science and Informatics, University of Szeged, Szeged)

Péter Sipos (Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences, HAS, Budapest)

Tamás G. Weiszburg (Department of Mineralogy, Eötvös Loránd University, Budapest)

**Honorary Members of the Committee:**

István Dódony (Department of Mineralogy, Eötvös Loránd University, Budapest)

Mária Földvári (retired from the Geological and Geophysical Institute of Hungary, Budapest)

István Viczián (Department of Mineralogy and Geology, Debrecen University, Debrecen)
Honorary President of the Committee:
Ernő Nemecz (HAS Veszprém/Budapest)

2. Meetings of the Hungarian Clay Group in 2018
In 2018, the Hungarian Clay Group had 3 meetings.

8th January (Budapest) (organised jointly with the Mineralogical-Geochemical Branch of the Hungarian Geological Society, abbreviated as HGS MGB in the following):
Conference review of 2017 and overview of the coming conferences in 2018
From the 12 reviewed meetings, those with clay mineralogical relevance were the following:
Kovács-Kis, V.: 13th Multinational Congress on Microscopy (September 24–29 2017, Rovinj, Croatia)
Györkös, D.: 14th European Meeting on Ancient Ceramics (EMAC, September 6–9, 2017, Bordeaux, France)
Among the 7 forthcoming meetings, the 9th Mid-European Clay Conference MECC2018 (17–21 September, 2018, Zagreb, Croatia) was introduced by B. Raucsk.

Jámbor, Áron: Alginite in the Transdanubian Central Range
Solti, Gábor: Alginite – from the formation to the applications
Solti, Gábor: Present and future – freshly patented alginate products in the agriculture

29-30th November (Veszprém): 5th Workshop of Earth Sciences Related Higher-Education Institutions (organised jointly with the Higher Education Working Committee, Committee on Geochemistry, Mineralogy and Petrology of the Hungarian Academy of Sciences; Earth Sciences Section of the Hungarian Academy of Sciences; HGS MGB; HGS Education and Training Section; Department of Earth and Environmental Sciences, Institute of Environmental Sciences, Faculty of Engineering, University of Pannonia, Veszprém)
The yearly meeting helps networking and collaboration of earth sciences-related higher-education institutions and introduces each time a certain institute, this time the Department of of Earth and Environmental Sciences of the University of Pannonia (Veszprém), with special focus on education issues, research projects and the newly installed SEM & TEM laboratory (Nanolab).

3. Clay-related presentations at other meetings in Hungary, in 2018
Presentations on clay minerals were presented also at several other organisations, in other sections of Hungarian Geological Society (HGS) and in various branches of the Hungarian Academy of Sciences (HAS). The meetings were held not only in Budapest but in other places too (in the following report these locations and organisations are specially indicated). The following meetings and presentations related to clay problems were held:

19-20th January: 13th Winter School on Mineral Sciences, “Experimental Mineralogy”. (Veszprém, jointly organised by Subcommittee on Nano-Mineralogy of HAS, HGS MGB, and the University of Pannonia; meeting language: Hungarian)

22nd May: Geomathematics, bauxite geology and geochemical results today and in the oeuvre of György Bárdfossy
Thematic lecture day, organised by the HGS Geomathematics and Informatics Branch, The Geomathematics Branch of the HAS, Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences of HAS, and the Department of Physical and Applied Geology, Faculty of Sciences, Eötvös Loránd University
Haas, J., Mindszenty, A.: The bauxites of the Transdanubian Central Range (Hungary): formation conditions and the factors influencing them
Kómlossy, Gy: György Bárdsossy in the international bauxite research

18th June: Meeting of the History of Geology Section of the HGS
Baksa, Cs.: Natural mineral resources in agriculture, with special emphasis on the Mineral resource of the Year (2016 - perlite, 2017 - zeolite, 2018 - alginite)

6-8th September: From the asthenosphere to the atmos-

relevant abstracts:
Hrabovszki, E., Tóth, E., Schubert, F.: Geometry and microstructure of veins from Boda Claystone Formation (BAF–2 well)
Kelemen, P.: Provenance study of various continental sediments in the Transdanubian Range — implications for the Mesozoic to Cenozoic geologic and geodynamic evolution
M. Tóth, T., Schubert, F., Raucsik, B., Bencsik, A.: Mineralogy and geochemistry of the Almásfüzitő red mud
Páles, M., Király, Cs., Jakab, G., Udvardi, B., Varga, Gy., Falus, Gy., Szalai, Z.: Particle size and shape analysis of red clays from a landslide at Kulcs
Pecsmány, P., Kristály, F.: Clay mineral distributions in two landslide susceptible areas
Szabó, Zs., Gál, N., Falus, Gy.: Modelling cement mineralogy in boreholes: hydration, aging and interactions with \( \text{scCO}_2 \)

14th November: Hydrosphere
Thematic lecture day, organised by the Section of Earth Sciences of HAS, the Committee on Geochemistry, Mineralogy and Petrology of HAS, and the Committee on Geonomy of HAS
Viczián, I.: The presence of water in minerals and rocks
Gyollai, I.: Aqueous alteration in Martian meteorites

14th November, Pécs: Boda Claystone Formation – thematic lecture day of the Boda Claystone (as potential repository for radioactive waste) research
Organised by the South Transdanubia Regional Branch of HGS, Pécs Committee of HAS, Earth and Environmental Science Section (X), Geology and Mining Working Committee, sponsored by the Geo-Log Ltd., the Geomega Ltd., the Golder Plc., Kömőrő Ltd., Mecsekérc Plc., Mérce limited partnership and Rotaqua Ltd.

4. Relevant new publications


Papers with clay relevance (in Hung. with English abstract):


5. Relevant Hungarian PhD defenses in 2018:

5th March: Zsirka, Balázs (University of Pannonia, Veszprém, supervisor: Horváth, Erzsébet, Kristóf, János): Synthesis, structural and surface characterization of clay nanostructures belonging to the kaolin group minerals
8th March: Bariczka, Ágnes (Eötvös Loránd University, Budapest; supervisor: Bajnóczi, Bernadett & Szabó, Csaba): Environmental deterioration of our built heritage, on the example of Zsolnay architectural ceramics
28th May:Laborczy, Annamária (Szent István University, Gödöllő; supervisor: Csáki-Michéli, Erika): Digital mapping of categorical soil properties
1st June: Dobrádi, Annamária (University of Pannonia, Veszprém, supervisor: Enisz-Bódogh, Margit): Effect of
Natural Calcium Phosphate upon the Properties of Apatite-Wollastonite Glass Ceramics

5th October: Kovács, András (University of Pannonia, Veszprém, supervisor: Makó, Éva): Modification of kaolinite structure through intercalation

25th October: Tőzsér, Dávid (University of Debrecen, supervisor: Kundrát-Simon, Edina): Remediation of soil metal contamination with plants

6. International activity:

9th MECC, 17-21 September, Zagreb, Croatia

Hungary had 3 contributions, and participated via session co-chair Béla Raucsik in the organization of Session E Clay (and associated) minerals in geological systems:


Halász, A.: Palaeoenvironmental reconstruction of a Permian playa lake: the Boda Claystone Formation (p. 52)

Kovács, E. M., Kónya J., M. Nagy, N.: Structural iron release from bentonite by Y³⁺ and La³⁺ ions (p. 66)

11th Conference on the History of Science and Technology (organized by the Hungarian Technical Scientific Society of Transylvania) 28 June - 1 July, 2018

Komlóssy, Gy.: From the stream to the ocean - The life of the geologist György BÁRDÖSSY

Erzsébet Harman-Tóth liaison officer

INDIA
ANNUAL REPORT 2017 – 2018

EXECUTIVE COUNCIL

Post held 2017-2018

President: Dr. S. K. Singh
Vice presidents: Dr. D.C. Nayak, Dr. Nayan Ahmed
Secretary: Dr. S.K. Mahapatra
Joint secretary: Dr. Gautam Goswami, Dr. Sudarshan Dutta
Treasurer: Dr. Jaya N Surya
Chief Editor: Dr. S.C. Datta
Editors: Dr. K. M. Manjaih, Dr. S.K. Roy, Dr. P. Chandran

Councilors:

East zone: Dr. A.K. Sahoo, Dr. Siladitya Bandopadhyay
West zone: Dr. A.L. Pharande, Dr. Vilas Kharche
North zone: Dr. U.K. Maurya, Dr. B.N. Ghosh
South zone: Dr. K.S. Anil Kumar, Dr. Chandrakala M.
Central zone: Dr. P. Chandran, Dr. Tapan Adhikari

MEMBERSHIP AND SUBSCRIBERS

The membership position as on 10th September, 2018

Honorary Members - 6
Life Members - 206
Annual Members - 19
Total - 231

BUSINESS MEETINGS

Council Meeting

The Council met on March 31, May 23, August 16 and September 07, 2018 to transact the various activities of the Society. The meetings were chaired by the President. members of the Council attended and contributed substantially to the proceedings of these meetings. The major issue was organizing the 21st Annual Convention of the Society at Kolkata during September 14-15, 2018.

Proceedings of 21st Annual Convention and National Conference of the Clay Mineral Society of India (CMSI) held at Kolkata, India
The 21st Annual Convention and National Symposium on “Advances in Clay Science towards Agriculture, En-
“Environment and Industry” was held at National Institute of Technical Teachers’ Training & Research (NITTTR), Salt Lake and NBSS & LUP Regional Centre, Kolkata 700091 during September 14-15, 2018. A brief report of the Convention is presented hereunder:

Inaugural Session
The inaugural session was held on 14th September, 2018. The programme was started at 10.30 AM with the Invocation song. Dr. S K Singh, President, CMSI and Director, ICAR-NBSS & LUP, Nagpur welcomed the dignitaries, delegates and guests. He extended a warm welcome to the Chief Guest, Prof. Dhrubajyoti Chattopadhyay, Vice Chancellor, Amity University, New Town, Kolkata and the Guests of Honour, Dr. Ashok Patra, Director, ICAR-IISS, Bhopal and Dr. Kaushik Majumdar, Vice President, Asia and Africa Programme, International Plant Nutrition Institute (IPNI), Gurgaon. Other dignitaries present on the occasion included Prof. K. Ghosh, Dr. Dipak Sarkar, Past Presidents of CMSI and Dr. S.C. Dutta, IARI, New Delhi, Dr. Pradip Sen, Former Managing Director, State Seed Corporation, West Bengal, Prof. Biswapani Mandal, Vice Chancellor BCKV, Mohanpur, Dr, T Satyanarayana, IPNI, Gurgaon, Dr. Gautam Goswami, TIFAC, New Delhi as Co-Chair person and Dr. S. K. Mahapatra, Secretary, CMSI. Dr S K Singh in his presidential address talked about the role of the clay particles as the base for every production system and its importance to arrive at appropriate soil quality indices. An understanding of mineralogy of inorganic and organic soil components is necessary for making sound and cost effective decisions about remediation of contaminated soils. Dr A K Patra and Dr K Majumdar, the Guests of Honour also spoke on the occasion. The presentation of Awards was organized by Dr S.K. Mahapatra, Secretary, CMSI. The Chief Guest, Prof. Dhrubajyoti Chattopadhyay, Vice Chancellor, Amity University, delivered his inaugural speech wishing a grant success of the seminar. Dr. D C Nayak, Organising Secretary presented the vote of thanks. The inaugural programme was ended with National Anthem.

Technical Sessions
The Fifth Professor Sushil Kumar Mukherjee – CMSI Foundation Lecture was delivered by Dr S. S. Mukhopadhyay, Former Senior Pedologist, Department of Soil Science & Agricultural Chemistry and Former Director, Electron Microscopy & Nanoscience Lab, PAU, Ludhiana, on the topic, “Clays: Nano-wonder in Coalescing Spheres of the Earth”. The session was chaired by Prof. Kunal Ghosh.

After this, one Special Session was organized in collaboration with IPNI, Gurgaon on “Soil Mineralogy and Potassium Inputs: The Interrelations” with Prof. S.K. Sanyal, Former Vice Chancellor, BCKV, Mohanpur, acting as Chairman and Dr. S.K. Singh & Dr. Kaushik Majumdar as Co-Chair persons. The three speakers included Dr. S.C. Datta Dr. Kaushik Majumdar and Dr. Sudarshan Dutta while the panelists on the dias were Dr Ashok Patra, Dr. Pradip Dey, Dr. S.K. Ray, Dr. Debrup Das, Dr. T. Satyanarayana and Dr. Nayan Ahmed.

After this, the Technical session: I “Geoscience and Industrial Application of Clays” was held with Dr Bijan Kumar Saha, GSI as Chair person, Dr. Gautam Goswami, TIFAC, New Delhi as Co-Chair person and Dr U.K. Maurya, CSWCRTI as Rapporteur. Seven papers were listed of which five papers were presented. The speakers included Dr Bijan Kumar Saha, Dr Sombubhra-Chakraborty, Dr D.R. Biswas, Dr Pankaj Srivastava and Dr Kiran Kumar Sulaya. This was followed by a presentation by M/s Skalar Ltd on some non invasive techniques of clay analysis.

The 21st Annual General Body Meeting of the Society (CMSI) was held at 7.00 PM on 14th September, 2018. Dr. S K Singh, President, CMSI, chaired the meeting. The business of the meeting as per the listed agenda was transacted. The proceedings of the 20th AGM held during 2017 at ICAR-NBSS & LUP, Nagpur were considered and confirmed by the house. The audited statement of account for the year ending 31st March, 2018 and budget estimates for 2018-19 were presented by the Secretary, Dr. S K Mahapatra (attached below). The new Executive Council was formed as under:

CMSI COUNCIL 2019 -2020

President: Dr. S.C. Datta
Vice Presidents: Dr. Nayan Ahmed, Dr. P. Chandran
Secretary: Dr. S.K. Mahapatra
Joint Secretaries: Dr. Gautam Goswami, Dr. Saumitra Das
Treasurer: Ms. Ritu Nagdev
Chief Editor: Dr. S.S. Mukhopadhyay
Editors: Dr. K. M. Manjaiah, Dr. D. C. Nayak, Dr. S. K. Roy
Councillors
East Zone: Dr. Siladitya Bandopadhyay, Dr. Prasenjit Roy
North Zone: Dr. U. K. Maurya, Dr. T. Satyanarayana
South Zone: Dr. K.S. Anil Kumar
One more person to be decided
Central Zone: Dr. Vassanda Coumar, Dr. Ranjan Paul
West Zone: To be decided in next EC meeting

President
Dr. S.C. Datta
Vice Presidents
Dr. Nayan Ahmed
Dr. P. Chandran
Secretary
Dr. S.K. Mahapatra
Joint Secretaries
Dr. Gautam Goswami
Dr. Saumitra Das
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Dr. K. M. Manjaiah
Dr. D.C. Nayak
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Councilors
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Dr. Prasenjit Roy
North Zone
Dr. U.K. Maurya
Dr. T. Satyanarayana
South Zone
Dr. K.S. Anil Kumar
One more person to be decided
Central Zone
Dr. Vassanda Coumar
Dr. Ranjan Paul
West Zone
To be decided in next EC meeting

The meeting ended with the vote of thanks by Dr. S.K. Mahapatra, Secretary of the Society.

The technical programme of the second day (15th September, 2019) was held at the Seminar room of ICAR-NBSS & LUP, Regional Centre, Kolkata. The programme was started with the Technical Session II on the theme “Clay Mineralogy and Nano-Science”. This session was chaired by Dr. S.C. Datta with Dr. K.M. Manjaiah as Co-Chairperson and Dr. Ranjan Paul acting as Rapporteur. In the session, out of 15 papers, twelve papers were presented by different speakers which included Dr. P. Chandran, Dr. Sonalika Sahoo, Dr. Raj Mukhopadhyay, Dr. Ruma Das, Dr. Nayan Ahmed, Dr. Ranjan Paul and Dr. R. P. Sharma. Ms. Ritu Nagdev, Dr. Siladitya Bandopadhyay, Shri Sourav Kumar Khan, Smt. Neepa Dey and Dr. U.K. Maurya.

Thereafter, the session on Technical session: III “Soil Quality, Environment and Fertility Management” was chaired by Dr. A.K. Patra, Director, IISS Bhopal, with Dr. T. Satyanarayana, IPNI as Co-Chairperson and Dr. Prasenjit Ray acting as Rapporteur. Out of 17 papers, eight papers were presented by the speakers which included Dr. P. Dey, Dr. Abir Dey, Dr. (Mrs) A. Daripa, Dr. (Mrs) Shreyasi Gupta Choudhury, Ms. Madhurima Choudhury, Ms. Bandana Kurmi, Dr. Prasenjit Ray, and Dr. Debarup Das.

In the afternoon, the last Technical session: IV “Soil Resource Management” was chaired by Dr. S.K. Singh, Director, ICAR-NBSS & LUP, Nagpur with Dr. P. Chandran, Head, SRS Division, NBSS & LUP, Nagpur as Co-Chairperson and Dr. R.P. Sharma acting as Rapporteur. There were eleven speakers which included Dr. K. Karthikeyan, Dr. S. Chattaraj, Dr. R. Srinivasan, Dr. G. Tiwari, Dr. S.K. Reza, Dr. B.N. Ghosh, Dr. T. Chattopadhyay, Dr. S.K. Gangopadhyay, Dr. D. Dutta, Dr. K. Das and Dr. K. D. Sah.

The Plenary session was chaired by Dr S K Singh with the penalists Dr. A.K. Patra, Dr. S.S. Mukhopadhyay, Dr. S.K. Ray and Dr. Sudarshan Dutta as Rapporteur wherein the Rapporteurs from all the different technical sessions presented the report of the deliberations and the recommendations were finalized.

The Seminar was ended with the formal vote of thanks by Dr. K. Das, Principal Scientist and Member of the Organising Committee.

Recommendations of the Seminar during September 14-15, 2018

Systematic investigation is emphasized on the study of the interrelations between soil mineralogy and potassium prior to developing potassium fertilizer recommendation based on soil test results.
An understanding of mineralogy of inorganic and organic soil components is necessary for making sound and cost effective decisions about remediation of contaminated soils.
Application of protein based bio-nano clay polymer composite for slow release of urea is most important in Indian agriculture.
Development of long term soil organic carbon restorative land use plan is essential in different AESR of India comprising mineralogical make up in the soils.
Research on landscape based modeling of soil mineralogy needs to be strengthened for better comprehension of soil forming process towards best possible soil resource
management. Coordination among the ICAR/CSIR Research Institutes, SAU's and Industries should be strengthened for basic research and wider application of clay and nano particles. Initiation of basic studies of soil mineralogy at University and Institute level to boost up the development of clay sciences of agriculture and environment.

Finance

<table>
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<tr>
<th>Publications</th>
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<tr>
<td>Journal: The first and second issues (June &amp; December 2017, Vol. 36, No. 1 and 2; June 2018, Vol 37, No. 1) of the Journal of CLAY RESEARCH.</td>
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<td>Other Important Activities</td>
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<td>Society’s website has been updated. <a href="http://www.theclaymineralsocietyofindia.com/">http://www.theclaymineralsocietyofindia.com/</a></td>
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THE ITALIAN ASSOCIATION FOR THE STUDY OF CLAYS – AISA
2018 ACTIVITIES:

AISA members actively participated in the presentation of research results and research programs at international and national conferences during 2018.

The Association continues to sponsor all events in schools and at conferences in which its members are involved. In 2018, AISA, in collaboration with the Institute of Methodology for Environmental Analysis - National Research Council (CNR-IMAA) organized DUST 2018 (3rd International Conference on Atmospheric Dust - 2018) which took place in Villa Romanazzi Carducci, Bari (Italy), from 29-31 May under the chairmanship of Dr. Saverio Fiore.

The DUST 2018 Conference focused on inorganic atmospheric particulate with a wide range of scientific contributions, such as the techniques used to characterize the particulates, the impact on human beings and the environment, the importance of dust in geological times, etc. The meeting provided a unique opportunity for mineralogists, physicists, geochemists, engineers, volcanologists, chemists and for many other specialists to share ideas and knowledge on the boundless world of atmospheric particles.

AISA, CNR-IMAA and Polytechnic University of Bari organized the MMS 2018 (Minerals and Materials Sciences - 2018), an international conference that was held from the 24th to 26th June, at the Polytechnic University of Bari, Italy. It represented an opportunity for scientists and researchers in the fields of mineralogy, material science, physics, biology, chemistry and cultural heritage and also for several experts to compare ideas regarding crystalline and non-crystalline solid state.

About one hundred participants from all over the world attended four plenary conferences delivered by acclaimed scientists who shared their knowledge and experience and discussed investigation techniques used in the study of materials, the application of new interaction processes between pollution and minerals, biochemistry cycles, environmental remediation, polymer syntheses formation, micro and nano materials used in chemistry and bio-medicine.

WORK PLAN FOR 2019:
The Association will be engaged in activities designed to further involve members in activities, consolidate membership and increase numbers.

AISA Council Board members 2018-2021

President: Vito SUMMA (Institute of Methodologies for Environmental Analysis, IMAA-CNR, Tito Scalo, Potenza)
Secretary: Antonio LETTINO (Institute of Methodologies for Environmental Analysis, IMAA-CNR, Tito Scalo, Potenza)
Treasurer: Saverio FIORE (Institute of Methodologies for Environmental Analysis, IMAA-CNR, Tito Scalo, Potenza)
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Lara MARITAN (Department of Geosciences, University of Padova)
Chiara Zanelli (Institute of Science and Technology for Ceramics – ISTEC-CNR, Faenza, Ravenna)

Administrative address:
Associazione Italiana per lo Studio delle Argille (AISA)
e/o Dipartimento di Scienze della Terra e Geoambientali Via Orabona, 4, 70125 Bari – Italia
Fiscal Code. 93296070720

Prepared by:
Antonio Lettino
Secretary, AISA
E-Mail: segreteria@aipea.it
THE CLAY SCIENCE SOCIETY OF JAPAN

1. Committee

The following officers were elected for the fiscal year 2019 and 2020.
President: Prof. A. Yamazaki, Waseda University
Vice president: Prof. M. Kawano, Kagoshima University, Prof. M. Nakagawa, Kochi University
Secretary General: Prof. T. Sato, Hokkaido University
Principal Editors: Dr. T. Hibino, National Institute of Advanced Industrial Science and Technology (Nendo Kagaku)
Dr. T. Ebina, National Institute of Advanced Industrial Science and Technology (Clay Science)

2. The 62th annual meeting

The 62th annual meeting of the Clay Science Society of Japan was held at Waseda University from 10 to 11, September 2018. It was principally organized by Prof. A. Yamazaki of Waseda University. A total of 84 papers including 37 posters were presented. The program included a keynote lecture by Dr. H. Toraya entitled “A new method for quantitative phase analysis using X-ray powder diffraction: direct derivation of weight fractions from observed integrated intensities and chemical compositions of individual phases” and a special lecture of a previous president, Prof. T. Hatta, entitled “Surface and bulk analyses”. The program also included a symposium entitled “Inorganic materials related to clay minerals” with following invited speakers.
Y. Ide (National Institute for Materials Science (NIMS)): Materials design based on layered silicates and titanates
N. Tarutani (Hosei University): Design of meso- and macro-porous hierarchical structure by utilizing nanocrystalline layered hydroxide salts
T. Matsumoto (Technology Center of Tochigi Prefecture): Synthesis and applications of low-silica zeolite
T. Wakihara (The University of Tokyo): Novel method for ultrafast synthesis of zeolites
M. Uehara (Railway Technical Research Institute): Preparation of geopolymer without employing Portland cement

3. Awards

The society presented awards to the following members at the occasion of the annual meeting.
Clay Science Society of Japan Award was given to S. Takagi, Tokyo Metropolitan University.
Achievement Award was given to T. Sakamoto, Kurashiki University of Science and the Arts.
Young Researcher Awards were given to Y. Kuroda (Yokohama National University) and K. Shikinaka (National Institute of Advanced Industrial Science and Technology).
Best Technological Award was given to M. Uehara, Railway Technical Research Institute.
Best Paper Awards were given to K. Takahashi et al. (Clay Science, 21, 1-6) and K. Kinjo et al. (Nendo Kagaku, 56, 1-7).
Young Student Award was given to Y. Higashi (Yamaguchi University).
Best Presentation Awards were given to the following young researchers.
K. Saito (Akita University)
S. Enju (Kyoto University)
T. Sato (Railway Technical Research Institute)
4. Publication
Clay Science Society of Japan publishes three issues of Nendo Kagaku (Journal of the Clay Science Society of Japan in Japanese), and four issues of Clay Science every year.

For further updated information: http://www.cssj2.org/english/ or contact Jun Kawamata, Yamaguchi University, e-mail: j_kawa@yamaguchi-u.ac.jp.

Jun Kawamata
January/2019
The Russian Clay Group (RCG) is affiliated to European Clay Group Association ECGA. RCG was created at 1994 and includes 43 members who confirmed their membership in 2017.

OFFICERS: Honorary President: Prof. Victor Drits, Geological Institute RAS. President: Dr. Victoria Krupska ya, Institute of Ore Geology, Petrography, Mineralogy and Geochemistry RAS. Secretary: Dr. Petr Belousov, Institute of Ore Geology, Petrography, Mineralogy and Geochemistry RAS (since 2018).

Members of the RCG specialize in different research areas: the structures and structural inhomogeneities of layered silicates, the behavior of clay minerals in soils and organomineral interactions, the modern and ancient weathering crusts, bentonite, kaolin and palygorskite clay deposits, clay minerals as indicators of facial settings and conditions of diagenesis and epithermal transformations, geochronological, paleogeographical and paleontological aspects, assessment of the effect of the composition of clays mineralogy on the filtration and capacitance properties of rocks within the framework of oil and gas geology, physico-chemical and physicochemical properties of clays and clay barriers used for isolation of nuclear heritage sites and radioactive waste (RW) storage, the microstructure and colloidal properties of clays and clay soils in the natural state and in a compacted form, the features of diffusion and migration technogenic components through clay rocks and compacted bentonites, the sorption of radionuclides (Cs, Sr, U, Am, Np), argillotherapy in a complex of restorative treatment, the swelling of bound water in clays, theoretical and experimental study of the relationship of rheological and electrochemical clay properties and polymer-clay dispersions in the presence of electrolytes, organoclay, modification of clay particles as additives for plastic lubricants, and as stabilizers of inverse emulsions and much more.

Applied research was also conducted to develop bentopolymer blends for horizontal directional drilling. The works were carried out jointly with the companies LLC “Company Bentonite” and LLC “Albrehts”.

Traditionally, members of the Russian Clay Group take part in various field trips activities. The geography of field research is very wide: European platform, the Urals, Siberia, Far East, Antarctica, Arctic, etc. In 2018 members of the Russian Clay Group were actively involved in both scientific and applied activities, with particular importance being placed on the establishment of international cooperation on the study of layered silicates.

In September 2018, the RCG conducted a scientific seminar: “Bentonite clays as a component of engineering barriers for the isolation of radioactive waste”. There were discussed the results of research projects were supported by the Russian Foundation for Basic Research (RFBR) and others. This seminar was devoted to various aspects of studying bentonite clays as components of engineering safety barriers for isolating radioactive waste, strengthening scientific ties between colleagues from different scientific organizations, and establishing scientific and technical cooperation with foreign organizations when planning research in an underground research laboratory at a disposal site under construction for the sake of active waste in Nizhne-Kanskiy massif (Krasnoyarsk region).

In addition to fundamental projects, members of the group actively attended international conferences on clay minerals and took part in the 9th Mid-European Clay Conference (MECC 2018, in Zagreb) as well as in the Workshop on the Legacy Radioactive Waste, held under the auspices of the IAEA.

International collaborations:
National Institute of Advanced Industrial Science and Technology (“AIST”) on the scientific study of bentonite clay deposits in Russia and Japan. As a result, joint field work was carried out at the 10th Khutor bentonite clay deposit (Republic of Khakassia).
Swedish Nuclear Fuel and Waste Management Company (SKB). According to the results of the working visit to the Aspo underground laboratory (Sweden), an agreement was reached to hold in April 2019 in Moscow a joint Alternative Buffer Material Meeting devoted to studying the behavior of compacted bentonite clays under conditions of simulating the disposal of radioactive waste in crystalline rocks.
Institute of Geological Sciences Polish Academy of Sciences, Research Centre in Krakow, the Clay Minerals Laboratory. The wonderful team of the Laboratory of Clay Minerals conducted a short course on their experience with the Jackson procedure for clay sample preparation and showed smectite layer charge measurement using the D2O-method.
Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH from the Federal Republik of Germany.
(a) Field trips of Russian Clay Groups’ members in the Leningrad Region; (b) participation on the 2nd International conference for clays and ceramics, Riga; (c,d) Laboratory work during Workshop on the Legacy Radioactive Waste; (e) collaboration with Skoltech (Russian silica valley); (f) participation on the Annual Clay Mineral Society meeting; (f) Clay Minerals Society meeting; (g) 10th Khutor bentonite clay deposit (Republic of Khakassia).
Scientific events visited by members of RCG (the largest and most significant):
Engineered Barrier Systems (EBS) - BENTONITE properties and applications organized by Florian Kober (Na-gra) that located at GTC – Grimsel Training Centre
X Russian conference with international participation “Radiochemistry 2018”
2nd International Symposium «Clays and Ceramics» Exolith - 2018. Lithogenesis: staging, processes and diagnosis. Annual meeting (scientific readings) dedicated to the memory of Professor Oleg Yapaskurt
12 Ural lithological meeting “Sedimentary geology of the Urals and adjacent regions: today and tomorrow
Many students are involved in the topics of studying of bentonites properties as barriers to isolating radioactive waste, studying the rheological properties of bentonites and organo-mineral compositions, the behavior of clay minerals in pedogenesis, and studying the geological aspects of various clay deposits.
The following events are scheduled for 2019:
Alternative Buffer Material (ABM) Meeting, 3-4th, April, 2019, IGEM RAS, MSU, Moscow
VI Russian clay minerals school “Argilla Studium-2019”, November, 2019, IGEM RAS, Moscow
IV Russian Meeting with international participation on clays and clay minerals - “CLAY-2019” – November, 2019, IGEM RAS, Moscow

SLOVAK CLAY GROUP (SCG) ACTIVITIES IN 2018

On 21 - 23 May 2018 the SCG organized the 5th workshop “Clay minerals and selected industrial minerals in material science, industrial applications and environment technology”. The workshop was held in a small old mining town, Banská Štiavnica, which is situated in the Central Volcanic Field of Slovakia. The main goal of the workshop was to provide PhD students and young scientists the opportunity to have lectures and to discuss their scientific results with senior scientists. The presence of six young scientists from Poland invigorated this event. Nine lectures and fifteen posters, covering a wide range of the topics related to clays and industrial minerals, were presented. A one-day excursion to industrial minerals deposits (bentonite, perlite, zeolite) was also included in the workshop. The event was partly supported by the “Council of the Scientific Societies at the Slovak Academy of Sciences”.

In addition to scientific events, the group members organized many different social events that contribute to creating a warm atmosphere within the group.
On behalf of RCG, I wish you all creative success and invite you to scientific events! Our web resources are www.ruclay.com and www.argillas.ru

President of Russian Clay Group-
Dr. Victoria Krupskaya (krupskaya@ruclay.com)
The annual meeting of SCG was held in the beginning of December in Bratislava. After constructive discussion, the members agreed with the proposal of the SCG council to prepare a statutes of the SCG Award to Young Scientists. The award will be granted to the members of the SCG and is likely to start in the year 2019. Two invited lectures were presented during the SCG meeting: Eva Proroková gave her talk about the natural buildings (construction of which utilizes also clay minerals) and Jan Labuta (National Institute for Materials Science, Tsukuba, Japan) presented an interesting lecture about life and research in Japan.

Participants of the 5th workshop at Jelšový potok bentonite deposit

Oral session at 5th workshop in Banská Štiavnica.

Most of the SCG members took part in the 9th Mid-European Clay Conference (MECC) in Zagreb, Croatia, September 17-21, 2018. Eleven contributions (2 oral and 9 poster presentations) were presented by SCG members. We enjoyed the friendly atmosphere of the conference as well as the city itself.


The financial contribution to PhD. students to cover part of conference expenses was also granted by the “Council of the Scientific Societies at the Slovak Academy of Sciences”.

Young 40s (Marek Osacký, Miro Honty) and expectant for a mature age (Tomáš Binčík) in Zagreb

Greetings of SCG members from the MECC in Zagreb

SCG Council: Peter Uhlík (president) peter.uhlik@uniba.sk
Jana Madejová (vice-president)
Iveta Štyriaková, Helena Palková, Juraj Bujdák
1. Activities of the Spanish Clay Society (SEA-Sociedad Española de Arcillas) in 2018

The Spanish Clay Society organized its XXV Scientific Meeting at the University of Salamanca in Zamora on July 5-7th, 2016, with 52 contributions from 63 participants. The Organising Committee was formed by SEA members from the University of Salamanca, coordinated by Professor Mercedes Suárez. The Conference program included plenary lectures, scientific session of oral and poster presentations and a field trip.

Plenary lectures:
"Fábricas en filosilicatos: cuantificación y aplicaciones" (Phyllosilicate fabrics: quantification and applications), by J. Gómez-Barreiro, from the University of Salamanca.
"Sepiolita como nanoplataforma para el desarrollo de materiales funcionales avanzados" (Sepiolite as a nanoplatform for the development of advanced functional materials), by P. Aranda, from the Institute of Materials Science of Madrid (ICMM-CSIC).

The field trip included a visit through the geologic story of the Duero river and an environmental cruise in the Arribes del Duero Natural Park, in a route of great geological interest and beauty landscape into the most spectacular vertical section of the canyon between Spain and Portugal.

Prof. Eduardo Ruiz-Hitzky, Research Professor Scientist at the National Research Council of Spain (Materials Science Institute of Madrid, ICMM-CSIC) and former Vice-President and President of the Spanish Clay Society (2002-2010) received honorary membership during the XXV Scientific Meeting of the Spanish Clay Society in Zamora.

The award “Initiation to Clay Studies” was granted to Yesenia Stephanie Martínez Lama from the University of Salamanca for her Master's Thesis entitled “Efecto de los Carbonatos en Arcillas Re-sedimentadas (Viso Superior del Polígono de los Villares, Salamanca)” (Effect of Carbonates on Re-sedimented Clays, Upper Viso, Polígono Villares, Salamanca), supervised by Dr. Mercedes Suárez and Dr. José Nespereira. The winner of the Young Researchers’ Award offered by the SEA was Ediana Paula Rebitski (Institute of Materials Science of Madrid, ICMM-CSIC). The prize for the IV Scientific Photography Contest on Clays was awarded to Dr. Ana M. Fernández-Díaz (CIEMAT, Madrid).
Some new SEA Council Board members were elected during the Annual General Meeting in Zamora: Dr. Fernando Nieto (President), Dr. Jaime Cuevas (Vice-President), Dr. África Yebra-Rodríguez (Secretary), Dr. Alberto López-Galindo (Treasurer), Dr. María José Ben-tabol, Dr. Adolfo Miras, Dr. Manuel Pozo and Dr. Cristina Villanova.

2. Call for Martín Vivaldi Award
The Martín Vivaldi Award is an International award, sponsored by the European Clay Groups Association (ECGA) and financially supported by the Spanish Clay Society to offer financial assistance to the recipient, with the aim to enable him/her to participate in an EUROCLAY Meeting for the purpose of presenting his/her paper. Candidates must submit an electronic copy, preferably a pdf file, of approximately 4000 words in English on a topic relevant to one of the sessions of the Meeting. The paper should be written in a format acceptable for international journals. Assessment will be on scientific content only and the winner will be expected to present his/her paper at the Meeting. The award consists of a honorarium of 1.000 Euros to contribute to the recipient to cover the expenses of the registration fee to the Meeting, travel and hotel expenses for attending next EUROCLAY Meeting in Paris, and a certificate. The award will not be made if it is considered that candidates do not reach the required standard.

Person eligible for the award must be under 35 years of age on the closing date for submissions. No restriction is placed on the sex or nationality of the candidate.

The Selection Committee shall consist of the President of ECGA (Chair), three members nominated by the SEA, and the President of the Spanish Clay Society, who will act as Secretary.

The application form must be completed and returned to the Secretary of the SEA (secretaria@sea-arcillas.es) with copy to the general address of the Spanish Clay Society (sea@sea-arcillas.es) with each entry to arrive before the official closing date. The candidates must note that the deadline will be strictly observed.

3. In Memory of José Antonio Rausell-Colom (1932-2018) and Emilio Galán (1942-2019)

It is with great sadness that we wish to remember and honor our dearly departed colleagues José Antonio Rausell-Colom and Emilio Galán, both distinguished researchers, professors and mentor. Obituaries that honor their careers and contributions to clay science are included in a separate section of this AIPEA newsletter.

África Yebra-Rodríguez
Secretary of the Spanish Clay Society

Prof. Eduardo Ruiz-Hitzky received honorary membership from the President of the Spanish Clay Society F. Javier Huertas (photo courtesy of Pilar Aranda).
Ediana Paula Rebizki received the Young Researchers’ Award from the President of the Spanish Clay Society: Fernando Nieto, F. Javier Huertas, and Mercedes Suárez (photo courtesy of África Yebra-Rodríguez).

“Fractal chlorite” by Ana M. Fernández-Díaz (CIEMAT, Madrid), prize for the IV Scientific Photography Contest on Clays.

TUNISIA
TUNISIAN CLAY GROUP

1- Committee:
The members of the Tunisian Clay Group (TCG) Executive Committee are:

   President:          Fakher Jamoussi
   Vice-President:     Nouri Hatira
   Secretary General: Mondher Hachani
   Treasurer:          Béchir Moussi
   Members:
      Hédi Ridha Chaftar
      Samir Baklouti
      Ali Tlili
      Emna Fakhfakh
      Imen Khiari
      Khalil Lazaar

2- Activities of the Tunisian Clay Group during 2018

2-1 Participation in congresses:

2-2 Organization of scientific excursion:
The Tunisian Clay Group (TCG) organized a scientific excursion for the students of the University of Tunis El Manar in the context of the Valorization of Geomaterials in the region of Jebel Oust and Jebel Menchar in North East of Tunisia. This took place on April 28th, 2018.
Excursion for the students of the Tunis El Manar University in the context of the Valorization of Geomaterials in the region of Jebel Oust. April 28th, 2018.

For further information, please contact:
Prof. Fakher Jamoussi,
Centre de Recherches et des Technologies des Eaux,
Technopôle de Borj Cédria
BP 273, 8020, Soliman
Tunisia
E-Mail: tunisianclaygroup@yahoo.fr
web site: www.tcg.tn
By the President of the Tunisian Clay Group
Prof. Fakher Jamoussi
December 2018
For the year 2018, the activities of the Clay Science Society –Turkey can be summarized as follows:

1. Biannual meeting of the Society's General Assembly (GE) took place on February 24, 2018 at Ankara. The Executive Committee Members of the Society were elected as Asuman Günal Türkmenoğlu (President), Şih Ali Sayın (Vice President), Haluk Akgün (General Secretary), Zehra Semra Karakaş (Treasurer), Hüseyin Yalçın, Selahattin Kadir and İsmail Aydın Aras as the members. Prof. Dr. Yüksel Sarıkaya's honorary membership to the Society was proposed and approved by the votes of the GE members. Professor Yüksel Sarıkaya is a physicochemist and he has been the member of our Society since 1991. He has served as an Executive Committee Member and was active for the implementation of interdisciplinary clay science and application studies, teaching and development of clay science in Turkey.

2. Our Society was represented at the 7th Annual Career Day of the Department of Geological Engineering, Middle East Technical University (METU) on May 24, 2018 where our major aim is to develop strong bonds between the Society and the young graduates; to encourage an increasing knowledge of clay science and its application on different aspects of clays and clay minerals and to provide a means of contact with the clay community at large. The students attending the Career Day were informed about the aims, activities and accomplishments of the Society.

3. Organizational studies of the 18th National Clay Symposium are continuing in collaboration with the Physics and Chemistry Departments of the Kocaeli University that is located in the city of İzmit of the Marmara province. The Symposium will take place in September 2019 and it will bring together clay scientists and professionals from various disciplines; it will include scientific and social programs, and field excursions.

4. The Clay Science Society –Turkey in collaboration with the Clay Minerals Society-USA will organize the 17th ICC2021 as promoted by AIPEA, in Istanbul during 12-16 July 2021. The organizational studies are continuing and very recently we took liberty of inviting the participants of the MECC2018 at Zagreb to participate in the 17th ICC2021 to be held in Istanbul.
The 2018 Annual Meeting of the Clay Minerals Society was held June 10-14 at the University of Illinois at Urbana-Champaign. Events included a workshop on Medicinal Applications of Clay Minerals by Professor Jin-ho Choy from Ewha Womans University, a very delightful BBQ at Professor Stucki’s home, field trips to see kaolinite in the Keokuk Geodes, to Starved Rock State Park in Oglesby, Illinois, to the Critical Zone Observatory, and a trip to collect Fithian illite. The social Program included an Amish Tour in Arthur, Illinois and a visit to Abraham Lincoln sites in Springfield, Illinois.

Student travel grants were funded by the CMS and by the National Science Foundation and were awarded to students to attend the 2018 CMS Annual Meeting. Recipients were: Mary Arenberg, Aaron Betts, Ryan Bowman, Laura Fackrell, Thomas Jeute, Alex Kubler, Stephanie Napieralski, Samuel Perry, Mark Peterman, and Zebadiah Teichert, Javier Chaparro Barajas, Paolo Benavides, Ryan Bowman, Olga Dorzhieva, James Entwistle, Thomas Jeute, Shichao Ji, Monsurat Omolola Jimoh, Anna Koteja, Malgorzata Lempart, Yayu Li, Pan Liu, Samuel Perry, Mark Peterman, Ahmed Radwan, Karolina Rybka, (Highest ranking Student Travel Grant Blair Jones/Jane Flinn Award), Itamar Shabtai, Peng Yang, Chi Zhang. Those able to attend the banquet are shown in the following photo.

The 2019 meeting of the Clay Minerals Society will be a joint meeting in Paris July 1-5 with the European Clay Groups Association and the 6th Mediterranean Clay Meeting. More information is available at euroclay2019.sciencesconf.org. The meeting will be held at Pierre & Marie Curie University in the center of Paris and will be organized by the French Clay Group under the auspices of ECGA. Bruno Lanson, Vice President Elect of the Clay Minerals Society will also serve as co-chair of the Paris meeting.

The Clay Minerals Society annually awards several grants of up to $3000 through its student research grant program. The 2018 Research Grant Awardees are: Brian Ares, Michigan State University, Paolo Benavides, University of Illinois, Laura Fackrell, University of Georgia, Yayu Li, University of Connecticut, Sarick Matzen, (Reynolds Award Winner for highest scoring Research Grant), University of California, Berkeley, Mark Peterman, Mississippi State University, and Holly Turner, University of Portsmouth.

The Marilyn and Sturges W. Bailey Award — the highest honor of The Clay Minerals Society — is awarded solely for scientific eminence in clay mineralogy (in its broadest sense) as evidenced primarily by the publication of outstanding original scientific research and by the impact of this research on the clay sciences. Service to clay mineralogy, teaching, and administrative accomplishments are not considered in the evaluation of nominees. The 2018 recipient was Dr. Gordon “Jock” Churchman, shown here with President Douglas McCarty (left), presented at the June 2018 CMS Annual Meeting.
The G. W. Brindley Clay Science Lecture recognizes a clay scientist who will infuse the Society with new ideas, someone who is both a dynamic speaker and involved in innovative research. Dr. Brindley himself approved the concept of The Lecture, and the speaker should deliver a lecture that Brindley himself would applaud. The 2018 recipient was Dr. Cliff T. Johnston, shown here with President Douglas McCarty (left). Dr. Johnston spoke on “Probing the Hydrophobic/Hydrophilic Nature of Clay Minerals at the Mesoscale Scale.”

The Marion L. and Chrystie M. Jackson Mid-Career Clay Scientist Award recognizes mid-career scientists for excellence in the contribution of new knowledge to clay minerals science through original and scholarly research. The Awardee is to be within the ages of 39 and 60. The 2018 recipient was Dr. Stephen J. Hillier, shown here with President Douglas McCarty (left).

The Pioneer in Clay Science Lecture recognizes research contributions that have led to important new directions in clay minerals science and technology. The 2018 recipient was Dr. Jan Środoń, shown here with President Douglas McCarty (left).

A major task facing the Clay Minerals Society over the past year concerned the future of our journal, Clays and Clay Minerals (CCM). We were losing market share and our membership numbers were also shrinking. As a technical journal we felt we were too small to have influence on the market on our own. Nevertheless, we continued to feel that we were not reaching all of those people who should be reading our journal. In addition, the stability of the financial position of CCM would likely become untenable. With all this in mind a decision was made to change publishers and go with Springer Publishing. All CCM content (1952–2018) will be together online at SpringerLink and available to all subscribers to Springer, regardless of whether they are direct, ‘big-deal,’ consortial, or other subscribers. Benefits include, greatly reduced time between acceptance and publication online, more immediate abstracting and indexing (appearance in Web of Science, Google Scholar, Scopus, etc.), marketing to a wide range of disciplines, not just the geoscience community, and access to more than 9,000 institutions. Springer will provide the content online and in print, so this means that we will end our contract with GeoScience World.
Obituary: EMILIO GALAN (1942-2019)

Professor Emilio Galán Huertos, world renowned clay mineralogist, passed away on January 29, 2019 at the age of 76. He was born in Málaga (Spain) on February 4, 1942 and was a man of exceptional talent. After successfully completing his secondary studies, in 1966 he received his undergraduate degree in Geology from the University of Granada. In 1972 he received his PhD in Geology from the Complutense University of Madrid under the direction of his professor, Dr. Juan Luis Martín Vivaldi. After the premature death of his professor in 1974, he continued with his international activities as member of the International Executive Committee at the “Working Group for the kaolin correlation program, genesis and age” from the International Geological Correlation Program (PICG, UNESCO 1974-1980).

From 1972 to 1976 he was part of the Spanish Research Council, and since 1968 he was professor of Crystallography and Mineralogy at the universities of Madrid, Badajoz, Zaragoza, and finally full professor at University of Seville. He was officially retired at age 73, but he continued collaborating with his research group until his last days.

Prof. Galán had a great capacity to detect at all times the areas of scientific interest for the Society, initiating and consolidating new lines of research such as “Minerals of gemological interest in Spain”, “Rocks and Industrial minerals”, “Historical Heritage Studies”, “Soil pollution”, “Atmospheric pollution caused by ceramic industries”, “CO₂ capture and storage”, etc, without counting his great affinity for the Geology and Technology of Clay Minerals. He was recognized as a world specialist on sepiolite, palygorskite and kaolinite. He was author/coauthor of more than 330 papers, 16 books and 61 book chapters. He imparted some 80 plenary lectures and attended more than 120 congresses, mostly international. He collaborated in the realization of two maps/memories and in three patents on kaolin treatments and on CO₂ capture. He directed 22 PhDs, 11 Bachelor/Master thesis and 2 final graduated thesis.

He served as a consultant for clay and ceramic industries, and for monument conservation programs. He participated on reviews of Spanish, Italian and EU projects on natural resources, materials, and environment. He was Associate Editor of Clay Minerals and Applied Clay Science and member of the editorial board of Applied Clay Science, Geological Carpathica-series Clays, Estudios Geológicos, Boletín de la Sociedad Española de Mineralogía, Peridico di Mineralogia, GeoActa.


He participated on the organization of numerous international and national meetings of these societies as Chairman or member of the organizing committee, emphasizing the EUROCLAY’87 that is still remembered as an extraordinary event by those of us who had the privilege of participating. Emilio Galán enthusiastically defended at AIPEA Council the candidature of Granada for the organization of International Clay Conference (ICC 2017).

As Honorary Nominations, Prof. Galán has the Medal of the University of Pavia for scientific merits (1973), Tecniterrae Research Award (1977), Elected Member of Science Academy of Seville (1993), Honour Member of the Czech and Slovak Clay Groups (1994), the Gruppo Italiano dell’AIPEA (1996), the Spanish Clay Society (1999) and the Spanish Mineralogical Society (2016), Pioneer in Clay Science and Technology by the Clay Minerals Society (2008), and AIPEA Medal (2017).

This, in summary, was the luminous career of Emilio Galán, a man of extraordinary knowledge and noble human qualities, with a wide range of interest that brought him into contact with many people from many countries around the world. He left a great mark on all his disciples and contributed consolidating clay research in Spain.

He is survived by his wife Rosa, his daughter Paloma, who offered their comprehension and help during more than 45 years of work.

Adolfo Miras, Patricia Aparicio and Isabel González
Georges Pédro was born on June 26th, 1929 in Alma, near Algiers. He was initially trained as an agronomist at Maison-carrée (Algeria) which had become the National School of Agronomy of Algiers, from which he graduated in 1952 (1st rank). He then moved to France where he completed his research-based training at the University of Paris (Laboratory of Physical Geography and Dynamical Geology in Sorbonne University) before being recruited as a research assistant at INRA (National Institute for Agronomic Research) in 1955. He was initially assigned to the Soil Laboratory, then directed by Stéphane Hénin, who had been the first president of the CIPEA (which became in 1963 the AIPEA as we know it today). He will spend his entire scientific career in this institute. While there, Georges Pédro shaped his scientific work at the crossroads of agronomy and surface geosciences. This work was devoted to the experimental study of soil formation in contrasting settings, “experimental pedology” as Dr. Pédro would name it. It should be noted that at the time this work considered a purely abiotic model that excluded the influence of plant growth or biotic activity in general. This work enabled Georges Pédro to be awarded a Doctor of Science degree in 1964 and has largely contributed to his very broad international scientific recognition, as evidenced by the many distinctions and prestigious positions he was later awarded.

Georges Pédro also kept devoting his scientific activity to studying the geochemical alteration of rocks as a function of their type and of the climates to which they are exposed. This enabled him to develop a general scheme for interpreting the different pedogenetic processes on the earth’s surface and to propose, in 1967, a map at the global scale. In addition to these scientific activities, Georges Pédro also had a strong impact in shaping the international clay community. He became involved very early in scientific societies, becoming secretary of the French Clay Group (GFA) in 1958, under the presidency of Stéphane Hénin. He also played a key role in shaping AIPEA to the form currently known during the International Geology Congress held in 1960 in Copenhagen. He was also heavily involved in the essential work of defining and clarifying clay nomenclature in the years 1960-1980, in particular with George W. Brindley (see photo). At the French level, Georges Pédro was President of the GFA from 1972 to 1975, just after the presidency of Georges Millot who had seen the GFA become the independent entity that we know and appreciate today. He was also President of the Association Française d’Etude des Sols (AFES) from 1982 to 1986.
Dr. José Antonio Rausell-Colom, the pioneering clay mineralogist who carried out some of the earliest research on swelling and intercalation of 2:1 clays, passed away in Madrid at the age of 85 on August 1st, 2018. He is survived by his three daughters, Estrella, Tannia and Vicky, his son José Antonio, Jr., and five grandchildren; his wife María Rosa passed away 4 years earlier. During his long and productive career as research professor at CSIC (Consejo Superior de Investigaciones Científicas of Spain), Professor Rausell-Colom gained praise and recognition as an authority in the field of physical-chemistry of clays. Early in his career, some of the best clay mineralogists in the international research community of the 20th century served as his mentors and collaborators. His doctoral research at the Complutense University of Madrid was supervised by Prof. J.L. Martín-Vivaldi and included a residency at Estación Experimental del Zaidín (EEZ-CSIC) in Granada, Spain, a crucible for decades of excellent research in clay mineralogy. In Granada, he worked under the direction of D.M.C. MacEwan, who had recently relocated from the Macaulay Institute in Scotland to Granada for a stint in the late 1950s as a research professor. José Antonio's dissertation on swelling of Na-montmorillonite was one of the earliest studies of factors that control smectite hydration, and it led to post-doctoral research with Keith Norrish of CSIRO-Australia (1958-1962). Rausell-Colom and Norrish pursued new questions related to swelling of smectites, first developing protocols for studying the swelling of clay minerals by X-ray diffraction at low angles, and then by looking into origins of soil smectites by applying controlled laboratory reactions to simulate weathering of micas.

In 1963, José Antonio began a decades-long career at CSIC in Madrid, beginning at the Instituto de Química-Física Rocasolano working on crystallochemistry of phyllosilicates. By the early 1970s, he was enounced as a Research Professor at the Instituto de Edafología y Biología Vegetal, and later (and longer) at the Instituto de Físico-Química Mineral, founded and directed by J.M. Serratosa, one of the laboratories further integrated in the new Instituto de Ciencia de Materiales de Madrid. His early work at CSIC involved intercalation of organic compounds (e.g. Rausell-Colom and Salvador, 1971, Complexes Vermiculite-Aminoacides, Clay Min 9, 139-149, published in French; and Rausell-Colom and Fornés, 1974, Monodimensional Fou-
Obituary:  
JEAN-LOUIS ROBERT  
(1948 – 2017)

During a long and productive career, Dr. Jean-Louis Robert gained international recognition for his expertise in structural and spectroscopic characterization of micas (and amphiboles). Dr. Robert spent his career as a researcher at CNRS (Centre National de la Recherche Scientifique of France), where he rose to the rank of Director of Research. He also held a post at the IMPMC in Paris (Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie, of the Sorbonne) where he pursued new areas of research on mineral synthesis and hydration of clay minerals in relation to structural properties of minerals. With detailed structural and spectroscopic studies, Jean-Louis more particularly explored the substitution processes and the scope of solid solutions in natural and synthetic micas and amphiboles. He worked with many renowned scientists like Jean Iiyama, Gian Carlo Della Ventura, Annibale Mottana, Jesus Sanz, and Frank Hawthorne. His very diverse collaborations illustrate his recognition by the international community of mineralogy. When he joined the IMPMC in Paris in 2006, he became an active member of the Earth Sciences Department. There, he continued development of the experimental activity on micas and amphiboles thanks to new approaches of mineral syntheses. More recently, he also turned towards new research avenues, in particular the structural control of clay hydration. Prof. Robert was the author of more than a hundred articles and was very active in his field, organizing several sessions and meetings in national and international scientific events. He served as President of the GFA (Groupe Francaise des Argilles) from 2011 to 2015, chaired the ECGA (European Clay Groups Association) beginning in 2015, and was chair of the EUROCLAY 2019 organizing committee. His enthusiasm for science and his devotion to students and research colleagues was widely recognized in the international clay community; his passing leaves a large hole in our community.

To his colleagues, friends and collaborators in the clay community, he was well known for his enthusiasm for sciences and his devotion for the community. Jean-Louis was an aficionado, a lover of clays and experimental mineralogy, and his door was always open to help students and his research colleagues. The clay community has lost a great scientist, an enthusiastic participant of learned societies, and a colleague and friend, one we will fondly remember for years to come.

With contributions from Bruno Lanson, Etienne Balan, Georges Calas, Laurence Galoisy and Maguy Jaber
Obituary:

FERNANDO VENIALE
(1929-2019)

We are deeply saddened to announce that Professor Fernando Veniale died in Pavia on March 16, 2019. He was born in Pavia, a town renowned for its ancient Alma Ticinensis Universitas where he studied in a uniquely stimulating environment. After graduating in 1954 with a thesis on volcanic rocks from Val Sesia (northern Italy) – for which he was awarded the National Prize “Roma” – he continued investigating granitic rocks occurring in the same region and extending to the Lake Maggiore, focusing in detail on electron microprobe analysis of accessory zircon and its petrogenetic significance. For the results obtained, he was awarded (1963) with the Prize “U. Panichi” by the Società Italiana di Mineralogia e Petrologia.

Later (1968-1970) he determined the lithotypes in the area Albenga-Savona (Liguria region, sheet 30 of Geological Map of Italy). During fieldwork, he realized the importance of investigating the rock weathering products and processes, also with the purpose of analyzing stones used as construction materials of ancient buildings and monuments. He analyzed stones, bricks, “terre-cotte” and mortars in ancient churches (also the renowned Certosa), university palaces, monuments, and Roman-medieval-“Spanish” townwalls of Pavia, providing support for their restoration. Furthermore, he studied the bricks and mortars of the medieval Civic Tower (collapsed in 1989) for understanding the causes of their decay. Other investigations concerned ancient ceramic artefacts from northern Italy.

Professor Veniale was chairman of workshops organized in 1980 and 1985 by UNESCO’s International Committee for Monuments and Sites. From 1990 on, he was a member of the International Committee for the safeguard of the “leaning” tower of Pisa. He mapped the construction stones and mortars, their degradation products and processes, contributed to development and use of a suitable software (Akira-Gis-Server), and assisted the restoration works completed in 2011. He analyzed also the subsoil of the tower for obtaining suitable information for the “controlled subsidence” intervention applied for reducing the tower tilting and consequently improving its stability. Primaziale Pisana, the organization managing the tower life, along with the Pisa Civic Administration, awarded him with a Gold Medal in 2011 when the tower was reopen to visitors.

Earlier in his career (1961-1965), Dr. Veniale undertook investigations specializing in clay mineral characterization, use and genesis, with collaborations and visits to prominent research centres in Netherlands, France, Sweden, Scotland and Spain, working on a range of clay occurrences using advanced methods and instrumentation. He was very active in promoting collaboration among various research centres all over the world and he visited many of them, including sites in Europe, USA, Brazil, Australia, China and South Africa. Italian colleagues called him the “globe-trotter of clays”.

The results of his research (about 200 publications and reports) cover many topics, including some very notable accomplishments. He discovered two new clay mineral species: “aliettite”, a talc saponite mixed-layer, and “hydro-chrysotile”, both as alteration products of serpentinitic rocks. He documented transformation mechanisms of lamellar-to-lath shaped illite/smectite, and discovered sepiolite in sediments belonging to the “evaporitic” formation of the Apennines as a marker of such environment. He also studied the relationship between particle shape and “crystallinity” of kaolin-group minerals, and determined by electron microscopy that the different stacking of hydrated-SiO₂ microspherules is the reason for the exterior opalescent aspect. Additional contributions to the research community include studying the clay mineral distribution in bottom sediments of the Adriatic Sea and along other Italian coasts (in collaboration with Scripps Institution of Oceanography, La Jolla, California), in the Ross Bay (the Italian base in Antarctica), and in the Strait of Magellan. The “Project Esope” for the recognition of suitable sites for nuclear wastes repository required drilling in bottom sediments of Atlantic Ocean at a deep of up to 6000 meters; Prof. Veniale analyzed column samples concerning clay mineral distribution.

He was head of the workgroup that realized the Catalogue of
Clays in Italy. A peculiar branch was devoted to “varicoloured” clays along the Apennines, where dickite was found as peculiar constituent. Other studies devoted to use and application of clays include: formulation of new clay-organic complexed to be used as a stationary phase in gas-chromatography for distinguishing polymers (in collaboration with ENI - Ente Nazionale Idrocarburi); interactions mechanisms of clay minerals with toxic heavy metals and organic pollutants; impermeabilization by clay barrier of repository sites for urban and industrial wastes; use of domestic wastes as manure in agriculture; stabilization of landslide bodies by a devised electro-osmotic treatment using aluminium anode or KCl diffusions; and last but not least, the investigations of clays for “thermal muds” used in spa-centres for recovering from skin, muscle and bone diseases (pelotherapy) and for cosmetic, wellness and relaxation treatments. His research provided evidence for the peculiarity of using-sulphurous bromine-iodine salty water for dermatologic or muscle-bone diseases, respectively. In his last publications (2008), he pointed out the necessity to certify the composition of clays and mineral waters used, and the “maturation” procedure for the preparation of muds when applied to different pathologies.

He attended all AIPEA and European Clay Conferences and many national workshops until his retirement, acting as chairman of various scientific sessions. He was co-chairman with G.W. Brindley (USA National Science Foundation) of a symposium on “Clays for Ceramic Products” held in Milan (Italy, 1973) with the participation of prominent clay scientists, visiting also the ceramic district of Sassuolo and the Museum of Ceramics in Faenza. A volume on ceramic clays in Italy was published, and he was awarded with the eminent Golden “Ambrogino” by the mayor of Milan. In 1981, he was charged as Organizing Chairman of AIPEA 7th International Clay Conference (ICC) held in Bologna and Pavia (Italy). On that occasion, the Alma Ticinensis Universitas of Pavia conferred the “laurea honoris causa” to Prof. Georges Millot (Strasbourg) “for his basilar studies on clay geology”. Prof Veniale was sponsor and 1st elected president of the Italian Group of AIPEA (1970-1975), as well as of the European Clay Groups Association (1987), and he served AIPEA as vice-president (1975-1978). He was on the editorial board of journals as Clay Minerals, Applied Clay Minerals, Ceramurgia and Materials de Construcción, served as fellow of several scientific organizations including the honorary memberships of Sociedad Epañola de Arcillas, Groupe Français des Argiles and the Czechoslovak Clay Group. His career attracted many other honours and distinctions. Besides those already mentioned, at his retirement, the University of Pavia conferred him the Gold Medal “Teresiana” (a distinction set up by empress Marie Teresien of Austria in the XVIII century) in recognition of his academic achievements. He also received the Karlovy Medal by the University of Prague (1983) and the Ulrich Hofmann Prize of the ECGA (2003) “in recognition of outstanding contributions in the field of applied clay science”.

In 1965, he was appointed “libero docente” and in 1975 full professor of Sedimentary Petrography. He was an excellent and inspiring teacher, training and encouraging the students, and supervising doctoral theses at the universities of Orleans, Granada and Barcelona. He was a milestone along the clayroad during past fifty years. At retirement, he had more time for his hobbies, including painting and writing verses in the dialect of his town Pavia, winning prizes in 1995 and 1998. Colleagues and friends recognize and appreciate his enthusiasm of life and zest of friendship, sense of humour, generosity in sharing ideas and initiatives, and his inspiration for students. His close colleagues and associates miss him deeply and send sympathies to his family and friends.

Submitted by Massimo Setti
Recent and Upcoming Meetings

2019

43rd International Conference and Expo on Advanced Ceramics and Composites (ICACC ‘19)
January 27th - February 1st, 2019, Daytona Beach, Fla. USA
http://ceramics.org/meetings/acers-meetings

8th International DTTG Workshop
February 18th - 22nd, 2019, Greifswald, Germany
https://www.dttg.ethz.ch/home_en.html

EUROCLAY 2019: Meeting of the European Clay Groups Association (ECGA) jointly with the 56th annual meeting of The Clay Minerals Society (CMS) and the 6th Mediterranean Clay Meeting (MCM)
July 1-5th, 2019, Paris, France.
https://euroclay2019.sciencesconf.org/

Goldschmidt 2019
August 18th – 22nd, Barcelona, Spain
https://goldschmidt.info/2019/

3rd International Conference on Calcined Clays for Sustainable Concrete
15 - 17 Oct, New Delhi, India
http://lc3.cimglobal.net/

MECC 2020
Mid European Clay Conference
Information will be posted on the AIPEA website.

Eurosoil 2020
August 24th – 28th, Geneve, Switzerland. www.eurosoil2020.com

8th International Conference on Clays in Natural and Engineered Barriers for Radioactive Waste confinement.
June 8th to 11th, 2020, Nancy, France.
A website detailing all the information will soon available.

2021

17th INTERNATIONAL CLAY CONFERENCE – ICC 2021
July, 17-21st, 2017, Turkey

36th International Geological Congress
March 2nd – 8th, New Delhi, India
http://www.36igc.org/

57th Annual Meeting of the Clay Minerals Society (CMS)
June 15th – 19th, Richland, Washington, USA
http://www.clays.org/images/57thAnnualMeeting.jpg
Becoming member of AIPEA is recommended to everybody interested in clays and clay minerals. At the moment, the main mean of communication among all members of this association is its website (www.aipea.org). There, all information is concentrated and made available to all AIPEA members, such as updated information from many events that are being organized around the world besides other information that might be of general interest.

The rules of acceptance of new members are defined in the AIPEA Statutes and By-Laws (www.aipea.org/statute.html), as follows:

**Statutes:**

**II. MEMBERSHIP**

3. a) AIPEA may accept as members individuals (individual members, who may also be life members), institutions and companies (corporate members), and national or regional societies (Affiliated Societies) with an interest in clay research or technology.

b) Application for individual or corporate membership shall be made in writing to the ... Treasurer and be accompanied by the appropriate membership fee. Applications from Societies wishing to become Affiliated shall be made to the Secretary General in writing giving relevant information on field of interest, number of members, etc.: if approved by Council (which shall not be required to give any reason for non-approval) the Society shall become Affiliated on payment of the appropriate membership fee.

c) Membership will be for the period for which the membership fee is paid. If it is one year’s dues the member will be in good standing for one year. If the membership fee is not paid, the membership may be cancelled unless there are extenuating circumstances which will be determined by the Council...

**By-Laws:**

“Individuals 65 years of age and older who have been individual members for 12 years or more shall automatically become Life Members on notification to the Treasurer. A Life Member must verify his membership every 4 years coinciding with the year of the International Clay Conference...”

To facilitate the admission of new members, AIPEA made available the Membership Application Form at its web page www.aipea.org/membership.html. Those interested in being part of this organization should fill it out and mail it to the AIPEA Treasurer, who will send information of how to pay the annual fee:

**Dr. Alberto LOPEZ GALINDO, Treasurer**
Instituto Andaluz de Ciencias de la Tierra, Director
CSIC - Universidad de Granada
Phone: +34 958 230 000 ext. 190212
Fax: +34 958 552620
Email: alberto@ugr.es
MEMBERSHIP APPLICATION FORM

Family Name ___________________________ Given Name ___________________________
Title ___________ Phone ___________________ Email ________________________________
Institution_____________________________________________________________________
Mailing Address________________________________________________________________
Type of membership*_________________ Amount of dues ___________________ for ________ years
Your Society_____________________________________________________________________

*If you are an individual member of an affiliated Society, give the name of the Society

Date ______________ Signature ________________________________________________

CHANGE OF ADDRESS NOTICE

Family Name ___________________________ Given Name ___________________________
Title ___________ Phone ___________________ Email ________________________________
Institution_____________________________________________________________________
Mailing Address________________________________________________________________
Your Society_____________________________________________________________________

Date effective ______________ Signature ____________________________________________

Fees: $30.00 USD/4-year individually; $15.00 USD/4-year student (students must prove their status through an official document provided by their university) or retiree; $100.00 USD/4-year corporate sponsor.
*student/retiree - professional - corporate
Note: Affiliated Societies pay dues on behalf of their members.
Payment by PayPal and credit card: visit www.aipea.org/membership.html
Wire Transfer: emailing treasurer treasurer@aipea.org
DATA COLLECTED
This statement pertains to use of personal data collected by AIPEA (Association Internationale pour l’Etude des Argilles; International Association for the Study of Clays). These data generally include an individual’s name and email address. For ICC newsletters, it may also include professional affiliation, mailing address, or images.

HOW PERSONAL DATA ARE COLLECTED
AIPEA collects personal data under limited circumstances. Most common are when an individual:
• Becomes a member of AIPEA;
• Participates as a speaker, author, or similar capacity;
• Purchases a product;
• Subscribes to a publication; or
• Is or becomes a member of a National Clay Group which is affiliated to AIPEA

HOW PERSONAL DATA ARE PROCESSED
Personal data of individuals may be used for limited purposes. Among them are:
• Membership administration;
• Provision of member benefits and opportunities;
• Delivery of products and services;
• Development of directories;
• AIPEA Newsletter and listserver

LEGAL BASIS FOR COLLECTING AND PROCESSING PERSONAL DATA
There are several legal bases for AIPEA’s collection and processing of personal data:
• For the legitimate interests of AIPEA, including the several uses listed above;
• To perform a contract;
• Based on consent; and
• Legal compliance.

THIRD PARTIES WITH WHICH PERSONAL DATA MAY BE SHARED
AIPEA may share member lists (name and email address) to affiliated societies who are organizing conferences.

SITE OF PROCESSING OF PERSONAL DATA
Personal data of individuals collected by AIPEA may be stored and processed in any country in which AIPEA, its vendors, or partners maintain facilities. AIPEA generally collects and processes personal data in the EU and UK.

PERSONAL DATA AUTOMATICALLY COLLECTED
AIPEA does not automatically collect data.

DATA RETENTION
Personal data may be retained by AIPEA for so long as necessary or useful to pursue the legitimate interests of AIPEA. Other factors may include: the duration of the business or contractual relationship between AIPEA and an individual; archiving of historical information; and legal requirements, including limitations on periods during which a legal claim might be brought.

SAFEGUARDS
AIPEA has implemented reasonable technical, physical, and administrative safeguards to protect personal data collected by AIPEA.

INDIVIDUAL RIGHTS REGARDING PERSONAL DATA
Individuals generally have the right to access their own personal data and to request that AIPEA correct any errors or incompleteness in their own personal data. The contact information provided below should be used for these purposes. There is also a right to request deletion of personal data. Such requests also should be directed to the designated contact.

DESIGNATED CONTACT
Inquiries regarding this privacy notice or other privacy concerns should be directed to:
Peter Ryan
Secretary General of AIPEA
276 Bicentennial Way, Middlebury College
Middlebury, Vermont, USA
Tel. +1 802-443-2557
E-mail: secretary@aipea.org