

15th INTERNATIONAL CLAY CONFERENCE

This year marks the 50th anniversary of the International Clay Conferences of AIPEA, the Association Internationale pour l'Étude des Argiles. AIPEA held its 15th International Clay Conference (ICC) in Rio de Janeiro, Brazil, from July 7 to 11, 2013, on the campus of the Federal University of Rio de Janeiro. The conference was organized by the Brazilian Clay Group of the Brazilian Geochemical Society (SBGq), in cooperation with the Brazilian Association of Petroleum Geologists (ABGP), under the auspices of the AIPEA. A total of 205 participants from 30 countries attended the meeting, which was sponsored by Petrobras (Diamond Sponsor), Halliburton, Schlumberger, and Geohub, with further support from Dairix, Bruker and Zeiss.

A significant pre-meeting activity was the second edition of the AIPEA School for Young Scientists (ASYS). The school, entitled Magnesian Clays: Characterization, Origin and Applications, was organized by Manuel Pozo of the Universidad Autonoma of Madrid, Spain. The ASYS was held at the Brazilian Center for Physics Research (CBPF) on July 6 and 7. Young (and not-so-young!) researchers had the opportunity to discuss the following topics with renowned scientists:

- Introduction to Mg-rich clay minerals: structure and composition (S. Guggenheim, USA)
- Properties and applications of Mg-clays (J. Santarén, Brazil)
- Geology of Mg-clays in sedimentary and non-sedimentary environments (J. P. Calvo, Spain)
- The origin of Mg-clay deposits: mineralogical assemblages and textures (M. Pozo, Spain)
- Geochemical pathways to Mg-clay formation (N. Tosca, Great Britain)
- Methodology for the identification and characterization of Mg-clays (E. Galan, Spain)
- Mg-clays in Brazilian basins (D. Barbosa Alves, Brazil)

The presentations will be collected in a book (AES, AIPEA Educational Series, vol. II), which will be published next year.

Four plenary lectures opened the daily scientific sessions at the 15th ICC:

- "The First X-ray Diffraction Results from the Mars Science Laboratory: Clay Minerals, Amorphous Materials, Sulfates" – Prof. David L. Bish (Indiana University, USA)
- "Functional Hybrid Clay Mineral Films" – Prof. Robert A. Schoonheydt (KULeuven, Belgium)

- "Structure Determination of Defective Lamellar Compounds: Insights on Mineral Reactions and Material Properties" – Dr Bruno Lanson (CNRS–University of Grenoble, France)
- "Complex Physics in Clays" – Prof. Jon Otto Fossum (Norwegian University of Science, Norway, and PUC Rio de Janeiro, Brazil)

As is usual for International Clay Conferences, the contributions covered an extremely wide variety of fields related to micro- and nano-minerals. The 15th ICC featured 433 contributions (173 oral presentations and 260 posters) distributed among 8 symposia and 11 technical sessions. The symposia titles were: Clay Minerals in Petroleum Systems; LDH Layered Double Hydroxides; Structural Characterization of Lamellar Compounds; Remote Sensing and Spectroscopy of Clays and Associated Minerals; Water Mobility Studies in Reference and Real Clays; Clays in Geology: Vectors for Resources; Soil Mineralogy; and Self-Organization from Clay Particles: From Nano to Macro. The technical sessions were: Applications of Clay Minerals in Earth Sciences; Clay Minerals in Ceramic, Archaeological and Archaeometric Investigations; Geotechnics and Clay Minerals; Synthesis and Modifications of Clays; Industrial Applications of Clay Minerals; Waste Disposal and Clay Minerals; Medical Geology and Clay Minerals; Interaction of Microorganisms, Biomineralization and Clay Minerals; Nanocomposites and Clay Minerals; Organo-modifications of Clays; and Qualitative and Quantitative Analysis of Clay Minerals.

A number of recognitions and awards were made during the conference. Professor **Robert Schoonheydt** (Katholieke Universiteit of Leuven, Belgium) was named AIPEA Fellow for his activities in promoting clay science and supporting the clay science community.



Robert Schoonheydt, AIPEA Fellow 2013 (right), and David Bish, AIPEA past president

The prestigious AIPEA Bradley Award for a young scientist was given to Dr **Ana Clecia Santos Alcântara** (Materials Science Institute of Madrid, Spain) for her contribution "Polysaccharide-fibrous clay bionanocomposites."



Ana Clecia Santos Alcântara, winner of the AIPEA Bradley Award

Another international award, the Novelli Prize, supported by the Italian Association for the Study of Clays (AISA), was given to **Marek Szczerba** (Polish Academy of Sciences, Cracow, Poland) for his contribution to industrial applications of clay minerals.



Marek Szczerba (right) receives the Novelli Prize from Saverio Fiore, incoming AIPEA president

The AIPEA Student Best Speaker Award was given to **Robert Koch** (University of Trento, Italy); **Eliana Satiko Mano** (São Paulo University, Brazil) and **Sirle Liivamagi** (University of Tartu, Estonia) were runners-up. The AIPEA Student Best Poster Award went to **Syafina Binti Mohol Ghazi** (Hokkaido University, Japan); runners-up were **Gabriella Fazio** (University of Brasilia, Brazil) and **Aleksandra Deręgowska** (University of Natural Resources and Life Sciences, Austria).



Student Best Speaker Award: (from left) Jeanne B. Percival (AIPEA treasurer), Robert Koch (award winner), Eliana Satiko Mano and Sirle Liivamagi (runners-up)

DMG PETROLOGY SUBGROUP MEETING, 7–8 JUNE 2013, BONN, GERMANY



Student Best Poster Award: (from left) Jeanne Percival (AIPEA treasurer), Franz Ottner (in lieu of Aleksandra Deregowska, runner-up), Syafina Binti Mohol Ghazi (award winner), and Gabriella Fazio (runner-up)

The level of the competition was very high, testifying to the increased interest in the world of microminerals. The Clays & Arts Award (sponsored by the Organizing Committee) was given to **Ailton Luis da Silva de Souza** (Petroleo Brasileiro S.A., Brazil).

The Association also helped students to participate in the conference through the Student Travel Awards programme. The following students received support to attend the conference and present their work: Dayse Mirella Oliveira Timóteo (Federal University of Rio de Janeiro, Brazil), Gabriel G. Machado Álvarez (Technical University of Crete, Greece, and Federal University of Rio Grande do Sul, Brazil), and Valentin Robin (University of Poitiers, France).

The AIPEA General Assembly elected its 15th Council. AIPEA officers for 2013–2017 are: Dr Saverio Fiore (Consiglio Nazionale delle Ricerche, Italy), president; Prof. Joseph Stucki (University of Illinois, USA), vice president; Prof. Christopher Breen (Sheffield Hallam University, UK), past president; Dr Daisy Barbosa Alves (Petrobras, Brazil), secretary general; and Dr Jeanne B. Percival (Geological Survey of Canada), treasurer. AIPEA councilors are Prof. Balwant Singh (The University of Sidney, Australia), Dr F. Javier Huertas (Consejo Superior de Investigaciones Científicas, Spain), Prof. Helge Stanjek (RWTH Aachen University, Germany), Dr Victoria Krupskaya (Russian Academy of Science, Russian Federation), Dr George Christidis (Technical University of Crete, Greece), and Prof. Makoto Ogawa (Waseda University, Japan). Prof. Stephen Guggenheim (University of Illinois at Chicago, USA) is the chair of the Nomenclature Committee, and Dr Sabine Petit (Centre National de la Recherche Scientifique, France) is the chair of the Teaching Committee. The representative of the next ICC is Dr Alberto Lopez Galindo.



This year's Petrology Subgroup meeting was held at the Institute for Mineralogy in Bonn on June 7 and 8. Over 80 participants met for dinner on Friday night at the gates of the Poppelsdorfer Schloss, which was the host site for the scientific program. People from all over Germany and some international guests were in attendance, and students made numerous contributions. The next day, the scientific program was introduced by Chris Ballhaus (University of Bonn) and was highlighted by lively and contentious discussions. Nine posters were presented in the library, and nineteen talks covering field work, theoretical approaches, and experimental studies were given. Presentations focused on the influence of halogens and water on magmatic processes, element partitioning, mantle processes, and meteorites. After running out of water in terms of rain and discussions, this successful meeting culminated with a barbecue on the terrace of the Schloss, accompanied by live music.



The next AIPEA meeting, the 16th International Clay Conference, will be organized by the Sociedad Española de Arcillas (Spanish Clay Society), under the chairmanship of Dr Alberto Lopez Galindo. The 16th ICC will take place at the Science Park in Granada, in July 2017. With the theme "Clays, from the Oceans to Space," the conference will embrace the universe of micro- and nanominerals, confirming, once again, the central role of AIPEA in promoting multidisciplinary activities in theoretical and applied clay science. Information will be available after 1 January 2015 at the website www.16icc.org. The meeting will be an excellent occasion for sharing ideas and knowledge with scientists working in the diverse scientific fields of microminerals. It will also

Alberto Lopez Galindo, ready to carry the AIPEA flag to Granada, Spain, which will host the 16th ICC in July 2017

be a great opportunity to meet old and new friends, and to see Granada... to quote the poet Francisco de Icaza: "Give him alms, woman, for there is nothing sadder in life than being blind in Granada."

Saverio Fiore (president@aipea.org)
President, AIPEA