



**IMA 2010
BUDAPEST**

BONDS AND BRIDGES

**THE 20TH GENERAL MEETING OF THE
INTERNATIONAL MINERALOGICAL ASSOCIATION**

**21-27 August 2010
Budapest, Hungary**



IMA2010 CONFERENCE NEWS

The daily newspaper of the 20th General Meeting of the International Mineralogical Association

FRIDAY

Today's Elements 5 talk

Glenn Waychunas: Mineralogy and geochemistry at lower dimensionality: Mineral-water interfaces and nanoparticles

New insights into interface structure and reactions are gathered with the help of experimental methods using synchrotron radiation and laser technology. Current studies allow refinement of the in-situ molecular structure at mineral surfaces.

Studying interface reactions, like sorption, precipitation and acid-base equilibria can help in understanding the characteristics of surfaces, edges and other "low coordination" surface topologies on nanoparticles, and predict chemical reactivity.

Most interfacial studies up to now have examined near equilibrium or steady state interface structure, but as Glenn Waychunas (Berkeley Nanogeoscience Center, USA) will show in today's ELEMENTS 5 talk, dynamic studies will be also possible in the near future (e.g. crystal growth, electron transfer, and dissolution).



From 12.20 to 13.00

Africa

Related programme in the Northern Building:

8.30-12.00: Mineral deposits of Africa (N-C hall)

Keynote speaker:

Kinnaird, J.A., Nex, P.A.M., Freemantle, G.G. & Youlton B.J.: Uranium mineralogy - a critical parameter for successful mining

12.00-12.20: Bridge to Africa - info and build-up to IMA2014 (N-C hall)

Theme of the day

IMA 2nd Business Meeting

At the second IMA Business Meeting among others, decision on the location of the next BM and election of the new IMA Councillors and Officers of Commissions were performed.

Frankfurt, and the European Microscopy Congress will be the host of the next IMA Business Meeting in 2012 (9-13 September).



New officers elected:

President: Ekkehart Tillmanns

First Vice President: Walter Maresch

Second Vice President: Sabine Verryn

Treasurer: Robert Downs

Secretary: Richard Göd

Communication Officer: Frances Wall

Councillors: Patrick Cordier, Sergei Krivovichev, Chikkahydegowda Srikantappa

Today's plenary talk

Max Wilke (EMU Medallist 2009): X-ray spectroscopy on geomaterials using synchrotron radiation

Two decades ago it was unimaginable to get such kind of results when studying geomaterials, which are nowadays available with the help of synchrotron radiation (SR) using X-ray spectroscopic techniques. That is why SR became an indispensable tool in Earth sciences.

High quality data is the result of continuous spectrum and the high brilliance produced by a SR source, while in many Earth science-related applications the possibility to focus the SR beam on a small spot bears high importance. The use of X-ray absorption edge (XANES) to determine redox reactions, or SR micro-XRF to obtain trace element concentrations in aqueous fluids in-situ at high P and T are only two examples, which highlight the versatile applicability of SR.

In today's plenary lecture of Max Wilke, many examples of using X-ray spectroscopic techniques are discussed.



From 16.00 to 16.50



Takamitsu Yamanaka on IMA2010 and on the importance of mineralogy:

"I'm so glad and satisfied that the 20th anniversary came off well."

"This is a very important part of science, because a lot of other branches are based on it."





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Lecture from yesterday

Schouwstra, R. & De Vaux, D.:

A tale of two elements - the Gamsberg Zn study illustrating the importance of a geometallurgical approach

Thursday's theme of the day was Economic Geology, we could hear about industrial clay deposits and crustal processes resulting in gold accumulation in two of the related lecture rooms and in the third room we could get familiar with more practical aspects like the relationship of mineralogy and geo-metallurgy.

Robert Schouwstra, keynote lecturer of this third section, showed the arising problems of metal concentration determination and the relevance of improving the "fundamental understanding" of resource economics. The multidisciplinary approach in economic geology is crucial, because according to him, "we can not rely on grade alone" in research of ore deposits.

Yesterday's Elements 5 talk

Yesterday's Elements 5 talk, presented by Nita Sahai, focused on the latest results in medical geology, more exactly on the indispensable role of mineralogy in it.



She gave a detailed explanation about a fascinating and complex subject, interactions between cells and biomacromolecules, but it was quite easy to understand due to her expressive figures. Her performance was motivating even for mineralogists working on entirely different fields.

According to her, the next step would be to gain recognition among the public and more importantly among other scientists, but judged by the reactions of the audience, it is not going to be very hard.



"For now mineralogical aspect of medical researches is a new field, but after hearing the Elements5 talk, I believe we can start thinking about this matter." (Vassilka Mladenova, Bulgaria)

"I think it has a great future." (Dimitrina Dimitrova, Bulgaria)

Africa

Theme of the day



The 21st General Meeting of IMA will be held in South Africa. The chair of its Organising Committee, Sabine Verryn informed IMA2010 Conference News about that congress.

"As you would have noticed through the booth in the North Building, the pamphlets in our conference bags, and the South African delegates with their colourful badges, the IMA2014 meeting takes place in South Africa. The South Africans invite you to come and chat to them to find out more about the conference. The theme is "Delving Deeper - Minerals as Mines of Information", which pays homage to the thriving mining industry in South Africa.

There will be an information session today at 12 pm in Room N-C in the North Building. A draw will take place to announce the winner of the beaded vuvuzela as well as the colourful table cloth - so if you have put your business card or IMA slip into the box, please be there to qualify."

Sabine Verryn's conclusions concerning organization of an IMA GM: "We'll try to do as well as here."



Aberra Mogessie (President of GSAf): "CAG23 will serve as a 'bridge' to link to IMA 2014-in-Africa."



Hassina Mouri, chair of CAG23 organising committee

The 23rd Colloquium of African Geology (CAG23) will be one of the largest multidisciplinary events in geosciences. This is the first time, it will take place in the Republic of South Africa at the University of Johannesburg in January 8 -14. in 2011.

Further information: www.cag23.co.za

Yesterday's plenary talk

Thursday's Plenary lecturer was Frank Hawthorne who showed interesting new aspects of theoretical mineralogy.

He emphasized that crystal chemical and thermodynamical research, although being very useful, still haven't fully answered the most important questions of crystal forming, the great "Why?"-s of mineralogy. He discussed the importance of understanding stability relations for a mineral reactions' correct interpretation and he also emphasized the role of mathematical methods (like graph theory). His chemical bond centered approach may give



answers to some elementary processes of mineralogy.

"I could have done nothing more satisfying than this in the past years."



"Mineral stability diagrams are important because things happening at the smallest levels influence the happenings of the larger levels, and first we have to understand the smallest things to understand processes." (Peter Bačik)



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List of IMA2010 donors of the Eötvös Museum of Natural History, Historical Mineral Hall

THANK YOU!

143 specimens from 53 donors, many new minerals, rare specimens from special localities, from the depth, deep ocean up to the surface... we are really grateful to all participants for their donations!

Without any kind of order, here are the people (hopefully nobody left out!) whom we cannot thank enough:

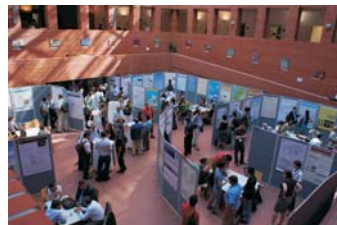
Tatiana Alekseeva, Andrey Alekseev, André-Mathieu Fransolet, Annibale Mottana, Dr. Jean-Claude Boulliard, Ecole des Mines (France), Evgeny Galuskin, Irina Galuskina, Fero Bakoš, Fred D'Ambrose, Fred E. Davis, Galina A. Buyko, Alexander K. Buyko, Alisa A. Buyko, Natalya Kovalchuk, Hani N. Khoury, Herwig Marbler, Hiroshi Miyajima, Igor Pekov, Jan Loun, Jean-Marie Genin, Jeffrey de Fourestier, Jens Götze, Jim Hulburt, John V. Ferro Jr., Jörgen Langhof, Kimberley T. Tait (Royal Ontario Museum), Liudmila Azarnova, T.D. Kritko, A.V. Temnov, Michiaki Bunno, Marcus Origlieri, Miki Shigeno, Yasushi Mori, Morteza Einali, Natalia Krasnova, Tomas Petrov, Nicolas Meisser, Nina V. Gorelikova, Pavel Škácha, Pietro Vignola, Ritsuro Miyawaki, Ruslan I. Kostov, Stanislav Filatov, Satoshi Matsubara, Sergey Z. Smirnov, Zdislav Spetsius, Ștefan Nicolescu, Ulisses Targino Bezerra, Vassilka Mladenova, Viktor Goliáš, Victor V. Sharygin, Vladimír Čavajda, Yosunori Miura, András Fall



Please remember, we are still waiting for the unknown donor (*The Phantom of the Mineral Hall*), with three specimens left in our collection... Those who did not yet received their Certificate of Appreciation, please pick it up at the Registration.

THANK YOU! Erzsébet Tóth, Tamás G. Weiszbarg

Wednesday evening and Thursday at IMA2010 - in pictures



IMA2010

Participants of IMA2010 on how they liked the conference...



"I liked everything in the conference and Budapest is very nice as well."
Wanessa Borges (Brazil)

"This is a big conference with several interesting people. I have heard a lot of useful new information and this motivates me greatly."
Angelika Rosa (Switzerland)



"The folklore dance was especially interesting."
Takahiro Tanaka (Japan)



"There were very interesting lectures about various subjects, and I particularly liked the museum visits."
Cees-Jan De Hoog (United Kingdom)



"My favourite was the quartet and the man playing a gamba. Elements 5 talks were up to my expectations, but the acoustics of the lecture room were not so good, so it was hard to hear the lectures."
Ricardo Castroviejo (Spain)



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Social, music and sport events

Friday, 27 August

10.30-11.00: Blockflute (classical music in the Northern Building)

13.00-16.00: IMA2010 Table Tennis (in the Southern Building)

13.15-13.45: Piano music (in the Southern Building)

16.50: Closing Ceremony (in the N-F hall)

Basketball Free Throw Championship

The winner of the championship organised on Thursday was Horst Marschall (Germany) among men and Katalin Szabó, Réka Káldos and Veronika Pogány (Hungary) among women.

How is mountain written in...

German: Berg
Croatian: planina
Czech: hora
Hungarian: hegy
Polish: góra
Romanian: munte
Slovakian: vrch
Slovenian: gora
Serbian: планина
Bulgarian: планина

Chinese: 山
Dutch: berg
Finnish: vuori
French: montagne
Hindi: pahaad
Icelandic: fjall
Italian: montagna
Japanese: 山
Russian: гора
Spanish: montaña

IMA2010 press team

the guys, who prepared the daily news for you



Sitting (from left to right): Judit Temes (reporter), Judit Szegő (reporter), Norbert Gergely (photographer), Zoltán Szenek (photographer).

Standing (from left to right): Máté Karlik (photographer), Alexandra Giurgiu (photographer), Krisztina Pandur (reporter), Gabriella Kiss (Editor-in-Chief), Gábor Horváth (photographer).

Programme changes

Oral cancellation

5SB06: Huang, X.L., Wang, X.L., Su Haiquan & Zhang, B.B. Effect of oligomerically modified montmorillonite on morphologies and properties of polycarbonate/montmorillonite nanocomposites. The presenting author's poster contributions in AM19C5_S2 and EM66C6_S2 are also cancelled.

5SB02: Honfi, K., Klumpp, E., Kilár, F., Dékány, I., Pernyeszi, T. Simultaneous sorption of lead and phenol by bentonite and organobentonite.

5SC07: Ghorbani, M. & Tajbakhsh, P. Bentonite; its resources and geological settings in Iran.

New poster presentation

CH31_P12_S2: Substrate effects on stone bioconsolidation by bacterial carbonatogenesis Fadwa Jroundi, Carlos Rodríguez-Navarro, José Vicente Navarro, María Teresa González-Munoz.

Mineralism

Enkeleida Goga Beqirai's (Albania) Gallery represent artistic applications of crystallography-mineralogy-petrography aspects involving minerals and rocks. These are used as models for fine arts, by using different techniques.

Art is selected as the most beautiful communication language between the Earth and "us". Artworks of those who are just starting this profession, those who are still deciding to choose this way, those who have already dedicated their life to this profession but also those who have no connection with this science are also included in the gallery.

During IMA2010, about 25 of the most representative art works from this Gallery are presented.



Daily news

Editor-in-Chief: Gabriella Kiss

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