



International Zeolite Association

IZA News - December 2010



Message from the President



Dear IZA associates,

This is the first letter I write as IZA President and I want to start with some thanks.

The first, on behalf of myself and the IZA Council, is to the IZA associates for the confidence bestowed through the vote during the election for the new Council at the 16th IZC in Sorrento.

Then I want to address heartfelt thanks from our entire association to the past President Francois Fajula and to the councillors whose term has expired the last July: Michael Anderson, Gabriele Centi, Avelino Corma, Stefan Ernst, Shilun Qui, Dongyuan Zhao, for their commitment, the time and effort that they have dedicated to the management of all the IZA activities during their mandate.

In the coming years will be accentuated the changes in the current scenario due to the acceleration of global development that has magnified the need to reduce environmental impact for all the entropic activities. Zeolite science and technology may provide an important contribution to the development of the technologies needed to address the challenges related to these changes.

For the application areas of zeolites and zeolite-like materials, the most urgent needs are the improvement of the chemical and energy efficiency of conversion and separation processes, making better use of fossil resources and the development of technologies that allow a more widespread use of renewable energy.

On the scientific front, the use of new templating agents and the rational application of isomorphous substitution have extended the number of zeolite structures but it has also brought to evidence the limits of thermal stability of extra-large pore structures. In parallel there have been major advances in the synthesis of porous ordered or crystalline zeolite-like structures with potentially very different properties from those of conventional zeolites, whose application developments were only marginally defined. It is necessary to develop more powerful chemical and physical tools effective for studying the structure and properties of new materials. A better knowledge of the materials will also help in developing new applications in less traditional areas of interest such as: energy transformations, optics, electronics, and bio-medical applications.

Our association must promote the stimuli that allow gathering the opportunities and the necessities generated by the changes of scenario, both through the traditional tools and developing new tools. This is the frame in which our association should set-up actions for the near future.

Among these, the organization of IZC's, and the maintenance of the website, which are the most important means of disseminating information, will continue to have primary importance. Also the care and the patronage of the awards "D.W. Breck" and "IZA Ambassador" are very important because they contribute both to promote the innovation and to give evidence to results and deserving researchers. It is important to maintain and stimulate the activities of IZA Commissions, since it is from the Commissions that we should expect more frequent updates on relevant results, on general sector trends and addresses on the methods and techniques more appropriate for the required applications.

On behalf of the IZA Council I confirm the enthusiasm with which we begin the next three years of our mandate and I send to all the associates and their families our best wishes for the coming season.

Giuseppe Bellussi

News from the IZC-16 and IMMS-7 in Sorrento, Italy

- The current members of the **IZA Council** (those newly elected in Sorrento are highlighted in blue) are:

President:	Giuseppe Bellussi	Vice-President:	Mingyuan He
Secretary:	Paul Wright	Treasurer:	Steve Wilson
Members:	Jiri Cejka	Mirosław Derewinski	
	Eduardo Falabella	Gerard Férey	
	Girolamo Giordano	Irina Ivanova	
	Tatsuya Okubo	Joaquín Pérez-Pariente	
	Bao-Lian Su	Kyung-Byung Yoon	

- The next International Zeolite Conference (IZC-17) will be held in **Moscow, Russia in 2013**, and the following one in **Rio de Janeiro, Brazil in 2016**.
- The **Breck Award 2010** went to **Yushan Yan**, (University of California at Riverside) and **Ryong Ryoo** (Korea Advanced Institute of Science and Technology) for their respective contributions in advancing the science of zeolite thin films and the direct synthesis of zeolite nanosheets.
- The new IZA Ambassador, the recipient of the **IZA Award 2010**, is **Lynne McCusker** (ETH Zurich) in recognition of the seminal contributions she has made together with **Christian Baerlocher** to the crystallography of zeolites and for her continuous service to the zeolite community.



Yushan Yan

Ryong Ryoo

She will serve as the IZA Ambassador for the next three years. If you would like her to visit your laboratory or institute during this time, please send a letter of invitation to **Mingyuan He**, the Vice-President of the IZA or contact her directly. The travel grant associated with the IZA Award will generally cover the plane fare for the IZA Ambassador's lecture tours. It is expected that local expenses will be assumed by the IZA Ambassador's hosts.

News from the Zeolite 2010 Congress in Sofia, Bulgaria

- The new president of the International Natural Zeolite Association is **Alessio Langella**.
- The **2010 Frederick A. Mumpton Award** for outstanding contributions to natural zeolites was presented to **Carmine Colella**.
- The recipient of the **2010 INZA Award** is **Georgi Kirov**.

CNRS Gold Medal



The CNRS Gold Medal, France's highest distinction in scientific research, has been awarded this year to **Gérard Férey** (member of the IZA Council). This prestigious annual prize rewards the works of a prominent personality who has made an exceptional contribution to the dynamism, reputation and influence of French scientific research. Gérard Férey specializes in the design of hybrid porous materials, in particular for the storage of CO₂ or medicines. With the help of his team, he predicts and explains the behavior of these nanomaterials, which have a wide range of useful properties and potential applications in the fields of energy, sustainable development and healthcare. Férey is a member of the Académie des Sciences and professor emeritus at the Université de Versailles Saint-Quentin-en-Yvelines (UVSQ). He served as deputy director of the CNRS Chemical Sciences Department before founding and heading the Institut Lavoisier in Versailles.

From the Structure Commission

- **Christian Baerlocher** and **Martin Foster** have now set up a mirror site of the **Database of Zeolite Structures**, to ensure that this valuable resource is always available to the zeolite community. The IZA Council agreed to pay for two Mac mini servers for this purpose. One of these is now installed at ETH Zurich in Switzerland and the other at Arizona State University in the USA. Switching between the two will be done automatically and is transparent to the user.
- A quick look at the web-access statistics shows that individual framework pages were accessed 19341 times in June 2010 and 13627 times in September 2010. It seems that the database is being used...
- A pdf file of the complete 2007 edition of the **Atlas of Zeolite Framework Types** can now be downloaded from the Database of Zeolite Structures (just click on "PDF" in the navigation bar).



From the Commission on Natural Zeolites

There are now datasheets for 38 natural zeolites on the website of the Commission on Natural Zeolites. The image on the right shows, for example, some crystals of natural heulandite from Scotland. There are many more pictures and all kinds of additional information to find at <http://www.iza-online.org/natural/>.

Heulandite, Touch Hills, Stirlingshire,
Scotland (© Volker Betz)



Obituaries

Rustum Roy (1924-2010)

Prof. Rustum Roy, one of the early pioneers of zeolite synthesis, passed away on August 26, 2010.

After obtaining B.Sc. and M.Sc. degrees at Patna University in India, Rustum Roy received his Ph.D. from the Pennsylvania State University, where he remained for 65 years. In the 1950's his research group was the only academic group in the USA doing synthesis research on zeolites, and Len Sand and Fred Mumpton were both former students. In 1958 he and Joe Smith (then an Assoc. Prof. of Mineralogy at Penn State) organized what was probably the first International Zeolite Meeting at Penn State, attended by R.M. Barrer and D.W. Breck, amongst others. In 1962 Prof. Roy founded the first interdisciplinary Materials Research Laboratory, and was its Director for 23 years. He was the Evan Pugh Professor of Solid State Chemistry and Professor of Geochemistry, and was also a Distinguished Professor of Materials Science at Arizona State University and a visiting Professor of Medicine at the University of Arizona. He was an elected member of the US National Academy of Engineering and of numerous national and international scientific academies. He authored and co-authored over a thousand publications. A more complete obituary can be found at <http://www.legacy.com/obituaries/centredaily/obituary.aspx?n=rustum-roy&pid=144979005>.

Imre Kiricsi (1948-2010)

Prof. Imre Kiricsi, organizer of the First International Conference of the Federation of European Zeolite Associations (FEZA) in Eger, Hungary in 1999 and one of the members of the FEZA Council, passed away on July 11, 2010.

Prof. Kiricsi initiated the foundation of the Hungarian Zeolite Association in 1992, and had been its president since 1998. During this time, the HZA organized several international meetings and Prof. Kiricsi served as the co-editor of the resulting proceedings. He was the Director of the Applied Chemistry

Department at Szeged University Attila József and the recipient of a number of prizes, including the Gold Cross of Merit of the Hungarian Republic in 2006 and the Albert Szent-Györgyi Prize in 2010. Some more details on his scientific achievements have been compiled by his colleague Janos Nagy and can be found at <http://www.iza-online.org/ImriKiricsi.html>.

Zeolite-related Conferences in 2011

2-4 Mar 2011	Erlangen, Germany	23rd German Zeolite Conference (Deutsche-Zeolith-Tagung) (http://www.processnet.org/dzt23.html)
14-15 Mar 2011	Prague, Czech Republic	School, Adsorption on Porous Material (http://www.jh-inst.cas.cz/~adsorption2011/)
11-13 Apr 2011	Edinburgh, Scotland, UK	34th Annual Meeting of the British Zeolite Association (http://www.eng.ed.ac.uk/bza2011/)
5-9 Jun 2011	Dresden, Germany	9th International Symposium on the Characterisation of Porous Solids - COPS IX (http://events.dechema.de/cops/)
3-9 Jul 2011	Valencia, Spain	5th International FEZA Conference and FEZA Summer School (http://www.feza2011.com/)
28 Aug - 1 Sep 2011	Denver, CO USA	7th International Symposium on Hydrotreating/Hydrocracking Technologies (http://www.symposiumnews.com/acs242/)
7-12 Aug 2011	Holderness, NH, USA	Nanoporous Materials & Their Applications (Gordon Research Conference) (http://www.grc.org/programs.aspx?year=2011&program=nanopor)
6-9 Sep 2011	near Varna, Bulgaria	4th International Symposium on Advanced Micro- and Mesoporous Materials (http://micro2011.innoslab.com/)
14-17 Sep 2011	Naples, Italy	International Symposium on Advances in Zeolite Science and Technology (AIZ2011) A symposium celebrating Carmine Colella's 70th birthday (http://www.aiz2011.unina.it/)
20-25 Sep 2011	Bari, Italy	Session on "Zeolites: Environmental & Medical Uses" (http://www.geomed2011.it/)

If you know of other conferences that would be of interest to zeolite scientists, please send an e-mail with the relevant information to Lynne McCusker at mccusker@mat.ethz.ch and it will be added to the list.

IZA membership is valid for 6 years - do you need to reconfirm?

The IZA Address Database has been updated to include all participants at the IZC-16 in Sorrento, and those who filled in an IZA membership form at the 2nd International MOF Conference in Marseille.

So that our records remain up-to-date, IZA membership is only valid for 6 years. However, it can be renewed at any time. To see if you need to reconfirm your membership, check your entry in the IZA Address Database (<http://www.iza-online.org/> under "Address Database"). The date last modified is the date used to calculate the membership duration. To reconfirm your interest in being a member of the IZA, simply click on "EDIT your entry", make any necessary changes to your data, and click on "submit updated address" (even if you have made no changes). An e-mail requesting confirmation will then be sent to your e-mail address.