

ISHA NEWSLETTER

November 2006

INTERNATIONAL SOLVOTHERMAL AND HYDROTHERMAL ASSOCIATION

Dear Friends,

This is the first Newsletter coming in the name of ISHA. In this Newsletter we primarily focus on the establishment of ISHA and the Joint 8th International Symposium on Hydrothermal Reactions and 7th International Conference on Solvothermal Reactions, held during August 5-9, 2006 Sendai, Japan.

The Founding Committee is looking for a good logo to represent ISHA. If any member wants to design a logo for ISHA it is most welcome. We can select the best one to use in our subsequent Newsletters. Kindly send your logo design along with the description.

ISHA has the following Founding Committee:

- PATRONS : Prof. R. Roy, USA
Prof.S. Somiya, Japan
- President : Prof.Masahiro Yoshimura, Japan
Vice President : Prof.G. Demazeau, France
Prof.N. Yamasaki, Japan
- General Secretaries : Prof.K. Byrappa, India
Prof.T. Adschiri, Japan
- Executive Members : Prof. S. Komarneni, USA
Prof.R.E. Riman, USA
Prof.L.N. Demyanets, Russia
Prof.M. Goto, Japan
Prof.T. Funazukuri, Japan
Prof.S. Feng, China

Goals: The aim of this new scientific association is to bring together all the scientists and researchers working in the areas of hydrothermal and solvothermal

research to a common forum to discuss various issues and meet every two years in different part of the world in the form of ISHA Conferences.

CONFERENCE REPORT

A Joint Meeting of the 8th International Symposium on Hydrothermal Reactions (ISHR) and 7th International Conference on Solvothermal Reactions (ICSTR) was held during August 5-9, 2006 at Sendai, Japan, with Prof. M. Yoshimura (Tokyo Institute of Technology, Japan) and Prof. N. Yamasaki (Tohoku University, Japan) as Chairmen Organizing Committee; and Prof. Tadafumi Adschiri (Tohoku University, Japan) as Chairman, Executive Committee. The previous ISHR-7 was held in China (2003) and ICSTR-6 was held in India (2004). These International Symposiums and Conferences on Hydrothermal and Solvothermal Reactions were held once in every 2 or 3 years in different countries. The aim of this Joint event was to offer an opportunity for researchers from all over the world to exchange scientific ideas and to promote the basic and applied aspects of research in hydrothermal and solvothermal technology. Here, in this conference, the delegates proposed to establish a new international association by merging both ISHR and ICSTR to one big association namely "International Solvothermal and Hydrothermal Association (ISHA)".

ISHR & ICSTR 2006 had over 300 participants from 17 countries like France, Germany, Japan, Korea, China, USA, UK, India, Russia, Mexico, Denmark, Singapore, etc. and it was held in Sendai International Centre, Sendai, Japan. ISHR & ICSTR 2006 was sponsored by The Commemorative Organization for the Japan World Exposition'70, Hosokawa Powder Technology Foundation, Intelligent Cosmos Foundation, Research Institute for Solvothermal Technology, and Sendai Tourism & Convention Bureau. This conference was also cooperated by Materials Research Society of Japan, Shigen Sozai Gakkai, The Ceramic Society of Japan, The Chemical Society of Japan, Japan Institute of Energy, The Japan Society of High Pressure Science and Technology. The Society of Chemical Engineers, Japan, The Society of Inorganic Materials, Japan.

The conference Welcome Reception was held on 5th August in the Excel Hotel Tokyu, Sendai at 4 PM. On 6th August, ISHR & ICSTR 2006 was inaugurated by Prof. T. Adschiri, Tohoku University, Sendai, Japan at 12.00 noon with an opening remarks followed by a welcome address by Prof. S. Somiya and Plenary lecture by Prof. M. Yoshimura. This conference as like the previous ones, continued to stress on the Science and Technology related to hydrothermal and solvothermal research, supercritical fluids and related reactions, organic and inorganic materials synthesis, growth of single crystals and thin films, nanomaterials and functional materials, geothermal process and geochemistry, inner space science and technology, green sustainable technology, waste treatment and alterations, thermodynamics - theory and modeling and novel material synthesis. Prof.S. Somiya was presented with a Life Time Achievement Award for his contributions to Hydrothermal Research in the world.

There were THREE Plenary Lecturers by senior Professors like Prof.M. Yoshimura (Japan), Prof.K. Arai (Japan) and Prof.G. Demazeau (France). These three plenary speakers had carefully chosen their topics, keeping in mind the current trends in hydrothermal and solvothermal research like soft solution processing and advocating its importance in the fabrication of functional materials. Similarly, the importance of the supercritical fluid technology, high reaction rates, simplified steps, high efficiency and high yields for production of materials on an appropriate level. The 3rd important plenary lecture was on the solvothermal reactions: an original route for the synthesis of novel materials like alloys, oxides, nitrides, sulfides, etc.

In this conference there were 20 selected key note addresses and 42 invited lectures on the most important topics of research in hydrothermal and solvothermal technology delivered by eminent scientists from all over the world. The topics covered areas such as novel methods of material synthesis for advanced oxidation processes, semiconductor nanowires, titanium complexes,



Prof.M. Yoshimura, inaugurating Joint ISHR & ICSTR 2006 Conference, on August 5, 2006



Prof.M. Yoshimura and Prof.T. Adschiri, presenting Life Time Achievement Award to Prof.S. Somiya, in recognition of his contributions to hydrothermal and Solvothermal research.



ISHA Founding Committee Members with Poster Award winning young Researchers from different countries.



Concluding Session: Joint ISHR&ICSTR 2006 Organizing Committee handing over the ISHA Flag to the next organizing committee from UK.



Senior members of ISHA enjoying the launching of ISHA.



Founding Members and Delegates at the Banquet on August 7, 2006.

supercritical fluids, high speed organic synthesis, conversion of bio-mass waste into resources, growth of gallium nitrides, perovskite thin films, strontium and barium titanates, nanoparticles, molecular minerals and so on. On the whole, these presentations were very interesting and each presentation was followed by a lengthy discussion between speakers and participants.

There were a large number of contributed papers presented either in oral or poster sessions. The papers covered a very large variety of materials and topics like recycling of waste materials-biomass, lignin, polymers, phenols, etc, mesoporous compounds with highly active catalytic sites, modelling of hydrothermal and solvothermal systems, preparations of monodispersed powders of various compounds, etc. These sessions focused once again on the hydrothermal and solvothermal synthesis of nanocrystals, framework structures of different compounds, etc.

The conference delegates were highly benefited from this ISHR & ICSTR conference and were active in all the sessions and interacted with one and all through highly thought provoking questions and comments.

In the concluding session on 8th evening, the Organizing Committee handed over the Cosmic Clave flag on behalf of the International Community of hydrothermal and solvothermal researchers to Dr. G. Sankar, UK, who has taken the leadership to organize the next ISHA Conference in UK during August 2008 at the University of Nottingham.

On August 9, Prof.T. Adschiri had organized a tour to the interested delegates to visit several research laboratories in Tohoku University to interact with various scientists, which was quite successful.

On the whole the arrangements in the conference were exceptional and left a unique feeling among the delegates. The volunteers dressed in the uniform to assist the delegates were very kind and attended to all the needs of the

delegates. The help desk and information desk were set up and provided assistance to the delegates during the conference hours. Finally the food arrangement was exceptionally good and every delegate enjoyed the sumptuous food both during the lunch and the poster sessions. Some beverages were provided during the poster sessions. There was a cultural event during the banquet which was held on 7th August at the Excel Hotel Tokyo, with some traditional Japanese classical performance.

During the concluding session, several poster awards were given to the young talented researchers who presented the best posters.

Prof.K. Byrappa

Prof.T. Adschiri

Membership Campaign:

It is proposed to have a membership campaign for ISHA inviting all the researchers in this area to enroll as Members as early possible, which would help us to register this new scientific body. Please inform all your friends and colleagues in the area of hydrothermal and solvothermal research to contact us. The following details can be sent to :

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Next ISHA Conference:

Nottingham University, UK. Tentative Date: August 2008.

Other related Conferences:

IUMRS-ICMAT 2007, Bangalore, India, October 8-13, 2007.

Supergreen 2007, Seoul, Korea, October 31- November 3, 2007

ISSF 2008, University of Bourdeaux, France, Tentative Date: July/August 2008

If the members have some suggestions and announcements to be included in the ISHA Newsletter, please contact the Secretaries : Prof.K. Byrappa or Prof.Tadafumi Adschiri.

We sincerely hope that you enjoyed reading this first Newsletter of ISHA.

Newsletter Prepared by ISHA Secretaries

Prof.K. Byrappa

Prof.T. Adschiri