(1st Circular) April - 2012

3RD INTERNATIONAL CONFERENCE ON HIGH-TECH ALUMINAS AND UNFOLDING THEIR BUSINESS PROSPECTS
(ALUMINAS-2013)
7-9 March, 2013

Jointly organized by

The Indian Ceramic Society
and

CSIR-Central Glass & Ceramic Research Institute

Endorsed by: International Ceramic Federation, Italy

Venue
CSIR-Central Glass & Ceramic Research Institute
Kolkata, India

THE INDIAN CERAMIC SOCIETY
Care: CSIR-Central Glass & Ceramic Research Institute
196 Raja S. C. Mullick Road
Kolkata – 700 032 (India)
Phone: +91-33-2413 8878 / 6410 6136
E-mail: incers@cgcri.res.in
Web: www.incers.org
ABOUT THE CONFERENCE

Alumina has always been considered as “a unique ceramic” or “material par excellence” in the field of engineering materials. It is quite evident from the fact that the global production of alumina is over four million tonnes/annum for use in various industries.

Realizing the superior potential of alumina, the Indian Ceramic Society jointly with the Central Glass & Ceramic Research Institute organized an international conference on “High-Tech Aluminas and Unfolding their Business Prospects” in the years 2008 and 2010 for discussion on newer and special applications of alumina for the industries. Participation came from technical and managerial personnel from the industry, R&D personnel from industry and academic institutions, entrepreneurs interested in new ceramic technology, start-up companies related to ceramics, teachers, as also students. In short, the conference acted as a “user-friendly” platform for discussing “A-Z” of alumina. We are now organizing this conference for the third time after a gap of about two years, and expect to offer an improved platform too! The conference has been endorsed by the International Ceramic Federation.

BROAD AREAS TO BE COVERED

The covered topics are (a) Alumina particles, (b) Alumina nanofibres, (c) Nanostructured alumina/coating, (d) Fumed metal oxide, (e) Thin films and (f) Miscellaneous. Efforts will be made to bring in the most recent happenings involving High-Tech Aluminas for bio medical application, sensors and armor protection or in any other frontier areas.

As in previous occasions, one session will be dedicated to corporate presentation and well furnished rooms will be provided for one to one discussion. Interactions among the participants, speakers and international experts will certainly help finding newer areas of applied research and technology development.

ORGANISERS

THE INDIAN CERAMIC SOCIETY

The Indian Ceramic Society (InCerS), a non-profit organization, in the fields of ceramic industry and education, was established in the year 1928 with the blessings and active support of Pandit Madan Mohan Malaviya, the main architect for establishing the Banaras Hindu University (BHU), Varanasi, and with the ardent efforts of a few dedicated leaders, namely, Sirdar Krishen Singh (Inaugural Chairman), Mr T. W. Talwalkar (Inaugural Secretary), Mr Satyasundar Deb (First President) and Dr N. N. Godbole (the then Pro-Vice-Chancellor of Banaras Hindu University).

The idea of a Society of the Indian ceramists was first conceived by Sirdar Krishen Singh in the year 1921. Subsequently, Mr. T. W. Talwalkar, who had been very impressed with the activities of the American Ceramic Society, felt the need for a similar kind of Society in India on his return in 1927. The inaugural meeting, attended by people from the glass and ceramic fields, was held at Banaras Hindu University on April 15, 1928.

The primary objectives of the Society are to (i) promote the advancement of ceramic science, arts and technologies by bringing into close contact those engaged in these pursuits, (ii) publish scientific and technical books and journals and (iii) hold annual sessions, meetings, discussions, symposia and exhibitions on the subjects of interest. The activities of the Society include broadly an appraisal of the trend of the ceramic industry and research as also an analysis of the impact of the fast developing science and technology and business environment leading to the growth of the indigenous ceramic industry.

During the last eighty-three years of its existence the Society has grown from strength to strength and presently, InCerS has more than 1700 members. With the passage of time it has slowly stretched its wings and today there are 14 Local Chapters spreading all over the country. The Society aims at bringing about a synergy of industry and educational institutions and professionals in the field of ceramics. Co-publishing the basic journal of the Society with Taylor and Francis, UK, is on its way.

CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE

Central Glass & Ceramic Research Institute (CG&CRI), a vision of Pandit Jawaharlal Nehru, the first Prime Minister, Dr Bidhan Chandra Roy and Dr Meghnad Saha, started off in 1944 as one of the institutions of the Council of Scientific and Industrial Research (CSIR) in a limited manner. It was, however, formally inaugurated by Pandit Nehru, on August 26, 1950. Dr Atma Ram, who later became DG-CSIR, was the founder director of the Institute. The Institute is the only one in India pursuing R&D in glass, and one among a few carrying out R&D in various aspects of ceramics and glass. With the
passage of time, the focus was diversified to suit the country’s needs as well as national and international development in the field of science and technology.

Currently, the Institute is engaged in the activities that are related to identified priorities of the Nation. These are chiefly the strategic sector, nanoscience & technology, health care, water technology, energy and environment, communication, sensor technology, contributions to SME and skill upgradation, and entrepreneurship developments. The main achievements of the Institute have been in the following areas: optical glass, radiation resistant glass, laser glass, low expansion glass, sol-gel processing of special ceramic and glass coatings, optical communication fibers, optical fiber based sensors, arsenic and iron removal technology for water, bio-ceramic implants and prostheses, solid state sensors, solid oxide fuel cells, lithium battery, engineering and structural ceramics, specialized refractory materials, and traditional ceramics. The Institute has been serving various sectors in the country including strategic, societal and the general industries. It has one of the best facilities in the country for the processing of ceramics and glass materials and characterizing them. International collaboration with important R&D institutes of a large number of countries gives an opportunity to the Institute to keep itself abreast with the latest developments in the key areas which it is pursuing.

CO-ORGANISERS

ALMATIS ALUMINA PRIVATE LIMITED

Based in Frankfurt, Germany, Almatis is the largest global producer of speciality aluminas with nine production plants around the world. Almatis started the specialty alumina business when it made the first sale of a calcined alumina to the abrasives industry in 1910. Almatis today provides premium aluminas globally to the refractory, ceramics and polishing markets. Products include tabular alumina, calcined alumina, reactive alumina, calcium aluminate cement, various spinels, alumina bonding agents and specialty aggregates, most recently introducing a brown sintered alumina of 96% alumina. BSA 96 is a high temperature aggregate produced in Europe as a new, innovative refractory raw material alternative for >90% Al2O3 applications.

From the first calcined alumina sale, Almatis has become a global producer of premium alumina, with nine plants on three continents located in Ludwigshafen, Germany; Rotterdam, the Netherlands; Huangdao, China; Iwakuni, Japan; Falta, India; Bauxite, AR, Leetsdale, PA (2) and Dalton, GA, the United States.

Over the last 5 years Almatis has invested more than $100 million into new capacities around the globe.

The most recent investments of the company had been in a new crushing and sizing line at the Ludwigshafen, Germany plant, which increased production to 75ktpy of alumina and spinel grades. The investment in the plant is to meet demand for synthetic sintered alumina-based aggregates, which are replacing traditional refractory materials such as white and brown fused alumina.

Also in 2011, the group broke ground on its tenth alumina production plant, in Huangdao, China. This state of the art calcines kiln investment will be commissioned later this year and will increase our calcines capacity by 50,000 MT. The Huangdao plant, opened in 2006, already produces tabular alumina, but the expansion into calcined alumina will enable Almatis to service the Chinese market with additional higher value alumina products.

Started as Alcoa’s chemical business in 1910, the company went private in 2004.

HINDALCO INDUSTRIES LIMITED

HINDALCO – the metals flagship of the Aditya Birla Group – is an industry leader in Aluminium and Copper. With a consolidated turnover of USD 15.85 billion (FY11), it is the world’s largest
aluminium rolling company and among the biggest producers of primary aluminium in Asia. With its
global subsidiary, Novelis, Hindalco’s footprint spans 13 countries, and finds a place among the
Fortune 500.
Hindalco in India operates across the value chain from bauxite mining, alumina refining, primary
aluminium smelting, to downstream rolling and extrusions. Its products serve key industry sectors such
as building & construction, power, telecom, refractories, packaging, transport and automotives.
The Company has embarked on an aspirational growth path towards which three new Aluminium
Smelters and two new Alumina Refineries are being set up in the states of Odisha, Madhya Pradesh
and Jharkhand. With these projects on stream, aluminium smelting capacity will touch around 1.7
million tonne and alumina refining capacity around 6 million tonne.

Hindalco

Headquartered in Chennai, the Rs 15,907 crores (USD 3.14 billion) Murugappa Group is one of
India’s leading business conglomerates. Market leaders in diverse areas of business including
Engineering, Abrasives, Finance, General Insurance, Cycles, Sugar, Farm Inputs, Fertilizers,
Plantations, Bio-products and Nutraceuticals, its 29 companies have manufacturing facilities spread
across 13 states in India. The organization fosters an environment of professionalism and has a work
force of over 32,000 employees. The Group has forged strong joint venture alliances with leading
international companies like DBS Bank, Mitsu Sumitomo, Foskor, Cargill and Groupe Chimique
Tunisien, and has consolidated its status as one of the fastest growing, diversified business houses in
India.

Besides, the group runs a research and development centre for rural development, the Sri AMM
Murugappa Chettiar Research Centre (MCRC), which has been designing simple, cost-effective
technologies for local artisans.
The group has grown consistently through its decisive and visionary response to changing times.
Its pioneering efforts, steadfast commitment to ethical business practices and its dogged pursuit of
new areas to extend its business acumen have brought in its wake several prestigious national and
international awards. The group is also the first business group in Asia to have been awarded the ‘IMD
Distinguished Family Business Award’ by the internationally renowned Management Development
Institute located in Lausanne, Switzerland.

ABOUT KOLKATA
Kolkata (earlier known as Calcutta), capital of the state of West Bengal, retains the relics of the
historic past while keeping pace with the present. Here is a city on which monuments of architectural
splendor, old picturesque churches, temples and cultural treasures stand side by side with modern
skyscrapers, industries of repute, universities and a modern way of life. It has now become one of the
most modern hubs of IT sectors in India. The enviable growth in all spheres has placed the city on the
global map. During March, the city is attractive for its nice weather. The average maximum and
minimum temperatures are 34ºC and 21ºC respectively.

VENUE
The venue for the international event has been selected as the Meghnad Saha Auditorium of
Central Glass and Ceramic Research Institute (CG&CRI), Kolkata. CG&CRI is located in the southern
part of Kolkata, adjacent to Jadavpur University. It is 25 km from Netaji Subhash Chandra Bose
International Airport, 12 km from Howrah, 8 km from Sealdah and 12 km from Kolkata railway stations.

INTERNATIONAL ADVISORY COMMITTEE
Prof. Arvind Agarwal, USA; Mr B. L. Bagra, India; Mr Subrata Barua, India; Mr Anil Bhatnagar, India;
Prof. Samir Kumar Brahmachari, India; Mr S. C. Chetal, India; Prof. Atul H. Chokshi, India; Prof.
Katherine T. Faber, USA; Prof. F. D. Gnanam, India; Dr.Dmitri Kopeliovich, Israel; Prof. H. S. Maili,
India; Dr Akio Makishima, Japan; Prof. Gary L. Messing, USA; Mr M. M. Murugappan, India; Dr T.
Ramasami, India; Prof. Sudipta Seal, USA; Dr R. K. Sinha, India; Dr G. Sundararajan, India; Prof.
Keizo Uematsu, Japan; Prof. Carlo Giorgio Visconti, Italy.
CONFERENCE ORGANIZING COMMITTEE

Prof. Indranil Manna (Chief Patron and Chairman), Dr D. Ganguli (Co-Chairman and Program Adviser), Dr A. L. Shashi Mohan (Co-Chairman), Dr Arup Kumar Chattopadhyay (Co-Chairman), Dr Sibdas Bandyopadhyay, Dr D. Basu, Dr Japes Bera, Mr Animesh Bose, Dr S. K. Das, Mr P. K. De, Mr Anil Chand Lodha, Prof. Saikat Maitra, Mr Sarbapi Mukherjee, Prof. T. K. Parya, Prof. S. Ram, Dr B. K. Satpathy, Mr N. Sharma, Mr Rajendra M Shingi, Dr H. S. Tripathi, Mr Anil Vaswani, Dr Shekar Venkat, Mr S. Chakrabarti (Member-Secretary), Mr B. S. Ganguli (Conference Treasurer) and Dr Arup Ghosh.

INVITED SPEAKERS

Prof. Kantesh Balani, Indian Institute of Technology, Kanpur, India
Prof. Chen-Kuei Chung, National Cheng Kung University, Taiwan
Prof. Shubhra Gangopadhyay, University of Missouri-Columbia, West Columbia, Missouri, USA
Dr Kestutis Grigoras, VTT Technical Center of Finland, Finland
Prof. M. Yu Gutkin, Russian Academy of Sciences, Russia
Prof. Jr-Hau (JH) He, National Taiwan University, Taipei, Taiwan
Prof. Michael J. Hoffmann, Karlsruhe Institute of Technology (KIT), Germany
Dr Antonio Licculli, Italy
Prof. Indranil Manna, Director, CSIR-Central Glass and Ceramic Research Institute, Kolkata, India
Prof. Gary L. Messing, Pennsylvania State University, USA
Prof. James Metson, The University of Auckland, New Zealand
Prof. Amitava Mukherjee, VIT-University, Vellore, India
Dr Corrado Picony, Italy
Dr Judy Mary Runge, Comprehensive Metallurgical Consulting, CompCote International, Inc, USA
Dr L. N. Satapathy, BHEL, Bangalore, India
Prof. Sudipta Seal, University of Central Florida, Florida, USA
Dr Indra Bhushan Singh, Advanced Materials and Processes Research Institute, Bhopal, India
Mr Abhishek Tewari, Institute of Materials Science, Ecole Polytechnique Federal de Lausanne (EPFL), Lausanne, Switzerland
Dr Priya Vashishta, University of Southern California, USA
Dr Gou-jen Wang, National Chug-Hsing University, Taichung, Taiwan
Prof. Wilfred G. van der Wiel, University of Twente, The Netherlands
Dr S. Sankaranarayanan, Hindalco Industries Limited, Belgaum, India
Dr Nelcy D. S. Mohallem, Laboratorio de Materiais Nanoestruturados, Brazil.
Prof. Sebastien Vizzini, IM2NP, Faculté des Sciences et Techniques, France
Mr. Nils Rosenberger, Almatis GmbH, Germany

IMPORTANT DATES

<table>
<thead>
<tr>
<th>Last date</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Submission of Abstracts</td>
<td>September 30, 2012</td>
</tr>
<tr>
<td>II. Acceptance notification</td>
<td>October 31, 2012</td>
</tr>
<tr>
<td>III. Intent for Advertisement/Exhibition</td>
<td>December 31, 2012</td>
</tr>
<tr>
<td>IV. Registration</td>
<td>January 31, 2013</td>
</tr>
<tr>
<td>V. Submission of full text</td>
<td>November 30, 2012</td>
</tr>
<tr>
<td>VI. Late Registration</td>
<td>February 28, 2013</td>
</tr>
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TARIFS

REGISTRATION FEE

<table>
<thead>
<tr>
<th>Category</th>
<th>Up to January 31, 2013</th>
<th>After January 31, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members of InCerS</td>
<td>Rs 2,500/-</td>
<td>Rs 3,500/-</td>
</tr>
<tr>
<td>Non Members</td>
<td>Rs 3,500/-</td>
<td>Rs 4,500/-</td>
</tr>
<tr>
<td>Spouse</td>
<td>Rs 1,500/-</td>
<td>Rs 1,800/-</td>
</tr>
<tr>
<td>Students</td>
<td>Rs 500/-</td>
<td>Rs 600/-</td>
</tr>
<tr>
<td>Retired persons from R&amp;D organizations, Government organizations, faculty members from academia</td>
<td>Rs 1,500/-</td>
<td>Rs 1,800/-</td>
</tr>
<tr>
<td>Overseas delegates</td>
<td>US $ 250</td>
<td>US $ 350</td>
</tr>
</tbody>
</table>

All payments should be made through Demand Draft/CBS cheque drawn in favour of “The Indian Ceramic Society – Aluminas-2013”, payable at Kolkata.

ADVERTISEMENT

A souvenir will be brought out on this occasion, which will contain details of programme, technical articles and limited advertisements. The advertisement tariffs are as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Rate</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back cover (colour)</td>
<td>Rs 60,000/- US $ 1,800</td>
<td>4 delegates free registration</td>
</tr>
<tr>
<td>2nd &amp; 3rd cover (colour)</td>
<td>Rs 40,000/- US $ 1,200</td>
<td>3 delegates free registration</td>
</tr>
<tr>
<td>Double spread (colour)</td>
<td>Rs 35,000/- US $ 1,050</td>
<td>2 delegates free registration</td>
</tr>
<tr>
<td>Back of the content page/ facing content page/ facing 2nd or 3rd cover (colour)</td>
<td>Rs 25,000/- US $ 750</td>
<td>2 delegates free registration</td>
</tr>
<tr>
<td>Full page colour</td>
<td>Rs 20,000/- US $ 600</td>
<td>1 delegate free registration</td>
</tr>
<tr>
<td>Full page B&amp;W</td>
<td>Rs 15,000/-</td>
<td>1 delegate free registration</td>
</tr>
</tbody>
</table>

BANNER

2.2 m x 1 m: Rs 7,500/-

EXHIBITION

An exhibition by the manufacturer/user/dealer of alumina materials will be organized during the conference. Limited number of covered 3 m x 1 m size stalls will be available at the venue. The tariff for the same is Rs 40,000/- (US $ 1,200) with three delegates free registration.

SPONSORSHIP

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patron</td>
<td>Rs 2,50,000/- US $ 7,500</td>
<td>8 delegates free registration, dias sharing (one member) during inaugural session, full page write up in the souvenir, display of banner outside the venue</td>
</tr>
<tr>
<td>Platinum sponsor</td>
<td>Rs 1,50,000/- US $ 4,500</td>
<td>6 delegates free registration, full page write up in the souvenir, display of banner outside the venue</td>
</tr>
<tr>
<td>Gold sponsor</td>
<td>Rs 1,00,000/- US $ 3,000</td>
<td>4 delegates free registration, full page write up in the souvenir, display of banner outside the venue</td>
</tr>
<tr>
<td>Silver sponsor</td>
<td>Rs 60,000/- US $ 1,800</td>
<td>3 delegates free registration, full page write up in the souvenir, display of banner outside the venue</td>
</tr>
<tr>
<td>Sponsor for delegate kit</td>
<td>Rs 1,50,000/- US $ 4,500</td>
<td>3 delegates free registration and one page free colour advertisement in the souvenir</td>
</tr>
<tr>
<td>Sponsor for lunch/dinner</td>
<td>Rs 1,00,000/- US $ 3,000</td>
<td>3 delegates free registration and one page free colour advertisement in the souvenir</td>
</tr>
</tbody>
</table>

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3rd International Conference on High-Tech Aluminas and Unfolding their Business Prospects (ALUMINAS-2013)

7–9 March, 2013

Intent form

1. Full Name (Block letters) : Prof/Dr/Mr/Ms
2. Nationality:
3. Passport No.:
4. Address:
5. Tel: _______________________ E-mail: _____________________________
6. Occupation:
7. Nature of Participation: Presenting author/exhibitor/advertiser/delegate
8. Whether accompanied by spouse/dependants: Yes/ No
(Full personal particulars should be provided)
9. Accommodation required: (Yes/No) (AC/Non AC) (Single/Double) (Budget)

Date: ____________________________

Signature

To be sent to:
Mr S. Chakrabarti
Hony Secretary
The Indian Ceramic Society
Care: CSIR-Central Glass and Ceramic Research Institute
296, Raja S C Mullick Road
Jadavpur, Kolkata – 700 032
INDIA
Phone: +91-33-24138878/64106136
Mobile: +919831486160

Conference Account Title: “The Indian Ceramic Society – Aluminas-2013”
Bank Name and Branch: Punjab National Bank, Ballygunge Branch (085), Kolkata
Account Number: CA-008500210021201
SWIFT Code: PUNBINBBCCCH
PAN: AAATT7382E