

REGISTRATION FORM

The First International Conference on
Emerging Materials: Characterization & Application (EMCA-2014)
December 4-6, 2014
National Institute of Technology, Durgapur and CSIR-
Central Glass & Ceramic Research Institute, Kolkata

1. Name (Prof./Dr./: -----
2. Designation & Affiliation: -----
3. Male/Female:-----
4. Mailing Address:-----

5. Telephone No. : _____ (O), _____ (M)
6. E-mail ID : -----
7. Highest Academic Qualification:-----
8. Accommodation required* (Y/N):-----
9. Food Preference (Veg/Non-veg): -----
10. Delegate Status (Indian/Foreign):-----
11. If Foreign, Passport Number: -----
12. Accompanying Spouse(Yes / No):-----
13. Registration Fees(INR/USD): -----Bank-----
DD/Cheque No.:----- Date:-----

(DD/Cheque should be drawn in favour of "EMCA-2014", payable at Durgapur)

14. Payment Reference (if paid by wire transfer/net banking):

I have taken the necessary permission from the authority to participate in the conference.

Place: _____

Date: _____ Signature of the Applicant

Please send the completed application form together with the Demand Draft to the Conference Secretary *before the due date*. The envelope should be superscripted "EMCA-2014". Scanned copy of the signed form, and scanned DD/Cheque may be sent via email for advance booking of place. Completed form may be sent to any one of the following addresses:

Dr. Amit K. Chakraborty

Associate Professor & CoE Coordinator,
Department of Physics,
National Institute of Technology Durgapur,
Mahatma Gandhi Avenue, Durgapur - 713209
West Bengal, India
Phone: +91 9434788137 (M)
E-mail: emca2014@gmail.com

Dr. Jiten Ghosh

Scientist
Advanced Mechanical and Material Characterization
Division,
CSIR-Central Glass and Ceramic Research Institute
196, Raja S.C. Mullick Road, Kolkata-700 032
West Bengal, India.
Phone: +91 -33-2473-3496 / Mob: 9874513844
E-mail: emca2014kol@gmail.com

INTRODUCTION:

Materials are the building blocks of the ever-changing world that we live in and hence, the study of materials has always attracted scientists and engineers across the globe. The quest for new materials has always been fuelled by the needs and aspirations of society. Knowledge of the structure, property and application of these new materials are therefore, fundamental to economic, social and industrial development. With the rapid growth in the quality of human life style in the last few decades the thrust in research on materials has seen a sharp rise. This emphasis on the development of new materials has led the researchers to discover numerous new materials with unique applications/functions which may be broadly classified under the umbrella term

"emerging materials". It is therefore, very important that the academicians, researchers and industry leaders remain up-to date- with the cutting edge of latest research on processing, characterization and applications of these emerging materials.

EMCA-2014 is aimed to bring together the novices and the experts working on emerging materials, their characterization and applications on a common platform so that they get an opportunity to exchange their ideas for mutual benefit. It is expected that the younger participants will be inspired to explore new directions in their research through interaction with the leaders in the field.

SCOPE OF THE CONFERENCE:

Abstracts of original research for Oral (invited & contributory) and Poster presentations in the following broad thematic areas are invited:

- Materials for sustainable energy
- Materials for environment
- Graphene and 2-Dimensional materials
- Nanomaterials and Nano-composites
- Advanced ceramics and glasses
- Thin Films, Lithography & Microelectronics
- Bio-inspired materials
- Photonic and Spintronic materials
- Sensors and Mesoporous materials
- Smart materials
- Advanced coating materials
- Advanced structural materials
- Advanced computational materials
- Advanced techniques for materials characterization
- Advanced techniques for materials growth

PUBLICATION:

All accepted abstracts will be published in the form of conference proceedings, a copy of which will be given to each participant. To be considered for publication of the abstract in the conference proceedings, at least one author must pay the registration fee before the deadline. The organizers are also in talks with renowned scientific publishers for publication of the full papers as a journal article, and updates on this will be published soon.

REGISTRATION (DEADLINES AND FEES):

Before October 31, 2014

Indian delegate (academia)	: INR 4000/-
Indian delegate (Industry)	: INR 7000/-
Student/Research Scholar	: INR 2000/-
Foreign delegate	: USD 300
Foreign student	: USD 200

Before November 15, 2014

Indian delegate (academia)	: INR 5000/-
Indian delegates(Industry)	: INR 8000/-
Student/Research Scholar	: INR 3000/-
Foreign delegate	: USD 350
Foreign student	: USD 250

Accompanying spouse (Indian): INR 2000/- (without kit & proceedings)
Foreign Accompanying spouse: USD 100/- (without kit & proceedings)
Conference fee covers conference kit, proceedings, 3 working lunches, one banquet dinner and 3 night accommodation in guest house/hostel.

The First International Conference on **Emerging Materials: Characterization & Application** **EMCA-2014**

December 4-6, 2014, Kolkata, INDIA



Organized By:

NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR

Mahatma Gandhi Avenue, Durgapur - 713209, India

Website: www.nitdgp.ac.in

and

CSIR-CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE

Jadavpur, Kolkata - 700032, India

Website: www.cgcri.res.in

DEADLINES (EXTENDED)

Submission of abstracts	: October 30, 2014
Acceptance of abstracts	: November 5, 2014
Submission of full paper	: December 31, 2014

Venue:

**CSIR-Central Glass & Ceramic Research Institute
Jadavpur, Kolkata-700032**

Conference homepage:

<https://sites.google.com/site/emca2014kolkata>

Guidelines for preparation of Abstracts

Abstracts must not exceed one A4 page. Abstracts must strictly follow the template given below. Abstracts must be submitted to: icemca2014@gmail.com. Non-compliance with the abstract template and lack of novelty of the work may lead to rejection of the abstract. All abstracts will be reviewed by experts. Corresponding author whose abstracts are accepted will be notified immediately.

ABSTRACT TEMPLATE FOR EMCA-2014

J. Ghosh^a, and A.K. Chakraborty^{b*}

^bDivision of AMMCD, CSIR-Central Glass & Ceramic Research Institute, Kolkata-32, India

^aDepartment of Physics, National Institute of Technology, Durgapur-713209, India

*Email of corresponding author: chakraborty@phy.nitdgp.ac.in

ABSTRACT

The maximum page limit of extended abstract is one A-4 page, including figures/ tables/ equations/ references typed in a double column in MS Word in Times New Roman font, 11 pt. The short abstract is limited to 50 words only.

Keywords: EMCA 2014, Kolkata, India.

I. INTRODUCTION

Authors should submit the Extended Abstract prior to the deadline as email attachment to the conference coordinators. Names of the authors, their affiliations should be as per the guideline provided in this format (TIMES NEW ROMAN,

12 PT). Presenting author's name should be in **bold** and underlined. The name of the corresponding author should be marked with superscript (*). The Abstract must be written in English. Text should be left and right justified with 2 cm margin to each side of the page. Neither text, nor figures or tables should be printed outside these margins. All texts should be single spaced, in Times New Roman, 11 pt font size consistently. The Extended Abstract begins with a short introduction, then summarizes the results of your research and ends with a conclusion section. Do not use foot notes. References should be cited uniformly.¹

II. RESULTS

All figures should be numbered consecutively and captioned. The caption title should be written centered, with upper and lower case letters. A space should separate the figure from the caption, and a space should separate the upper part of the figure and the bottom of the caption from the surrounding /following text. Figures may be inserted within the text section or added at the bottom.

There is no limit on how many figures/tables one can show in the abstract. Figures should be inserted as pic rather than drawn/pasted on the template. Figures must have sufficient resolution so that the lines are not broken when printed on a paper.

Fig. 1

Fig. 2

III. CONCLUSIONS

IV. ACKNOWLEDGEMENT

References

1. AK Chakraborty et al., "Carbon nanotube (CNT) - epoxy nanocomposites: A systematic investigation of CNT dispersion" *J. Nanoparticle Res.* **14**, 6493 (2011).

GUIDELINES FOR PREPARATION OF THE POSTERS:

Poster sessions will be organized wherein the participants may display their research in the form of a poster. Thereto motivate the young scholars, there are cash rewards for the **three best posters**. Adjudication will be done by a panel of experts. 1m×1m square space will be provided for display of each poster. Typically a poster should have the following sub-sections: Abstract, Introduction, Results & Discussion, and Conclusion etc. Each poster should be on a single piece of paper. The name of the presenting author should be in bold and underlined. The name of the corresponding author must be marked with an asterisk. A passport size photograph of the presenter may also be included.

ADVERTISEMENTS & SPONSORSHIPS:

Full page, colour in the souvenir : INR 40,000/-

Half page, colour in the souvenir : INR 20,000/-

Full page, monochrome in the souvenir : INR 15,000/-

Half page, monochrome in the souvenir : INR 8,000/-

Sponsor type	Key Benefits	Sponsorship fees (INR)	Other benefits
Platinum sponsor	Display of logo in printed and electronic documents of EMCA-2014 Full page colour advertisement in the souvenir	2,00,000/-	Exhibition booth plus registration for up to five members
Diamond sponsor	Display of logo in printed and electronic documents of EMCA-2014 Full page colour advertisement in the souvenir	1,50,000/-	Registration for up to 3 members
Gold Sponsor	Display of logo in printed and electronic documents of EMCA-2014 Half page colour advertisement in the souvenir	1,00,000/-	Registration for two members

For payment of fees please adhere to the following guideline. All electronic communications should be directed to icemca2014@gmail.com OR emca2014kol@gmail.com. For mailing address, please refer to the registration form attached below.

DD/Cheque should be drawn in favour of "EMCA-2014", payable at Durgapur

Payment mode	By E-Mail	By post
Wire Transfer	Completed form and proof of transfer with transaction reference number	No Hard copy required
DD/Cheque	Completed form and scanned copy of a DD/Cheque	Original DD/Cheque

SPECIAL ADVICE FOR FOREIGN NATIONALS:

Foreign nationals (not NRI or PIO) are advised to provide their passport and affiliation details at least three months in advance to obtain necessary clearance from the Ministry of External Affairs (MEA), Govt. of India. They are further advised not to purchase any flight tickets before getting the MEA clearance. However, if the organizers fail to obtain the clearance from the MEA in time before the conference, full refund of registration fees if already paid will be made. Participants may also check mandatory vaccination (if any) or other visa requirements by visiting the websites of Indian Missions in their respective countries. Invitation letter will be issued to the foreign delegates upon request, if this is needed for obtaining visa.

THE ORGANISERS:

Patron

Prof. Tarkeshwar Kumar, Director, NIT Durgapur

Mr. Kamal Dasgupta, Director, CSIR-CGCRI, Kolkata

Chairman

Prof. Dipak K. Mondal, NIT Durgapur

Secretary

Dr. Amit K. Chakraborty, NIT Durgapur

Joint Secretary

Dr. Jiten Ghosh, CSIR-CGCRI, Kolkata

Coordinators

Dr. Amit K. Chakraborty, NIT Durgapur

Mr. Ashim K. Chakraborty, CSIR-CGCRI, Kolkata

Dr. Anoop K. Mukhopadhyay, CSIR-CGCRI, Kolkata

Dr. Supriya Bera, NIT Durgapur

THE VENUE:

CSIR-Central Glass & Ceramic Research Institute, 196 Raja S C Mullick Road, Jadavpur, Kolkata-700032.

THE ORGANISING INSTITUTES:

National Institute of Technology, Durgapur (NIT-D) is a leading institute offering undergraduate, postgraduate and doctoral programmes in various disciplines of engineering, technology, science, humanities and management. Currently the Institute offers nine UG (B. Tech.) programmes, more than twenty PG programmes (M.Tech./M.Sc./MS/MBA) and PhD programmes in various disciplines. NITD started its journey in 1960 as Regional Engineering College as a joint venture of the Government of India and Government of West Bengal. It assumed its current name in 2003 as it was upgraded to a deemed university, when the union Govt. of India decided to take full administrative and financial control of the college under the Ministry of Human Resource Development (MHRD). The institute received a major boost in research in 2007 when the union Government of India declared it as an Institute of National Importance. **The Centre of Excellence in Advanced Materials** was founded in 2013 through a major grant of the MHRD under its Technical Education Quality Improvement Programme to encourage the institute's contribution to materials research. The centre has been founded as a partnership between the departments of Physics and MME (Metallurgical & Materials Engineering).

CSIR- Central Glass & Ceramic Research Institute (CSIR-CGCRI) is one of the first four laboratories of the Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India that was founded in 1950. CGCRI is devoted to achieving leadership in Science and Technology in the area of advanced ceramics and glasses. In its sixty four years of glorious existence, CGCRI has made significant contributions to the Indian society in developing and transferring technologies and components to strategic, public and private sector industries. Currently the Institute offers M.Tech programme in Glass and Ceramic Engineering and PhD programmes in various disciplines under Academy of Scientific and Innovative Research (AcSIR), CSIR, India. Backed up by numerous state-of-the-art facilities, the Advanced Mechanical and Materials Characterization Division (AMMCD) and the Materials Characterization and Instrumentation Division (MCID) of CSIR-CGCRI are deeply engaged in both conventional and advanced characterization of glass and ceramic materials of extraordinary importance for the development of new complex materials for multifunctional applications.

THE CITY OF KOLKATA

Kolkata (formerly Calcutta) is the capital of the Indian state of West Bengal. It was the national capital of British India until 1911. It is located on the bank of the River Hooghly and is about 200 km north of the coast of the Bay of Bengal. The "City of joy" as described by the French writer Dominique Lapierre, is one of the most vibrant cities of India and is considered as the Culture capital of India. Many famous personalities in science, arts, culture, and politics call this city, home. Most of India's Nobel laureates including Rabindranath Tagore (Literature), CV Raman (Physics) Mother Teresa (Peace) to Amartya Sen (Economics) have had close association with this city. It is also the city of the three famous Boses (S.N. Bose, after whom Bosons are named, J.C. Bose inventor of wireless along with Marconi, and Netaji Subhash Bose, the great freedom fighter). Oscar awardee Satyajit Ray created his cinematic masterpieces in this city. In addition, the city has many internationally renowned academic and research institutes such as Calcutta University, Jadavpur University, Indian Association for the Cultivation of Science, Bose Institute, Saha Institute of Nuclear Physics, Variable Energy Cyclotron Centre, The Asiatic Society etc.

TRANSPORT TO AND FROM KOLKATA

Kolkata is well connected with the rest of India by air, rail and road. The NSC Bose International Airport (CCU) in Kolkata has hundreds of national and international flights everyday connecting to the rest of India and the world. The main train station that connects Kolkata with rest of India is Howrah (HWH).

HOW TO REACH CSIR-CGCRI:

From Howrah Station or Airport: Take Pre-Paid Taxi or Public buses going to 'Jadavpur' and get down at 'Jadavpur Thana' bus stop. The CSIR-CGCRI complex is clearly visible on the main road opposite Jadavpur Police Station (Thana) on Raja S. C. Mullick Road. The distance from the Airport is around 22 km and from Howrah Station is around 11 km. The nearest Metro (underground) Station is 'Rabindra Sarobar' from where connecting public transport is readily available.