

### Invited Speaker

Prof. A Chakraborty, GNIDSR, Kolkata  
Dr. A Dinda, AIIMS Delhi  
Dr Annie John, SCTIMST, Thiruvananthapuram  
Dr. A Sinha, NML, Jamshedpur  
Prof B. Basu, IIT Kanpur  
Prof D. Bahadur, IIT Bombay  
Dr. G. Banerjee, IFGL Bioceramics Ltd  
Dr. H. K. Verma, SCTIMST, Thiruvananthapuram  
Prof P. Bhargava, IIT Bombay  
Prof. R N Bhattacharyya, RGKMC, Kolkata  
Dr. S. Dhara, IIT Kharagpur  
Prof T. S. Sampath Kumar, IIT Madras

### Sponsorship

Industries, R&D organization, Government and non-government organizations are requested to sponsor this seminar on advanced materials and depute delegates

Principal Sponsor	Rs 2, 00, 000 (5 delegates free)
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Co-Sponsor	Rs. 50,000/- (2 delegates free)

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### Registration Fees

Students/ Research Scholars	Rs. 1000.00
Delegates from Acad. Institutions / Govt. R & D Organization	Rs. 3000.00
Delegates from Industries	Rs. 5000.00

Cheque / DD should be drawn in favour of "Convener CBMA" and should be sent to "Convener, CBMA 2008, Department of Ceramic Engineering National Institute of Technology, Rourkela – 769 008, Orissa"

### Accommodation

A limited number of rooms with shared accommodation are available in the institute guest house at a reasonable charge. A good number of hotels are also available in the city with the tariff ranging from Rs. 400 to Rs. 3500 per day. Confirmed accommodation for delegates / participants can be arranged by the organizing committee either in the NIT guest house and /or in the hotels on specific request accompanied with demand draft.

### Contacts

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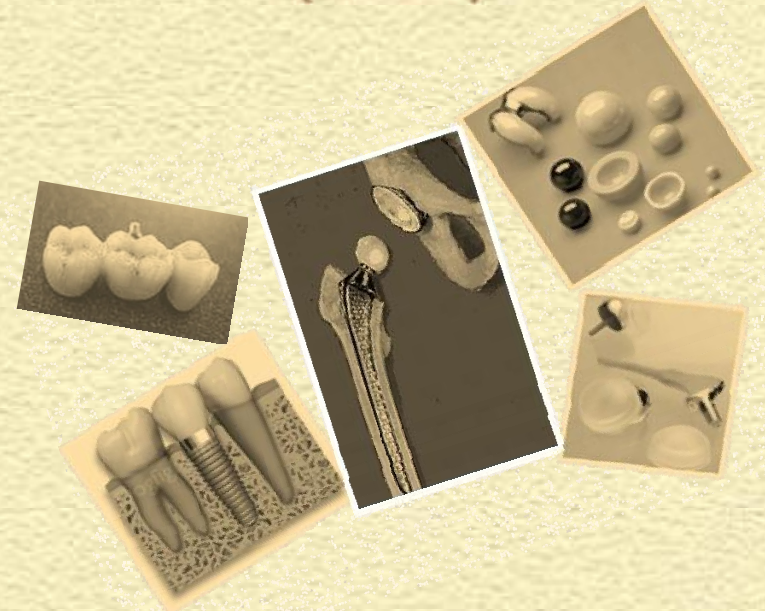
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# National Conference on CERAMICS IN BIO-MEDICAL APPLICATIONS (CBMA)



January 21 - 22, 2010

Organized by

Department of Ceramic Engineering  
National Institute of Technology  
Rourkela 769 008

# Ceramics in Bio-Medical Applications (CBMA)

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## Objectives:

Ceramics materials are linked to the ancient human civilization when the early men could make earthen pots from clay. Starting from that humble beginning, ceramic materials have become one of the most fascinating materials in the world with its application areas reaching in space. During the last four decades, ceramic materials and composites have also caused a major revolution in the medical science by improving the quality of human life through the use of artificial bone, eye, dental fixtures etc. Tailor made synthetic ceramic parts not only serve as an additional support but also as an internal prosthetics, which when integrated into the human system, fully perform the function of the skeletal materials they replace. These special classes of tailor made bio ceramic materials perform specific biological / functional / chemical activities in living systems. Treatment procedures through reconstructive surgery have resulted in marked improvement in the quality of life of a rehabilitated person.

Depending on the implant-host response the bio ceramic materials can be bioinert, bioactive or bioresorbable. Till date, the focused research and development on bioceramics is being carried out only in a limited number of research laboratories and academic institutions and less so at other places.

The present situation thus calls for close and collaborative interactions, dissemination of knowledge, deliberations and exchange of ideas on the different mon platform for a fruitful discussion

aspects of bioceramic, research, the medical and the ethical aspects of this material's application etc. The present conference thus aims to provide a common platform for a fruitful discussion and sharing of ideas among various groups of researchers, and medical professionals actively involved in the research, development and application of different bio ceramic materials.

## About NIT Rourkela:

National Institute of Technology, Rourkela (NIT) is one of the premier central government institutions for imparting quality technical education in the country. The institute is situated at the eastern end of Rourkela steel city, beyond Sector-1 over an area of 262 hectares of land provided by the Government of Orissa. Surrounded by hills and greeneries, it is a beautiful residential campus offering accommodation to faculty, staff and students. The campus has all the amenities for developing personal, social and academic skills of the student community. The institute has 10 engineering departments, 4 basic science departments as also the social science department. The city of Rourkela came into prominence in the year 1954-55, with the decision of the Government of India to set up the first Public Sector Steel Plant in this locality in collaboration with the then West Germany. The city is a huge metropolis connected with all parts of the country by railway and road. Domestic air services are available from Ranchi, Bhubaneswar and Kolkata which are about 4- 6 hours journey by rail from Rourkela. The population of the city is about 6 lakhs. The climate during the third week of January is pleasant with temperature ranging from 11°C (min) to 25°C (max).

## About the Department:

Although started in 1994, within this short time the Department of Ceramic Engineering has established it self as one of the centres of excellence for both undergraduate and post-graduate teaching in Ceramic Engineering as well as for research programmes in the field of traditional and advanced ceramics. The faculty members are young, dynamic and they are well qualified and trained for carrying out active research in the field of bio-materials, advanced refractories, nano science and technology, electronic materials, etc. The department has already established its research capability in different areas and awarded with various prestigious projects from DST, CSIR, UGC, MOEF, etc. It has also linkages and active collaboration with different industries in India. The students as

well as research scholars of the department also avail the opportunity through collaborative projects, short term visits to the industries etc.

## Themes:

- Ceramic scaffold and Tissue Engineering
- Dense Bio ceramic implants
- Ceramic nano particles and drug delivery
- Bio ceramic composites

## Patron:

Prof. Sunil K. Sarangi, Director, NIT, Rourkela

## National Advisory committee

Prof B. Basu, IIT Kanpur  
Dr C P Sharma, SCTIMST, Trivandrum  
Dr D. Basu, CGCRI, Kolkata  
Prof D Bahadur, IIT Bombay  
Prof D. Kumar, IT, BHU, Varanasi  
Dr G Banerjee, IFGL Bio ceramics  
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Prof N R Mohanty, NIT Rourkela  
Prof S K Jena, NIT Rourkela  
Dr S Adak, TRL Belpahar

## Local Organizing Committee

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Prof S Bhattacharyya  
Prof S K Pratihari  
Prof R Sarkar  
Prof D Sarkar  
Prof B B Nayak  
Prof S K Pal  
Prof R Mazumder  
Prof A Choudhury  
Prof H B Sahu

## Theme Speaker

Dr C. P. Sharma, SCTIMST, Thiruvananthapuram  
Dr D. Basu, CGCRI, Kolkata  
Prof S K Guha, IIT Kharagpur