



INAUGURATION OF INCERS STUDENT CHAPTER IIT(BHU), VARANASI



&

TECHNICAL SYMPOSIUM

“BREAKING BOUNDARIES: EXPLORING EMERGING OPPORTUNITIES IN CERAMICS”

Organized by
InCerS Student Chapter, IIT(BHU)

&

Supported by



Department of Ceramic Engineering, IIT(BHU)



The Indian Ceramic Society



Dr. Ashutosh Kumar Dubey
Head of the Department
Department of Ceramic Engineering IIT(BHU)

Venue | Date

Department of Ceramic Engineering | 6th April

About IIT(BHU)

Founded in 1919 as Banaras Engineering College (BENCO), the Indian Institute of Technology (BHU) Varanasi, celebrated its centenary in 2019. The institute, rooted in the vision of Bharat Ratna Mahamana Pandit Madan Mohan Malviya, a pioneer in modern Indian education, expanded with the establishment of College of Technology (TECHNO) and College of Mining & Metallurgy (MINMET). In 1968, BENCO, MINMET, and TECHNO merged to become the Institute of Technology (IT-BHU). Since 1972, IT-BHU admitted students through the Joint Entrance Examination (JEE) conducted by the IITs. Recognized for its excellence, IT-BHU transitioned into IIT (BHU) Varanasi on June 29, 2012, following parliamentary legislation. The institute, committed to nation-building, has swiftly aligned with IIT standards, maintaining its status among the top engineering institutions in India. With a legacy of a century, it continues to forge ahead with renewed vigor and dedication.

About Ceramic Department

The Department of Ceramic Engineering is celebrating its Centenary throughout the year of 2024 by organizing various technical talks, symposia, alumni meets and conferences. Pandit Mandan Mohan Malviya Ji first instituted courses in Glass and Ceramic Technology as early as 1924 with the noble objective of advancing glass and ceramic technology in India. In the year 1968, the Department was renamed as the Department of Ceramic Engineering. The Department offers B.Tech, Dual Degree (IDD), M.Tech and Ph.D. degrees in Ceramic Engineering. M.Tech and Ph.D. programs are interdisciplinary and are also open to those students of allied branches of Engineering and Sciences. The Department is pursuing active research in the emerging areas such as structural ceramics & composites, functional ceramics, electrical & electronic ceramics, energy materials & devices, glass & glass-ceramics, ceramic whitewares, bio-ceramics, refractories & high temperature ceramics, etc. Research papers are regularly being published in reputed national and international Journals.

Our Thrust Areas

- **Energy Materials & Devices:** Developments of alternative energy technologies are important to reduce the dependency on fossil fuels and effective utilization of renewable energy sources. The department is effectively involved in the development of technology related to Photovoltaic cells (Solar cells), Solid oxide fuel cells, electrochemical energy storage solutions ranging from rechargeable Li/Na-ion batteries, aqueous batteries, pseudo-capacitors and supercapacitors and solid-state hydrogen storage technologies.
- **Electrical & Electronic Ceramics:** Electrical and electronic ceramics constitute a specialized category of engineered materials distinguished by their exceptional electrical properties. These ceramics are extensively employed in cutting-edge applications spanning display technology, quantum technology, memory devices, sensors, and numerous other fields. These ceramics showcase a range of characteristics, including high electrical insulation, robust dielectric strength, piezoelectricity, ferroelectricity, and semiconducting behavior, which are contingent upon their composition and structure.
- **Structural Ceramics & Composites:** Over the years, research conducted here at the Department of Ceramic Engineering has delved into various aspects relevant to structural ceramics and composites. This includes research exploring toughened alumina, nano magnesia-carbon refractory bricks, zirconia-based ceramics, and ceramic-based systems for solid oxide fuel cells, among other areas of study.
- **Glass & Glass-ceramics:** The department is actively developing specialized colored glasses, infrared filter glasses for night vision, and glass matrix composites for structural applications. Exploration also includes the development of chalcogenide glasses for IR amplifier, non-linear optics, thermal imaging, electronics, and optoelectronics applications. Industrial and biomass wastes are recycled and integrated into glass matrix composites for different engineering applications. Studies on various micronutrient-based glasses aim at their applications in agriculture for varying soil conditioners.
- **Bio-ceramics:** The department delves into the extensive use of ceramic materials in medical applications, such as hip prostheses, cardiac valves, and dental implants. Hydroxyapatite (Hap) emerges as a prime candidate for artificial teeth or bones due to its outstanding biocompatibility and bioactivity.

ADVISORY COMMITTEE MEMBERS

NAME	ORGANISATION
Dr. L. K. Sharma	President, NE India Chapter of ACerS
Mr. Sudipta Saha	President, InCerS
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Prof. Anjan Sil	IIT Roorkee
Prof. Rituparno Sen	GCECT, Kolkata
Prof. Ravi Kumar N.V.	IIT Madras

PROGRAM

8:30am - 9:30am

Breakfast

9:30am - 11:00am

Inauguration of InCerS Student Chapter
IIT(BHU), Varanasi

- Lightning of the ceremonial lamp with Invocation.
- Welcome address by Head of the department, Ceramic Engineering Department, IIT(BHU), Varanasi.
- Introduction of the theme by Faculty Adviser, InCerS Student Chapter, IIT(BHU), Varanasi.
- Address by President, Indian Ceramic Society.
- Address by Honorary Secretary, Indian Ceramic Society.
- Address by Chief guest: CEO, Mahamana Ceramic Development Organization.
- Address by Guest of Honors
- Felicitation
- Vote of Thanks

11:00am - 12:30pm

Session 1: Technical Talk and Student
Presentation

12:30pm - 2:00pm

Lunch

2:00pm - 3:50pm

Session 2: Technical Talk and Student
Presentation

3:50pm - 4:00pm

Corporate Presentation(Tentative)

4:00pm - 5:00pm

High Tea

SPONSORSHIP

On behalf of the organizing committee, we cordially ask for your active participation and gracious attendance as a financial sponsor during the 1-day Symposium and Inauguration of InCerS Student Chapter, IIT(BHU). As stated below, there are five different sponsorship tiers:

S.No.	Category	Amount
1.	Platinum Sponsor	₹ 50,000/-
2.	Gold Sponsor	₹ 25,000/-
3.	Silver Sponsor	₹ 20,000/-
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Account details for bank transfer are as follows:

Beneficiary: The Indian Ceramic Society

Bank Account number: **08560100007854**

Bank Name: Bank of Baroda

Branch: Jodhpur Park, Kolkata

Branch Code: JODCAL/0856

Bank Code: 012

IFSC Code: BARBOJODCAL (Fifth Character is Zero)

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REGISTRATION

S.No.	Category	Registration Fee
1.	Industry Delegates	₹ 1,000/-
2.	Other Institute Faculty members/ Scientists	₹ 500/-
3.	Student (any college)/ IIT (BHU) faculty	Free

Use this link or QR Code for registration:

<https://forms.gle/Z8Fe8zDftU8nMY3RA>



CONNECT WITH US



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