

## You are invited to attend

# Research Cafe



# CSIR-Central Institute of Mining and Fuel Research Dhanbad – 826001

on Friday, 15th July 2022, 4:00 PM onwards

On

# Multifunctional Materials: The Future of Sustainable Societies

significant advances in materials science Despite technology, multifunctional materials that address the needs of different applications are scarce. In this regard, new combinations of nanostructured materials have garnered significant attention recently due to the fact that they have exceptional applications in the fields of wastewater treatment, energy storage, semiconductors, optoelectronics, etc. These multifunctional materials, unlike other compounds or mixed nanomaterials, differ largely in their physical and chemical properties, which play an important role in enhancing their application potential and industrial deployments. Our research strives to address these pressing issues and offer sustainable solutions by developing new material compositions that possess a multitude of applications.

Let's hear from

Dr. M. S. Santosh Senior Scientist

Coal to Hydrogen Energy for Sustainable Solutions (CHESS) CSIR - Central Institute of Mining and Fuel Research (CIMFR) Digwadih Campus, PO: FRI, Dhanbad - 828108, Jharkhand.

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#### **Awards and Accolades**

- · Commonwealth Professional Fellowship
- · Hungarian Short-term Fellowship
- DST Fast Track Young Scientist Award
- Member of the Indian Delegation to BRICS Young Scientist Conclave
- Won the BIRAC GYTI SRISTI Award of Appreciation
- · Junior Researcher Award International Association of Chemical Thermodynamics
- · Swedish Institute Guest Scholarship

#### Research interests

- · Hydrogen economy
- Water treatment
- · Membrane technology
- Energy storage

### **Key areas**

- · Material synthesis
- Membrane fabrication
- · Waste to wealth
- · Clean energy

Mandatory for all Ph.D Students of CSIR-CIMFR and AcSIR-CIMFR. Dhanbad

Please CLICK HERE to Join through MS Teams