



## Technical Article

- Novel Magnetic Graphene Oxide Composite Material as a Solid-Phase Adsorbent for Uranium Removal

## Young Officer's FORUM

- IN-SITU Calibration System for Area Gamma Monitors and Autonomous Gamma Dose Loggers

## Young Researcher's FORUM

- Inter-droplet Force Between Magnetically Polarizable Pickering Oil-in-water Nanoemulsions Stabilized with  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> Nanoparticles: Role of Electrostatic and Electric Dipolar Interactions

## News and Events

- Role of Nuclear and other Advanced Technologies for Climate Change Control
- Hindi Workshop
- Report on Transfer of IGCAR's Conductivity Meter Technology
- Women's Day Celebrations at IGCAR 2023

## Awards, Honours and Recognitions

## Bio-diversity @ DAE Campus, Kalpakkam



Director's Message

Dear Colleagues,

The fuel handling operation required for the 32nd campaign of FBTR was planned in two stages. The first stage of fuel handling operation to load two MK-1 fuel assemblies into the core, was completed. Reactor was started on 31st March to measure shutdown margin and operated at 25kWt to measure control rod worth. Commissioning of new 670 kW, 6.6 kV HT motor for Main Boiler Feed Pump (MBFP)-"A" was completed. An integrity test of MBFP motor-A for 100 hrs continuous operation was completed. All the mandatory surveillance checks including DG load test as per the planned schedule were carried out. 64th campaign for reprocessing of 105 GWd/t Burnup FBTR fuel in CORAL facility has been completed successfully.

The upgraded Online Nuclear Emergency Response System (ONERS-2) with provisions for radiological consequence assessments using Time-Dependent source Terms has been installed along with Numerical Weather Prediction & Dispersion Models on the High Performance Computing System at the Nuclear and Radiological Emergency Monitoring Cell, AERB Mumbai. The ONERS is used by NREMC-AERB for monitoring of emergency exercises and training purposes. The installation of C-Band Doppler Weather RADAR at Kalpakkam site in collaboration with ISTRAC has been completed. Endurance test and other commissioning works are in progress.

The transfer of Pulsating sensor-based conductivity meter technology developed in IGCAR to M/s. Lablink, Mumbai based industry on a non-exclusive basis was carried out as part of 'Atma Nirbhar Bharat' mission.

Women's day was celebrated from March 1-7, 2023, at IGCAR. Ministry of Women and Child Development had directed DAE to create awareness about the schemes developed by the government for the welfare of women. The celebrations included competitions and felicitating girl students who have excelled in studies, sports, and cultural events.

I appreciate the efforts of the editorial committee and the authors for their contributions to the newsletter.

[B. Venkatraman]  
Director IGCAR & GSO

## Awards, Honours and Recognitions

**Dr. John Philip** has been selected as an Editorial Board Member of Journal of Magnetism and Magnetic Materials of Elsevier Publishers.

**Dr. Arup Dasgupta** received Fellow of Indian Institute of Metals (IIM) for the year 2022.

**Dr. R. Mythili** received Fellow of Electron Microscopy of Society of India (EMSI) Award for the year 2022 under Materials Science category

**Dr. Harish Chandra Dey**, received "Welding Science & Technology Award" from IIW-India, Chennai Branch.

## Best Paper/Poster Award

**Ms. B.R. Vaishnavi Krupa** received EMSI-2023 conference – Best poster consolation price

**Dr. Arup Dasgupta** received "The above and beyond appreciation for Editorial Leadership" in 2022 from Springer.

**Shri Shailesh Joshi, Ms. Madhusmita Panda, Dr. O. Annalaskhmi, C. Dr. Venkata Srinivas and B. Venkatraman** received the second prize in the best poster award at the 6<sup>th</sup> Asian and Oceanic Congress on Radiation Protection (AOCRP6) international conference held at Mumbai during February 7-11, 2023 for the paper titled "Uranium based Metal Organic Framework as OSL Dosimeter".