



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
Indian Institute of Technology Bhubaneswar

Press Release

**‘Light Weight Aggregate Concrete is Future of Construction’
Workshop at IIT Bhubaneswar delves into Development and Applications
of the Sustainable Material**

Bhubaneswar, 22nd April 2024: Indian Institute of Technology (IIT) Bhubaneswar, in association with Indian Metals and Ferro Alloys (IMFA) and the Indian Concrete Institute (ICI), has recently organized a one-of-its-kind and first-ever workshop on ‘Light Weight Aggregate Concrete: Development & Applications’. Experts from industry & academia deliberated on this sustainable, durable & environment-friendly solution for construction.

Organized by the School of Infrastructure (SIF) of IIT Bhubaneswar, the one-day workshop witnessed detailed deliberations on this futuristic subject by different experts. Dr. N.C. Pal, OSD-cum-EIC-Design, PWD, Govt. of Odisha graced the workshop as chief guest and shared his experience on research in the field of this unique product and how Light Weight Aggregate (LWA) Concrete has the potential to become the future of construction.

The technical lectures focused on utilizing light-weight aggregates (LWA) produced from industrial byproducts as an alternative to natural aggregates. LWA concrete offers excellent benefits related to thermal comfort, acoustics, fire safety, and reduced dead load of the building, contributing towards sustainability without compromising strength and durability.

Speaking on the occasion, Prof. Dinakar Pasla, Dean- Sponsored Research & Industrial Consultancy (SRIC) highlighted the mixed design aspects related to LWA concrete and presented the quantum of work on LWA concrete being carried out at IIT Bhubaneswar.

Dr. S. Suriya Prakash, Professor, IIT Hyderabad discussed the future of affordable housing using structural LWA concrete precast slabs, highlighting their significant contribution to speedy construction, a critical need in India today.

Mr. Chitta Ranjan Ray, Whole Time Director, IMFA Ltd., along with Mr. Debasis Mahapatra, DGM-LDA, highlighted the production process of LWAC at their plant, while Dr. Amit Chatterjee, Chief R&D Officer, Vedanta Ltd- Aluminium Business discussed the design approaches for structural LWA concrete. Further, Dr. Manikandan, Head, Technical Services, Dalmia Bharat Group presented a parametric study of LWA production using palletization process.

Dr. Sumanta Haldar, Head of School, SIF also spoke on the occasion and congratulated the team for organizing such an enlightening workshop on a very relevant subject.

A panel discussion following the technical lectures provided a future roadmap for LWA concrete in India and how mineral-rich states like Odisha can benefit from such aggregates. The laboratory demonstration of LWA concrete was conducted, presenting the participants with practical experience of its workability and other fresh properties.

The workshop was attended by more than 70 participants from industry, academia, and government organizations. The programme was coordinated by Prof. Dinakar Pasla, Dr. Umesh C. Sahoo, and Dr. Anush K. Chandrappa.
