Report: Expert Lecture on "Research Opportunities at CSIR-Central Road Research Institute (CRRI), New Delhi"

Date: 30th August 2025

Venue: Seminar Hall E-119, E-Block, Department of Civil Engineering, Integral University,

Lucknow

Opening & Welcome

The session commenced at Seminar Hall E-119 with a warm welcome by **Dr. Zishan Raza Khan**, Associate Professor, Department of Civil Engineering. Dr. Khan introduced the theme linking undergraduate and postgraduate research aspirations with the national R&D ecosystem and welcomed the eminent resource persons from **CSIR-CRRI**, **New Delhi**:

- Dr. Sarfaraz Ahmed, Senior Scientist, Flexible Pavement Division
- Dr. Ashish Walia, Senior Scientist, Flexible Pavement Division
- Sh. Sachin Gowda M. K., Senior Scientist, Pavement Evaluation Division

He highlighted CRRI's stature as India's premier national laboratory for roads and transportation and emphasized the importance of industry-oriented summer internships, B. Tech projects, and M. Tech dissertations aligned with real-world problems.

Session I — Address by Dr. Sarfaraz Ahmed (Senior Scientist, Flexible Pavement Division)

Theme: Overview of CRRI and cross-cutting research avenues

Dr. Sarfaraz Ahmed provided a panoramic overview of CRRI's mandate, interdisciplinary divisions, and collaborative projects with MoRTH, NHAI, ULBs, and international partners. He underscored how CRRI projects span the full innovation chain—from materials characterization, pavement design and performance, traffic and safety studies, bridge and geotechnical engineering, to advanced testing and instrumentation.

He concluded with guidance on aligning students' Statements of Purpose (SoP) and problem statements with national priorities such as resilient highways, climate adaptation, waste valorization, and safety.





Session II — Talk by Dr. Ashish Walia (Senior Scientist, Flexible Pavement Division)

Theme: Flexible pavement design, performance, and innovation

Dr. Ashish Walia delved into the Flexible Pavement Division's core work: mechanistic-empirical design, performance-based specifications, balanced mix design, and advanced lab characterization. Dr. Walia encouraged students to bring a clearly defined dataset and field context (traffic level, climate zone, aggregate sources) to accelerate lab planning and ensure publishable outcomes.

Session III — Talk by Sh. Sachin Gowda M. K. (Senior Scientist, Pavement Evaluation Division)

Theme: Pavement evaluation, diagnostics, and asset management

Sh. Sachin Gowda M. K. showcased the Pavement Evaluation Division's capabilities in network-and project-level assessments. He explained how non-destructive testing (NDT) tools guide maintenance, rehabilitation (M&R), and asset management.

He emphasized that students who are comfortable with data analytics (Excel/Python/GIS) and have basic knowledge of pavement design/standards adapt fastest to evaluation projects.

Student Interaction

The Q&A was lively, with students inquiring about Eligibility & timeline, Proposal preparation, Ethics & publication and Safety & lab orientation.

The experts advised students to arrive with concise proposals, a literature-backed rationale, and clarity on datasets/field sections to minimize iteration and maximize lab time.

Vote of Thanks

The program concluded with a formal **vote of thanks** by Mr. Vikash Singh, Assistant Professor, Department of Civil Engineering, expressing gratitude to **Dr. Sarfaraz Ahmed**, **Dr. Ashish Walia**, and **Sh. Sachin Gowda M. K.** for their time and insights. The Department acknowledged the support of the University administration and faculty coordinators, and thanked students for their enthusiastic participation.



