

Civil Connect

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Department of Civil Engineering



Gandhi Institute of Advanced Computer and Research

Prajukti Vihar, Aurobind Marg, RAYAGADA – 765002, Odisha

www.giacr.ac.in

mail@giacr.ac.in

Editor-in-Cheif

Rajesh Kumar Beherdalei

Senior Lecturer

Department of Civil Engineering

It is a privilege to present the current issue of the Bi-Annual Newsletter of the Department of Civil Engineering. This publication highlights the key academic, technical, and co-curricular activities undertaken during the past six months.

The newsletter captures departmental events such as workshops, seminars, expert lectures, industrial visits, student projects, faculty achievements, and outreach activities. These initiatives reflect our commitment to providing quality technical education and practical exposure to our students. Such contributions not only enhance communication skills but also foster confidence, creativity, and professional growth.

I sincerely thank all students, faculty members, and the editorial team for their valuable contributions and continuous support in bringing out this issue successfully. Their dedication and teamwork strengthen the academic culture of the department.

Let this newsletter inspire us to pursue excellence, innovation, and responsibility in shaping the built environment for a better tomorrow.

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Department of Civil Engineering

Gandhi Institute of Advanced Computer and Research, Rayagada

Message from the Principal



It is truly heartening to witness the Civil Engineering Department of our college publishing its bi-annual newsletter, a testament to the department's vibrant academic culture and forward-thinking initiatives. The branch of Civil Engineering continues to make noteworthy contributions to emerging domains such as autonomous civil vehicles, renewable energy systems, and sustainable infrastructure development.

The evolving landscape of science and technology underscores the pivotal role of Civil engineers in shaping a resilient and innovative future. In response to these dynamic challenges, the department has proactively introduced a range of measures aimed at equipping students with the skills and mindset needed to thrive in this transformative era.

This bi-annual newsletter serves as a reflection of the department's commitment to excellence, showcasing key activities, achievements, and initiatives that foster academic growth, technological advancement, and societal impact.

Message from the Head



Greetings!

I am delighted to witness the launch of the Department of Civil Engineering's newsletter—a vibrant platform that fosters connection among students, faculty, and stakeholders by showcasing the department's dynamic activities and achievements.

This edition proudly highlights the Project Expo and the ongoing Research and Development initiatives, reflecting the innovative spirit and academic rigor of our department. It also features the commendable contributions of our faculty members and the best practices that continue to elevate the standards of Civil Engineering education.

I extend my heartfelt congratulations to all the students and faculty of the Civil Engineering Department for their dedication and collaborative effort in bringing out this newsletter. May it continue to inspire excellence and strengthen our academic community.

Vision and Mission of the Institution

Vision

To become a globally recognized, value-driven educational institution committed to excellence in delivering quality education, nurturing students' inherent talents, and developing innovative professionals in technical and managerial fields, thereby equipping them to meet the future challenges of the global economy.

Mission

M₁: To deliver quality education through effective teaching–learning processes that foster academic excellence in technical and managerial disciplines.

M₂: To nurture students' inherent talents by encouraging creativity, critical thinking, innovation, and lifelong learning.

M₃: To develop competent and ethical professionals with strong values, leadership skills, and social responsibility.

M₄: To promote industry-oriented learning and research through collaboration, practical exposure, and adoption of emerging technologies.

M₅: To prepare globally competitive graduates capable of adapting to evolving challenges and contributing effectively to the global economy.

Vision & Mission of Department of Civil Engineering

Vision

To emerge as a center of excellence in civil engineering education, delivering globally relevant knowledge and developing ethically strong engineers dedicated to building the nation.

Mission

M1: To provide strong foundational and advanced knowledge in civil engineering and technology through effective teaching–learning processes.

M2: To inculcate ethical values and professional responsibility among students to develop socially responsible engineers.

M3: To promote practical learning and industry interaction through fieldwork, internships, and real-world projects.

M4: To encourage innovation, research, and sustainable engineering practices addressing global and societal needs.

M5: To prepare competent civil engineers capable of contributing effectively to infrastructure development and national growth.

Program Outcomes (POs)

- 1. Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- 2. Problem analysis:** Identify and analyses well-defined engineering problems using codified standard methods.
- 3. Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
- 4. Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
- 5. Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.
- 6. Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
- 7. Life-long learning:** Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Educational Objectives

PEO1: To impart science-based engineering education to develop professional skills that will prepare the students for immediate employment in relevant branch of civil engineering in industry.

PEO2: To develop human potential to its fullest extent so that intellectually capable and creatively gifted leaders can emerge in range of professions.

PEO3: To develops among students the awareness of and the competence to be savvy users of information technology.

PEO4: To develop among students the ability to work with others, in professional and social settings.

PEO5: To develop a global view among students so that they can appreciate diversity in the world and in intellectual pursuits and the desire and ability to keep learning throughout life.

Programme Specific Outcome

PSO1: Apply principles of mechanics and basic sciences to analyze civil engineering structures. Survey, map, measure and analyze data for sustainable infrastructure planning.

PSO2: Ability to enhance research skills and utilize advanced computing tools for analysis, design and implementation of these systems for resolving real life / social problems.

PSO3: To prepare plan, drawings, estimates, reports and execute all Civil Engineering projects by applying modern construction techniques, equipments and software's which will equip them to complete the project in the stipulated time and cost.

Industrial Visit to JK Papers



An industrial visit to JK Paper Ltd was organized on 20th January, 2024 for the students of the Civil Engineering Department. All the students actively participated in the study visit with great enthusiasm and interest. The primary objective of the visit was to provide practical exposure to industrial operations and infrastructure systems related to large-scale manufacturing units.

During the visit, students were introduced to various sections of the plant, including raw material handling, pulp processing, paper production units, water treatment facilities, and waste management systems. Special emphasis was given to civil engineering aspects such as structural design of industrial buildings, foundation systems, drainage planning, effluent treatment plants, and quality control measures adopted in construction and maintenance.

The technical experts at the plant explained the functioning of heavy machinery, safety practices, and environmental sustainability measures implemented by the company. Students gained valuable insights into real-world applications of their theoretical knowledge. The visit proved to be highly informative and helped bridge the gap between classroom learning and industrial practices, enhancing the practical understanding of the students.

Voters Awareness Programme at Sai Priya Nagar



A Voters Awareness Programme was organized by the Civil Engineering Department on 11/02/2024 at Sai Priya Nagar, Rayagada. The primary objective of the programme was to create awareness among the tribal community about the importance of voting and active participation in the democratic process.

During the programme, students explained the significance of voting as a fundamental right and civic duty. They highlighted the role of citizens in strengthening democracy by casting their votes responsibly and without influence. Information was provided regarding voter registration procedures, necessary identification documents, and the importance of verifying names in the electoral roll. The participants were also educated about ethical voting practices and the need to avoid misinformation.

The tribal residents of Sai Priya Nagar actively participated in the awareness session and interacted with the students by asking questions related to the voting process. Pamphlets and informative materials were distributed to reinforce the message. The programme was conducted with enthusiasm and a strong sense of social commitment. It helped in promoting civic consciousness and encouraged greater electoral participation among the local community.

Expert Talk by Er. P.J. Murali on Construction Engineering

The Department of Civil Engineering, GIACR Rayagada, organized an **expert talk by Er. P.J. Murali**, a **retired civil engineer** on 20th February, 2024 with vast experience in government and private construction projects. The session aimed to enhance students' understanding of **construction engineering practices, project management, and field applications**.



Er. Murali shared his valuable insights on topics such as **foundation design, quality control in concrete works, material selection, and structural safety**. He emphasized the importance of **site supervision, adherence to building codes, and sustainable construction methods** in modern civil engineering. The talk also covered real-life case studies from his professional career, illustrating how theoretical concepts are applied in actual project execution.

Students actively interacted with the expert, asking questions related to **career opportunities, project handling, and new technologies** in construction. The session inspired students to focus on practical learning, discipline, and professional ethics.

The program concluded with a vote of thanks by the Head of the Department, appreciating Er. Murali's contribution to enriching students' technical knowledge. Overall, the expert talk was highly informative and motivational, bridging the gap between academic learning and industry practices.

Annual Sports Meet at GIACR Rayagada

The **Annual Sports Meet** at **GIACR Rayagada** was organized on 26th February, 2024 with great zeal and enthusiasm, bringing together students, faculty, and staff to celebrate the spirit of sportsmanship and teamwork. The event was inaugurated by the Principal, who encouraged students to participate actively in both athletic and recreational events to maintain physical fitness and mental well-being.



The Sports Meet featured a variety of events including **track and field competitions, cricket, football, volleyball, badminton, tug of war**, and several indoor games like **chess and carrom**. Students from different departments, including the **Diploma Civil Engineering Department**, showcased their energy, discipline, and competitive spirit throughout the events.

The highlight of the meet was the **4×100 meter relay** and the **inter-departmental cricket match**, which received loud cheers from the audience. Faculty members also participated in friendly matches, adding excitement and unity to the occasion.

Winners and runners-up were felicitated with medals and certificates during the valedictory ceremony. The Principal, in his closing remarks, emphasized the importance of sports in fostering leadership, teamwork, and perseverance among students. The event concluded with the national anthem, marking the end of a joyful and memorable day at GIACR Rayagada.

Cleanliness Drive at Chekkaguda Village



A Cleanliness Drive was conducted on 8th March 2024 at Chekkaguda village, located about 5 km away from Rayagada, by the students of the Civil Engineering Department. The initiative aimed to promote environmental awareness, sanitation, and community participation in maintaining a clean and healthy surroundings.

The students actively engaged in cleaning village roads, public spaces, and nearby areas by collecting plastic waste, dry leaves, and other non-biodegradable materials. They also created awareness among villagers regarding proper waste disposal practices, the importance of hygiene, and the need to maintain cleanliness to prevent diseases. Informal interactions were held to educate residents about sustainable waste management and environmental protection.

The drive was carried out with great enthusiasm, teamwork, and a sense of social responsibility. Faculty members guided and supervised the activities to ensure smooth execution. The event not only improved the cleanliness of the village but also instilled civic consciousness and leadership qualities among the students. Such community-oriented programs reflect the department's commitment to social service and sustainable development beyond academic learning.

Alumni Meet – 2021 Pass-out Students (Department of Civil Engineering)

The Department of Civil Engineering, GIACR Rayagada, organized an **Alumni Meet** for the **2021 batch of Diploma students** on 17th March, 2024 to reconnect with their alma mater and share their professional experiences. The event aimed to strengthen the bond between alumni and the department while creating a platform for interaction between current students and former graduates.



The program began with a welcome address by the **Head of the Department**, followed by an inspiring speech from the **Principal**, highlighting the importance of alumni engagement in academic and institutional growth. Alumni shared their journey in the field of civil engineering, discussing their experiences in construction companies, government projects, and higher studies. Their insights into **practical field challenges, career opportunities, and skill development** were highly beneficial for the students.

The event concluded with a felicitation ceremony and a vote of thanks, expressing gratitude to all participants. The Alumni Meet served as a memorable and motivating occasion, fostering a sense of belonging and continued collaboration between the department and its graduates.