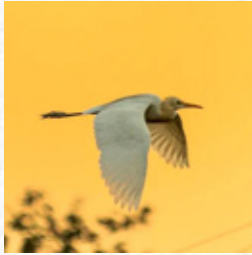




**OPJU**

UNIVERSITY OF STEEL TECHNOLOGY  
AND MANAGEMENT



# ANNUAL SUSTAINABILITY REPORT

*Charting Our Commitment Towards Sustainable Excellence*

**2023**

OP Jindal University, Raigarh (Chhattisgarh)





 O P JINDAL UNIVERSITY



# Introduction to Sustainable Development Report

Sustainable development refers to a development approach that aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. It's a concept that recognizes the interconnectedness of economic, social, and environmental aspects of human well-being. It includes several aspects such as ensuring the conservation and sustainable use of natural resources, reducing pollution and waste, and protecting biodiversity and ecosystems for the benefit of current and future generations, Promoting social justice, equality, and inclusivity in access to resources, opportunities, and basic services such as education, healthcare, housing, and employment. This involves ensuring that the benefits of development are shared by all segments of society. It assures Pursuing economic growth that is inclusive, sustainable, and promotes decent work for all, while also considering the long-term impacts on the environment and society. This involves encouraging innovation, responsible consumption, and production patterns that minimize negative environmental impacts. Considering the needs and rights of future generations in decision-making processes and actions taken today, ensuring that resources are used wisely and sustainably to maintain the well-being of future populations. It also involves recognizing that sustainable development challenges are interconnected and global in nature, requiring collaboration among countries, stakeholders, and sectors to address issues such as climate change, poverty, inequality, and environmental degradation.

Achieving sustainable development involves integrating these principles into policies, strategies, and actions at various levels – from local communities and businesses to national governments and international organizations. It requires a holistic approach that balances economic, social, and environmental considerations, taking into account the complex interactions between them.

The United Nations' 2030 Agenda for Sustainable Development, adopted in 2015, outlines 17 Sustainable Development Goals (SDGs) as a universal call to action to address global challenges and achieve sustainable development by 2030. These goals cover a wide range of issues, including poverty, health, education, gender equality, clean energy, climate action, and more, providing a framework for collective efforts towards a more sustainable and equitable world.

A Sustainable Development Report provides an in-depth assessment and analysis of progress made toward achieving sustainable development goals and targets. These reports typically evaluate a wide range of indicators across economic, social, and environmental dimensions to track advancements, challenges, and trends related to sustainability. Sustainability Development Reports serve as valuable tools for policymakers, institutions, and the public, offering comprehensive assessments of progress, highlighting areas that need attention.

In the post Corona Pandemic era, world is facing several challenges to fulfill the sustainable Development Goals (SDGs). However, the pandemic also provided an opportunity to rethink existing systems, accelerate digital transformation, and prioritize sustainability in recovery plans to build back better and more resilient societies.

O.P. Jindal University, Raigarh has portrayed one of its kinds of events and activities of moving towards a better and safer environment by implementing the SDGs within the university campus. By implementation of SDGs within the campus, the university has taken defined revolutionary steps toward social and environmental consciousness.



Adopted by the United Nations in 2015.

Blueprint to achieve a better and more sustainable future.

Integrated goals that recognize the action in one area will affect outcomes in others.

Universal call to action to protect the planet by 2030.

There are 17 SDGs.

Addresses global challenges.



## Note from Vice-Chancellor



**Dr. R. D. Patidar**

*Vice Chancellor,  
OPJU Raigarh*

Sustainable Development 17 Goals generated by The United Nations General Assembly focused on the priorities on which we need to work together for our Mother Earth and its Biodiversity. Imperative attentions are required to achieve the goals to diminish the negative futuristic impacts in terms of climate, quality education, clean and safe food and water and gender equity. Everyone should to be alert by mind and action to act on the set policies within timeline.

Universities play a crucial role in promoting and practicing sustainable development. They have the potential to influence society, advance knowledge, and shape future leaders.

O P Jindal University provides education and conduct research on sustainable development topics, fostering awareness, knowledge, and expertise in areas such as renewable energy, environmental conservation, social equity etc. It offers specialized programs, degrees, and courses focused on sustainability across various disciplines. It also serves as hubs for innovation and technological advancements. It often conducts research to develop sustainable technologies, eco-friendly materials, and solutions to address environmental challenges. University also collaborates with industries, governments, and communities to implement these innovations. Implementation of sustainable practices within the campus, promoting energy efficiency, waste reduction, water conservation, and green infrastructure are among the major steps. University engages with local communities and stakeholders to address sustainability challenges collaboratively. It has initiated outreach programs, partnerships, and service-learning opportunities that benefit communities, transfer knowledge, and promote sustainable practices. University collaborated globally, sharing knowledge, best practices, and resources to address global sustainability challenges. It has participated in international research networks and joint projects that advance sustainable development goals.

I am Happy to present O P Jindal University's sustainability report to showcase the efforts done within the academic departments, centers, student clubs and the administration collaboratively in promoting diverse sustainable development and continually evolving. I hope that the sustainability report of O P Jindal University Raigarh will not only provide clarity of our commitment but also motivate other universities, colleges of India to take such initiatives because we believe Live Differently so that Other may Simply Live.



# Commitment towards Sustainability

OP Jindal University (OPJU), established by the Jindal Education and Welfare Society, is committed to delivering a high-quality education through a world-class curriculum, innovative teaching methods, and dedicated faculty. The University is deeply devoted to sustainability and responsible environmental stewardship, evident in its efforts to create an eco-friendly campus. The Green Campus Initiative, guided by a well-defined vision and mission, addresses global challenges such as climate change, biodiversity loss, and waste management. Its primary mission is to expedite the achievement of Sustainable Development Goals at all levels. We will outline the core objectives of the Green Campus Initiative, shedding light on the university's vision, mission, and the significance of this endeavor.

O. P. Jindal University thrives to emerge as a green and sustainable campus, which not only works on the creating an environment of clean and green in the campus but also actively participates in constructing a sustainable society through its commitment to education, research, community engagement, and the evolution of its physical environment. It transcends being merely ecologically



responsible; its core mission includes addressing societal challenges through integrated education and research initiatives and fostering harmonious campus development in sync with its local surroundings. In essence, it signifies a holistic dedication to enhancing the welfare of individuals through pragmatic and diverse means.

OP Jindal University is dedicated to the pursuit of the United Nations (UN) Sustainable Development Goals (SDGs), encompassing 17 vital objectives. Our unwavering commitment to these global targets extends to our firm belief that our collective endeavors hold the potential to make a profound impact at local and regional levels.

Our mission is firmly rooted in a commitment to reduce our carbon footprint, curtail energy consumption, enhance waste management, and transform our university campus into a greener, more sustainable environment. As the world advances technologically and continues its journey of development, the depletion of our natural resources becomes increasingly apparent.

At OP Jindal University, we have wholeheartedly pledged ourselves to fostering a future that is not only sustainable but also equitable and bountiful for all. Empowered with the ability to catalyze positive change in society, we believe that the projects and initiatives we embark upon will not only benefit the broader community but also enlighten our students. These students, equipped with the knowledge and values of sustainability, will carry forth these principles into their individual capacities, furthering the cause of a sustainable future.



## Vision

- To be a role model among higher education institutions globally, aims to empower young minds to drive sustainable societal transformation through excellence in value-based education, research, innovation, and entrepreneurship.

## Mission

- **Develop Industry-Ready Talent:** Create programs aligned with new-age technologies to build a skilled workforce that drives societal growth.
- **Enhance Employability:** Implement outcome-based education using emerging technologies and experiential learning, equipping students to solve real-world problems and improve their employability.
- **Cultivate Global Collaborations:** Foster local and global partnerships to enrich teaching, research, and institution building.
- **Promote Holistic Leadership:** Incorporate liberal education to nurture well-rounded, globally competent leaders capable of multifaceted responsibilities.
- **Encourage Innovation and Entrepreneurship:** Establish an industry-focused environment that supports innovation and entrepreneurship, contributing to sustainable development.

## Core Values

- **Student-Centric Success:** Measure success through student outcomes
- **Academic Freedom and Trust:** Foster an environment of academic freedom and trust
- **Ethical Integrity:** Maintain the highest standards of ethics and integrity in all operations
- **Social Responsibility:** Develop sustainable practices and concern for the environment & Society
- **Inclusive Accessibility and Compassion:** Remain accessible to all facets of society without consideration of economic status





# Green Initiatives Team

**Mentor**

**Dr. R. D. Patidar**

*Vice Chancellor*

**Director- Sustainability**

**Dr. Siddharth S Chakrabarti**

*Dean-SoE*

**Additional Director**

**Dr. Sanjay Singh**

*Professor & Director-NSS*

**Convener**

*(Green protocol & Waste Management)*

**Dr. M. Kalyan Phani**

*Associate Professor (Sr Grade), Metallurgical Engineering*

**Convener**

*(Green Campus Initiatives & ECO Club)*

**Dr. Mahashakti Mahamaya**

*HoD, Civil Engineering*

**Coordinator**

**Dr. Taniya Sengupta Rathore**

*Associate Professor, SoS*

**Coordinator (Eco Club)**

**Dr. Anurag Sharma**

*Assistant Professor, Civil Engineering*

**Members**

**Dr. Deeptimayee Swain**

*Associate Professor, EE*

**Dr. Deepak Patel**

*Assistant Professor, Metallurgical Engineering*

**Prof. Namrata Ojha**

*Assistant Professor, SoM*

**Dr. Dharmendra Saini**

*Assistant Professor, Mechanical*



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<b>1</b>	<b>NO POVERTY</b>		End Poverty in All its Forms Everywhere
<b>2</b>	<b>ZERO HUNGER</b>		End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture
<b>3</b>	<b>GOOD HEALTH &amp; WELL BEING</b>		Ensure healthy Lives and Promote Well-being for all at all ages
<b>4</b>	<b>QUALITY EDUCATION</b>		Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for all
<b>5</b>	<b>GENDER EDUALITY</b>		Achieve Gender Equality and Empower all the Women and Girls
<b>6</b>	<b>CLEAN WATER AND SANITATION</b>		Ensure Availability and Sustainable Management of Water and Sanitation for all
<b>7</b>	<b>AFFORDABLE &amp; CLEAN ENERGY</b>		Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for all
<b>8</b>	<b>DECENT WORK AND ECONOMIC GROWTH</b>		Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for all
<b>9</b>	<b>INDUSTRY, INNOVATION AND INFRASTRUCTURE</b>		Build Resilient Infrastructure, promote Inclusive and Sustainable Industialization and Foster Innovation
<b>10</b>	<b>REDUCED INEQUALITIES</b>		Reduce Inequality Within and Among Countries



# Contents

<b>11</b>	<b>NO POVERTY</b>		Make cities and human settlements inclusive, safe, resilient and sustainable
<b>12</b>	<b>ZERO HUNGER</b>		Ensure sustainable consumption and production patterns
<b>13</b>	<b>GOOD HEALTH &amp; WELL BEING</b>		Take urgent action to combat climate change and its impacts
<b>14</b>	<b>QUALITY EDUCATION</b>		Conserve and sustainably use the oceans, seas and marine resources for sustainable development
<b>15</b>	<b>GENDER EDUALITY</b>		Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and half and reverse land degradation and halt biodiversity loss
<b>16</b>	<b>CLEAN WATER AND SANITATION</b>		Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
<b>17</b>	<b>AFFORDABLE &amp; CLEAN ENERGY</b>		Strengthen the means of implementation and revitalize the global partnership for sustainable development



# OPJU CONTRIBUTION

O P Jindal University plays a vital role in advancing sustainable development goals (SDGs) through various initiatives, research, education, and practical actions. Here are several ways universities contribute to sustainable goals:

<b>Curriculum Integration</b>	University integrates sustainability principles into their academic programs across disciplines. This includes offering courses, majors, and degrees specifically focused on sustainability and incorporating sustainability concepts into existing courses.
<b>Research &amp; Innovation</b>	Active involvement of faculties, staff and students in research on sustainable technologies, environmental conservation, social equity, renewable energy, and other relevant areas. This research contributes to finding solutions to global challenges and informs policy-making.
<b>Campus Sustainability</b>	University implements sustainable practices within their campuses. This involves reducing carbon footprints, promoting renewable energy use, implementing waste reduction and recycling programs, adopting green building standards, and encouraging sustainable transportation options.
<b>Community Engagement</b>	University engages with local communities to address sustainability issues. They initiate outreach programs, partnerships, and projects that aim to improve living conditions, promote environmental stewardship, and foster sustainable development in surrounding areas.
<b>Student Engagement and Activism</b>	Students often drive sustainability initiatives on campus. They participate in sustainability clubs, organize events, advocate for sustainable practices, and push for institutional changes that prioritize sustainability.
<b>Partnerships and Collaboration</b>	University collaborates with various stakeholders, including governments, businesses, NGOs, and other academic institutions, to address sustainability challenges. These partnerships have lead to joint research projects, knowledge-sharing, and collective action.
<b>Policy Influence</b>	University contributes to policy discussions and influence decision-making processes related to sustainability at local level. It is providing recommendations to policymakers.
<b>Capacity Building</b>	University trains future leaders, professionals, and policymakers with knowledge and skills in sustainability. This capacity-building ensures that graduates are equipped to tackle complex sustainability challenges across different sectors.
<b>Ethical Investments</b>	University aligns its investments and endowment portfolios with sustainable practices, opting for socially responsible investment strategies that consider environmental, social, and governance (ESG) factors.



# CERTIFICATES







# NO POVERTY



## End Poverty in All its Forms Everywhere

### Significance

Equal Employment Opportunity

### Related Policies/ Guidelines

Employment Guidelines are adopted as per the norms of Government of India and welfare measures are provided to all employees for all divisions.

### Initiatives and Achievements

#### Courses/Subjects

- Indian Economy (MGT-B 407): A course looks at economic development of India. It offers a framework for understanding the outcomes of economic development of the country.
- Industrial Relations & Labour Laws (HRM 502): It includes all the acts and law generated to protect the rights of an employee.

#### Research

- Saket Jeshwani: How Employees Raise Voice? A Model of Employee Voice Regulation, SCMS Journal of Indian Management, 2022.

#### Events

- On the occasion of birthday of Shri O. P. Jindal ji (Babuji), the Vice Chancellor of OPJU Dr R. D. Patidar with USR team visited the schools of adopted villages- Govt. Pre-Middle School, Tumidih, Govt. High School, Samaruma, Govt. Higher Secondary, School and Govt. Middle School, Chharratangar, donated away the Sports & games items and books to the schools.
- The students of OPJU visited adopted village- Tumidih on 16th May 2023 and organized Clean Village, Save Soil and Safety from Dengue campaign. The volunteers cleaned the village and interacted with the villagers. They discussed with them about the importance of cleanliness, side effects of over use of chemical fertilizers and how to prevent from Dengue.
- The students of OPJU visited adopted village- Samaruma on 18 April 2023 and organized Clean Village, Save Soil and Safety from Dengue campaign. The volunteers cleaned the village and interacted with the villagers. They discussed with them about the importance of cleanliness, side effects of over use of chemical fertilizers and how to prevent from Dengue.

#### Others

- Providing fair wages for all individuals, irrespective of gender, race, or ethnicity.
- Implementation of Provident Fund for all employees.
- Med claim facility to the employees and their families as healthcare service.
- Employment opportunity for the neighboring villages.
- Adoption of five villages by the university:
- Punjipathra, Tumidih, Samaruma, Chharratangar, Padkipahr





## Outcomes

- Enables to create a goodwill and confidence amongst the local communities.
- Enables to empower rural population.
- Creates an open work environment within and outside the institution.
- Bridges the gap that is created of being a large institution and the common community member which encourages local development as well and enhances the local and sustainable incomes and works towards poverty alleviation.

## Future Planning

- Conducting need assessment of the adopted villages.
- Developing priority list of basic needs.
- Enable to create more employment.
- Facilitate income generation and additional income sources.

## Glimpses





**Dr. Biranchi Prasad Panda**

Professor  
School of Management, OPJU

“OPJU imparts the skills, education and training to the young professionals to make them industry-ready who will be able to eradicate poverty from their societies. Further, the NSS and USR volunteers of OPJU conduct various activities in the adjoining communities and adopted villages. These include awareness programs on – Food & Nutrition; Healthcare, Hygiene & Cleanliness; Human Rights & Social Protection; Basic services, Common Technologies & Economic Resources; Resilience to Environmental, Economic & Social Disasters; Insurance of Lives, Assets and Agriculture Crops. In addition, it donates Groceries, Blankets, Sanitary Pads, and Study Materials & Stationeries to the poor and needy people in the locality. Though eradication of poverty is a big challenge, still it is possible to slowdown and zero-down thereby increasing the living standard in the country as well as on the planet earth.”







## ZERO HUNGER



**End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture**

### Significance

Ensuring Food security and nutrition for the local communities.

### Related Policies/ Guidelines

The university being a not-for-profit entity, conducting charitable activities as CSR activities which comprise various community activities with the villagers around the university.

### Initiatives and Achievements

#### Events

- NSS and the Department of Civil Engineering, OPJU embraced a philanthropic activity initiative at APNA GHAR ASHRAM, Raigarh. This activity, held on December 11, 2023, was devoted to supporting individuals contending with both physical and mental challenges.
- NSS AND CENTRE FOR SOCIAL EMPOWERMENT, OPJU team members visited NETRAHEEN BAL VIDYA MANDIR, AMLIDIH on 10th December 2023 and interacted with the students and teachers; and donated vegetables & grocery items to the School.
- The volunteers and faculty members of the Department, OPJU of Civil Engineering in association with NSS AND CENTRE FOR SOCIAL EMPOWERMENT, OPJU visited NETRAHIN BAL VIDYA MANDIR, AMLIDIH on 7th November, 2023 and celebrated Diwali moments. They interacted with the kids, enjoyed the moments and donated essential grocery items like Rice (35 kg), Pulse and many more to the School.
- NSS AND CENTRE FOR SOCIAL EMPOWERMENT, OP JINDAL UNIVERSITY, RAIGARH in association with JSP Foundation and OPJH organised a Health Check-up Programme at Govt. Middle School, Chharratagar (Adopted village) on 31st October 2023. Health Check- up of 112 Students (class-6th, 7th & 8th) was done by eminent Doctors.
- NSS, CENTRE FOR SOCIAL EMPOWERMENT and NAAC Steering committee members of OPJU visited NETRAHIN BAL VIDYA MANDIR, AMLIDIH on 10th October, 2023. The members interacted with the Managers, students and teachers of the School; and donated RICE (104 KG), BEDSHEETS (12), DRAWING SHEETS (50) for Braille Practice, SALT and SANITARY NAPKINS PACKETS to the School.
- The Department of Civil Engineering embraced a philanthropic initiative by orchestrating a National Service Scheme (NSS) activity at Apna Ghar Ashram in Raigarh. This compassionate event, held on December 11, 2023, was devoted to supporting individuals contending with both physical and mental challenges.
- NSS AND CENTRE FOR SOCIAL EMPOWERMENT, OPJU in association with JSP Foundation donated grocery items to NETRAHIN BAL VIDYA MANDIR, Amlidih.
- NSS and Centre for Social Empowerment, OPJU members visited NETRAHEEN BAL VIDYA MANDIR, AMLIDIH ( Adopted village) and donated grocery items, etc.



## Outcomes

- Ensuring better health of the villagers near around the university.
- Ensuring better performance standards of the students in the villages nearby.

## Future Planning

- Planning to offer nutritious and affordable food choices within the campus.
- Implementation of measures to reduce food waste on campus.
- Innovations and training related programs for local farmers.
- Awareness programs for the employees and students

## Glimpses







**Dr. Girish C Mishra**

Dean  
School of Science, OPJU

“Zero Hunger initiative can promote sustainable agriculture practices that protect the environment, preserve natural resources, and mitigate climate change. OPJU has been consistently striving to educate students about the complexities of hunger, food security, and nutrition and spreading awareness inculcating required sentiments among the students for achieving food security and improved nutrition towards uprooting hunger.

”







## Good Health and Well-Being



## End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture

### Significance

Health and Wellness centre and camps for all in-house and nearby villages.

### Related Policies/ Guidelines

Arrangement of medical facilities, wellness centre and fitness clubs for the inmates of the university campus by developing the related infrastructure.

### Initiatives and Achievements

#### Events

- NSS and CENTRE FOR SOCIAL EMPOWERMENT, OPJU in association with Dept. of Electrical Engineering organized CLEAN CAMPUS DRIVE and a workshop on WOMEN'S PERSONAL HYGIENE at Govt. Pre- Middle School, Tumidi h(Adopted village) on 4th September 2023.
- NSS, OPJU in association with JSP Foundation organised a Workshop on WOMEN'S HEALTH AND HYGIENE for the girls of Govt Middle School, Chharratangar on 6th September 2023.The workshop was conducted by Ms Nikita Bhoy and Ms Suman Dansena.
- NSS, OPJU in association with JSP Foundation organised a Workshop on WOMEN'S HEALTH AND HYGIENE for the girls of Govt High School, Samaruma on 18th August 2023.The workshop was conducted by Dr Kavita Patel, Dr Dipti Shukla and Mrs Kavita Deshmukh. They guided the girl participants on their personal health and hygiene for Good Health.
- NSS, OPJU in association with JSP Foundation organised a Workshop on WOMEN'S PERSONAL HYGIENE for the women of Punjipathra 22nd August 2023 at OPJU campus. Dr Saumya Singh and Dr Debasmita Samal conducted the workshop. 25 women participated in the workshop. The resource persons guided the participants about their personal hygiene and distributed sanitary napkins, etc. to all the participants.
- NSS OPJU, Raigarh in association with JSP Foundation conducted a Workshop on Women's Personal Hygiene for the girls of Govt. Higher Secondary School, Chharratangar on 23rd August 2023. The workshop was conducted by Mrs Kanchan and Ms Kirti.
- NSS and Centre for Social Empowerment, OPJU in association with JSP Foundation organised a Workshop on "Mental Health and Well-being" for the students of Govt. Higher Secondary School, Chharratangar (Adopted village) on 25th August 2023. The resource person Dr Anuja conducted the workshop.
- NSS OPJU, Raigarh in association with JSP Foundation conducted a Workshop on Women's Health & Hygiene for the girls of Govt. Middle School, Chharratangar on 11th July 2023. The workshop was conducted by Dr Kavita Patel and Dr Saumya Singh and Ms Komal Sharma.



- International yoga day was celebrated at OPJU on 21st June 2023. The students, employees and staff members enthusiastically participated in the Yoga Session and learnt about the objectives and benefits of Yoga in daily life. Mr. Sambit Sahu and Ms. Jyoti Sahu from OPJCC, Raigarh conducted the session as the Resource Persons. They talked about the Yoga, its impact and benefits and the theme of the Day- Yoga for Vasudhaiva Kutumbakam. No. of participants-30.
- NSS OPJU, Raigarh in association with JSP Foundation conducted an activity on Women's Health & Hygiene for the women of village-Tumidih at Pradhan Colony on 13th July 2023. The packets of Sanitary napkins were given away to all the participants. Total 32 Women participated in the workshop.
- Games and Sports Department of OPJU conducted the following: Pilates Exercise Session on 26 & 27 October (for female) and 30 & 31 October (for male) Faculty and Staff Members. Cycle Race on National Unity Day, ecofriendly on 31 October 2023.

### Others

- Closed Dumping pit for chemical waste discharging from chemistry Laboratory.
- Practicing all COVID-19 WHO guidelines/protocols.
- Developed a better quality of life of the community in the village due to access to and improved facilities and services.
- The entire campus is a non-smoking, no tobacco, no drugs and no alcohol zone.
- Providing clean and safe drinking water, safe sanitation practices, better living facilities to the children and to 100% in-house staff within the campus.
- Ensuring appropriate practices for dealing with hazardous substances.

### Future Planning

- Providing wellbeing programmes for staff and students to reduce incidence of communicable diseases and promote mental health
- Promotion of bicycles and electronic vehicles for campus movement by residents and visitors.
- Awareness programs for the employees and students



## Glimpses



**Dr. Taniya Sengupta Rathore**

Associate Professor  
Dept. of Biotechnology, SoS, OPJU

“ At OPJU, Good Health and Well-being are integral. We champion a holistic approach, ensuring students thrive academically and personally. Our initiatives encompass mental health support, physical fitness programs, and health education, fostering a vibrant community. By prioritizing well-being, we empower individuals to excel in their studies and lead fulfilling lives. ”





## QUALITY EDUCATION



**Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for all**

### Significance

Comprehensive education through learning by doing practices to encourage grabbing the opportunities.

### Related Policies/ Guidelines

National and International Collaborations with other institutes for international level education.

### Initiatives and Achievements

#### Courses/ Subjects

- Business Etiquette & Soft Skills (MBA207): The course introduces concepts related to business etiquette and soft skills and its applications in the contemporary context
- One Thing & Extreme Ownership (MBA304): This course help the students understand the tools and techniques of personal effectiveness that produces extraordinary results and extreme ownership, so essential for corporate leaders of today.
- Entrepreneurship & Innovation (MBA302): This course is to facilitate the development of skills and a knowledge base that will enhance the student's ability to more effectively understand, interpret and implement entrepreneurial acts and new venture creation.
- Business Ethics & Corporate Governance (MBA403): This course is to enable the development of a sound understanding of corporate governance practice in a national and international context.

#### Events

- The Department of Mechanical Engineering organized an expert talk on How to prepare for the GATE and Job Interviews on 15th February 2023. The session was delivered by Miss Bharti Sahu, Assistant Manager, JSP Raigarh. She guided the pre final year B.Tech students for GATE and discussed detailed strategy to follow for campus placement exams.
- School of Management, OPJU organized an online workshop on Entrepreneurship Skills, Attitude & Behavior Development on 28th February, 2023 in association with Institution's Innovation Council. The speaker of the session was Dr. Sabat Kumar Digal, Head and Associate Professor, Rama Devi Women's University Bhubaneswar.
- In order to make the students interview-ready for the upcoming campus drives, CDC organized one-week (13-17 Feb 2023) online Placement Preparation Training Program (Aptitude, Reasoning, GD and PI) for the final year students of School of Management at OPJU in online mode with external experts of GTT Foundation Ms. Mitali Pattiwal.
- In order to make the SoE students interview-ready for the upcoming campus drives, CDC organized one-week (20-24 Feb 2023) online Placement Preparation Training Program (Aptitude, Reasoning, GD and PI) for the pre annual year students in online mode with external experts of Talent Hunt, Mr. Chand Basha.



- The Dept. of Civil Engg., OPJU in association with UltraTech Cement and the Centre for Industry-Academia Collaboration (CIAC) organized a 2-Days (21 & 22 September 2023) workshop on Professional Practices in the Cement and Construction Industry.
- The Dept. of Mechanical Engg. in collaboration with the Career Development Centre organized for its 5th & 7th semester students, the following sessions  
How to Prepare Professional Resume on 14 September 2023  
Interview Readiness on 26 September 2023.
- Students of the Mechanical and Electrical Engg. Dept. had the opportunity to participate in an insightful session on Entrepreneurship and Innovation as a Potential Career Path on 6 October 2023. The session focused on career and business opportunities for EV enthusiasts. The session was organized by the OPJU Innovation Center, in collaboration with Formula Bharat and IIC-OPJU.
- OP Jindal University organized 5 Kilometer Run on the occasion of National Sports Day (Major Dhyan Chand's Birthday) under the banner of FIT INDIA MOVEMENT (HUM FIT TO, INDIA FIT) for faculty, staff, security, and students, on 29 August 2023 at 4: 00 pm.
- School of Science in association with Institution's Innovation Council organized Innovation Expert Talk on Skill Based Learning and Employability by Dr. Sanjay Kumar Singh on 26 August 2023. Faculty, and students, on 29 August 2023 at 4: 00 pm.
- To impart awareness about the advance trends of Biotechnology, Dept. of Biotechnology, School of Science OPJU organized an one day skill enhancement workshop entitled "Awareness of Trends in Biotechnology" for B.Sc. 1st Year Biotechnology (H) students on 13th April 2023, having three sessions.
- Department of Biotechnology, School of Science OPJU has organized a guest talk entitled "The Entrepreneur within You: From Dreamer to Achiever" for B.Sc. 1st and 3rd semester Biotechnology (Hons.) students on 31st August 2023. The Resource Person for the session was Mr. Swapnil D Topre, CEO & Founder, Migrow Group of Companies, Pune, Maharashtra.

## Others

- Overall 65 MOUs has been signed with National and International Institutes.
- 95% final year students were placed through CDC in several industries.
- Boards of Studies meeting for updating curriculum are done with the experts from industries and academics.
- Smart boards, Projectors are installed in classes and labs as teaching learning process.
- Mentor-Mentee scheme applicable to all departments of the university.

## Outcomes

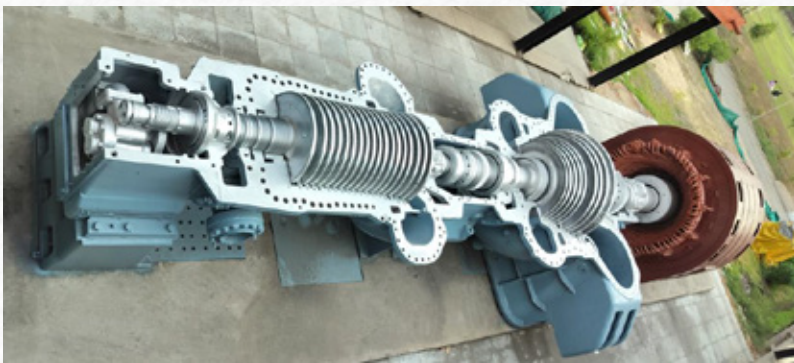
- Students obtaining successful positions and progressing high in their careers.
- Selections in IITs for higher education.
- Effective extracurricular activities that enables the students to nurture their passion and careers equally.
- Creating interest among student which will help them in learning many concepts through interactive-audio- visual teaching contents.
- Easy communication between Institution and Parents for student related academic activities.



## Future Planning

- Accelerating implementation of NEP 2020 for all the schools of the university.
- Programmes to enhance literacy and education in communities and schools in the university's local area and beyond
- Providing more advance and innovative facilities that promote and encourage inclusive learning.

## Glimpses







**Dr. R. D. Patidar**

Vice Chancellor,  
OPJU Raigarh

“ The impact of quality education stretches its periphery beyond the classroom. The commitment of OP Jindal University to sustainable development and community engagement have created a dynamic effect, empowering individuals to make progressive contributions to the society and beyond. The interdepartmental collaboration across the schools on various educational and extracurricular initiatives have shown us the incredible impact on quality education curating the future leaders. The assurance to the Sustainable Development Goals is evident, and we are proud to be part of a movement that prioritizes education for a sustainable future.





# 5

## GENDER EQUALITY



4

## Achieve Gender Equality and Empower all the Women and Girls

### Significance

Equal opportunity for employment

### Related Policies/ Guidelines

Women empowerment and maintenance of male to female ratio for employees and students.

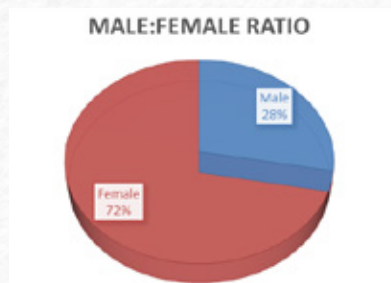
### Initiatives and Achievements

#### Events

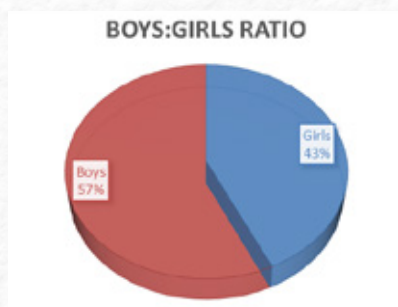
- Internal Complaints Committee (ICC) in association with Social Empowerment Club organized a webinar on Sexual and Mental Harassment of Women at Workplace: Legal Outlook on 27 October 2023. Prof. Gagan-deep Kaur (School of Law, UPES, Dehradun) was the resource person.

#### Others

- Male to female ration of employee is 28:72 (male: female)



- The female to male ratio for students enrolled in the university is 43:57 (Girls: Boys)



### Outcomes

- Implementing workplace gender equity strategies, including those for improving the representation of women in university leadership positions and senior academic roles.
- Women are entitled to work with dignity and freedom from fear.
- The university provides more connected environment with better wellbeing.
- Promote women in the institution based on their merit and performance.





- Engagement with the local community women to promote female education and empowerment through employment.
- Providing childcare within campus and promoting workplace flexibility.

## Glimpses



**Dr. Saumya Singh**

Associate Professor (Sr. Grade)  
Dept. of Mathematics, SoS, OPJU

“ Gender equality is a central goal for OPJU. In short span of time, we have accomplished many milestones in increasing participation of women in our staff and faculty positions both at the entry and senior leadership positions. In the coming years, we will strengthen resource investment in research, teaching and engagement on gender rights and advocacy, rights of sexual and gender minorities, and related issues.







## CLEAN WATER AND SANITATION



Ensure Availability and Sustainable Management of Water and Sanitation for all

### Significance

Ensuring availability and sustainable management of water and sanitation.

### Related Policies/ Guidelines

- Water Harvesting Facilities within the campus.
- Effectiveness of a range of sanitation interventions and provide a comprehensive framework for health-protecting sanitation.

### Initiatives and Achievements

#### Courses/ Subjects

- Environmental Sciences (SOE-B-Civ-23-107): After completing the course, the students will be able to gain in-depth knowledge of natural processes and resources that sustain life. Develop critical thinking for shaping strategies for environmental protection, conservation of biodiversity, environmental equity, and sustainable development.

#### Research

- Kavita Patel "Comparative Study of Physico- chemical Parameters of Ground water of Residential and Industrial area of Sirgitti in Bilaspur District" *ijmst*, vol. 10, no. 4, pp. 1128-1134, Sep. 2023.

#### Events

- Department of Physics, School of Science organized a 30 hours' value added course on Green Technology for Sustainable Development during 22 nd March to 21 st April 2023. The objective of the course was to impart latest technology and capacity building of students towards green technologies which are becoming increasingly important for ensuring sustainability.
- A meeting of CSIR-Institute of Minerals and Materials Technology (IMMT) Bhubaneswar, Jindal Power Limited Tamnar, and OP Jindal University Raigarh was organized through ZOOM on 03.02.2022 at 4.30 – 5:30 PM. The meeting was attended by Shri Chavinath Singh, Executive Director & Plant Head, JPL Tamnar, Mr. R D Katre, Vice President, JPL Tamnar, Dr. P. K. Senapati, Head, D&PE, with his team from CSIR-IMMT Bhubaneswar.
- NSS, OPJU in association with JSP Foundation organised a Workshop on WOMEN'S PERSONAL HYGIENE for the women of Punjipathra 22nd August 2023 at OPJU campus. Dr Saumya Singh and Dr Debasmita Samal conducted the workshop.
- NSS OPJU, Raigarh in association with JSP Foundation conducted a Workshop on Women's Personal Hygiene for the girls of Govt. Higher Secondary School, Chharratangar on 23rd August 2023. The workshop was conducted by Mrs Kanchan and Ms Kirti.



- NSS, OPJU in association with JSP Foundation organised a Workshop on WOMEN'S HEALTH AND HYGIENE for the girls of Govt High School, Samaruma on 18th August 2023. The workshop was conducted by Dr Kavita Patel, Dr Dipti Shukla and Mrs Kavita Deshmukh.

## Others

- Rain water harvesting pit.
- Sanitary Napkin facility in girls' common room.
- Dustbins in different locations throughout the campus.

## Outcomes

- Responsible use of potable water.
- Clean Environment throughout the campus.
- Increase in green cover area of up to 84%.

## Future Planning

- Work towards achieving zero waste generation campus.
- Developing management and guardianship plans for on-campus biodiversity and ecosystems

## GimpSES







**Dr. Surendra K. Dwiwedi**

Director of Administration,  
OPJU Raigarh

“ *CLEAN drinking-water and hygienic sanitation practices are vital keys to human health and well-being. Significant progress on SAFE water and sanitation provision prevents life-threatening Neglected Tropical Diseases, eventually building a strong community around us staying in a healthy environment.* ”







## AFFORDABLE & CLEAN ENERGY



Ensure Access to Affordable, Reliable,  
Sustainable and Modern Energy for all

### Significance

Reduction in Consumption of fossil fuel as conventional source of energy.

### Related Policies/ Guidelines

Green energy policies adopted by the university.

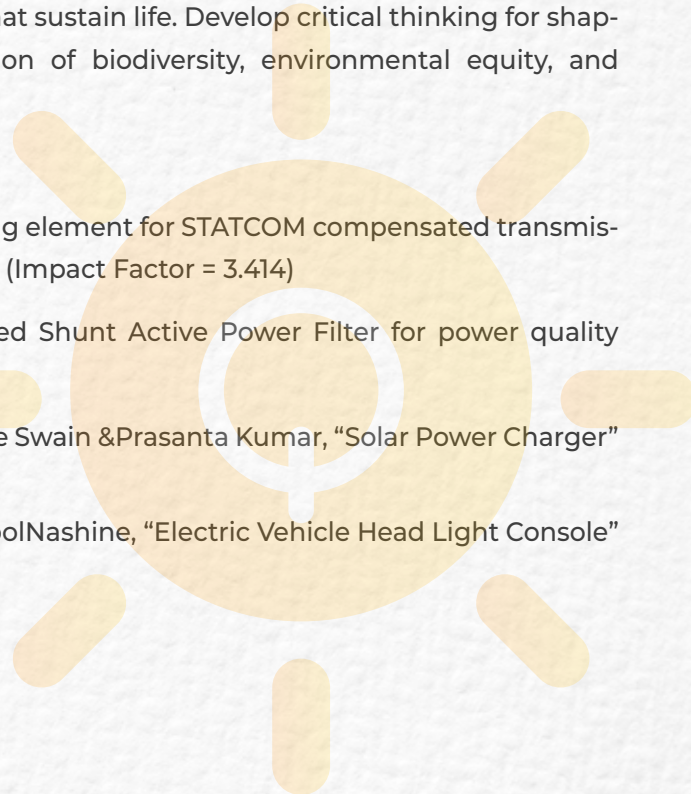
### Initiatives and Achievements

#### Courses/ Subjects

- Renewable Energy Sources and Systems (SOE-B-EE604): The course introduces concepts related to renewable energy sources and systems and its applications in the power quality improvement.
- Installation Commissioning, Maintenance & Testing of Electrical Equipment (SOE-B-EE703 (6)): This course help the students understand the maintenance and testing techniques of electrical equipment that produces extraordinary results in getting affordable and clean energy.
- Electric Vehicles (SOE-B-EE510): This course introduces concepts related to Electric vehicle and its effectiveness in the reduction of carbon dioxide in environment i.e. in climate.
- Advanced Process Control & Instrumentation (SOE-B-EE703 (5)): This course enhances the students understanding on advanced process control and instrumentation, which will helpful to enhance quality of power in advanced technique and also reduce pollution of climate.
- Environmental Sciences (SOE-B-Civ-23-107): After completing the course, the students will be able to gain in-depth knowledge of natural processes and resources that sustain life. Develop critical thinking for shaping strategies for environmental protection, conservation of biodiversity, environmental equity, and sustainable development.

#### Research

- Dr. Sandeep Biswal, "Taylor series based protection starting element for STATCOM compensated transmission line," Electric Power Systems Research, vol. 204, 2022. (Impact Factor = 3.414)
- Dr. Sushree Diptimayee Swain, "Adaptive Controller based Shunt Active Power Filter for power quality enhancement in Grid-integrated PV systems" Elsevier.
- Dr. G.Madhusudhana Rao, R.D Patidar, Sushree Diptimayee Swain &Prasanta Kumar, "Solar Power Charger" Patent.
- R.D Patidar, Shashikant Kaushaley, Rakesh Patidar, Mr.KapolNashine, "Electric Vehicle Head Light Console" Patent.





## Events

- The Five-Days Online Workshop on “Renewable Energies and Plug in Vehicles Integration in Microgrid ” on 14th November- 18th November 2022 at 2.30 pm to 4.30 pm had been organized by Department of Electrical Engineering, OP Jindal University, Raigarh (C.G.). The programme was co-ordinated by Dr Sushree Diptimayee Swain.
- Department of Electrical Engineering, O P Jindal University has organized “A National Level Poster Presentation for Students Symposium” on the occasion of National Energy Conservation Day on 14th December 2022.
- The Centre for Industry-Academia Collaboration in association with the Department of Electrical, Mechanical & Metallurgical, and Materials Engineering, IQAC has organized an online one-day workshop on "Design and Development of sustainable technology Aligned Curriculum" on January 12, 2022 to discuss and implement an industry-linked curriculum for the ongoing B. Tech program in the departments.
- Dr Siddharth S Chakrabarti, Professor & Head- Mechanical delivered a talk at IEEE R10 Industry-Academia Workshop on “Research and Innovation on Reduction of Carbon Footprint” organized by M/S Jindal Power Limited (JPL), Tamnar, and OPJU, Raigarh on 20th September 2022. The session was attended by industry professionals and academicians.
- Department of Mechanical Engineering organized a 5 Days Online Faculty Development Program on “Energy Management in Power Plants” in association with IEEE Chapter, Chhattisgarh state Renewable Energy Development Agency (CREDA), Institutional Innovation Council and Jindal Power Limited, Tamnar from September 05-09, 2022 in online mode.
- The five-day online workshop on power electronics and its applications using OPAL-RT has been conducted from 20.02.23 to 24.02.23. The workshop was designed to provide participants with practical knowledge and experience in the field of power electronics and its applications i.e., electric vehicle, solar pumps, PV applications, multi-port converters and so on.
- OP Jindal University, Raigarh - Institutions Innovation Council (under the Ministry of Education's Innovation Cell) organized Energy Conservation Meet on 13 December 2021 on the theme of Energy Conservation in association with NSS and NTPC, Lara. The objective of this workshop was to create awareness about energy conservation.

## Others

- The university's lighting system adheres to the 2007 Energy Conservation Building Code (ECBC) norms. Notably, our campus is illuminated by an energy-efficient LED lighting system in 90% of common areas, exemplifying our commitment to conserving energy.
- Sensor attached light facilities in corridors with timer, ensuring switching on/off accordance to body heat.
- External street and garden lights are equipped with astronomical timers, ensuring precise on/off switching in accordance with sunset and sunrise timings. This approach not only enhances energy efficiency but also contributes to a more sustainable and eco-friendly campus environment.

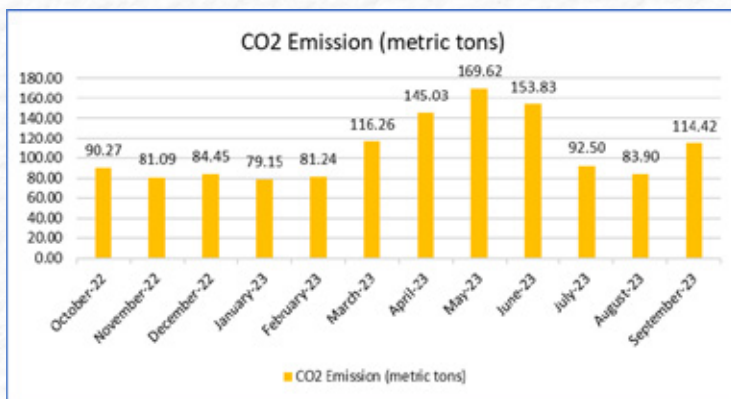


## Outcomes

- Decrease in the dependence on conventional power.
- Maximizing the use of solar power system in Hostels.

## Future Planning

- Work towards achieving zero consumption of conventional energy.
- Self sufficient power generation versus utilization.
- Development of long term management plans.



## Glimpses







**Dr. Dharmendra Singh Saini**  
Assistant Professor  
Dept. of Mechanical Engineering, OPJU

“ As a professor deeply invested in sustainable development, I commend our university’s commitment to affordable and clean energy initiatives. The institution’s innovative approach not only fosters a greener campus but also empowers students to tackle global energy challenges. It’s inspiring to witness our collective efforts driving impactful change towards a more sustainable future. ”





## DECENT WORK AND ECONOMIC GROWTH



Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for all

### Significance

Enabling associated economic activities due to the establishment of the university at this location.

### Related Policies/ Guidelines

Promotion of overall economic development through wide ranging opportunities.

### Initiatives and Achievements

#### Events

- Dr. Arindam Patra and Prof. Suchismita Panda, Dept. of Humanities, SoS successfully completed the 5-Day online FDP on the theme Inculcating Universal Human Values in Technical Education organized by All India Council for Technical Education (AICTE) from 6 to 10 November 2023.
- The Department of Mechanical Engineering, School of Engineering, OPJU in association with the SAEIN-DIA Collegiate Club of OPJU on 30th November 2023, hosted an insightful expert session for students, focusing on the construction of formula racing cars.
- Dr. Umesh Vishwakarma, Dept. of Mechanical Engg. successfully completed a 12-week online NPTEL-AICTE Faculty Development Programme on Automation in Manufacturing offered by IIT Madras.
- Prof. Vinod Nagpure and Dr. Swapnasarit Kar of Civil Engg. Dept. delivered sessions in a Faculty Development Program on Recent Advancement in Civil Engineering organized at J D College of Engineering and Management, Nagpur respectively on 29 & 30 November, 2023.
- School of Management organized a Faculty Development Program on Innovative Solutions to Research with SPSS from 9-13 October 2023, exclusively for the faculty members, research scholars and students. This FDP enabled the participants to enhance their research and analytical skills using the statistical software package SPSS.
- A 5-Days online FDP on Recent Trends in Mathematics & Technology organized by Dept. of Mathematics from 9-13 October 2023.
- Prof. Shikha Tiwari of Civil Engg. Dept. attended an FDP in Recent Trend in Mathematics and Technology from 9 to 13 October 2023.
- Prof. Asimkiran Dandapat of CSE Dept. successfully participated in the 1-Week FDP in Hybrid Future of AI and ML in Cyber Security organized by NIT Patna.
- Prof. Pradeep Kumar Shrivastava of CSE Dept. participated in a 5-Days FDP on Recent Trends in Blockchain Technology & Cyber Security organized by the Dept. of Computer Science & Engg. of JIS University, Kolkata
- Dr. Saroj Kumar Chandra of CSE Dept. successfully delivered an expert talk in the 5-Days online FDP on Recent Trends in Mathematics and Technology held on 9-13 October 2023.



- Dr. Dipti Shukla of SoS attended one-week National Level Faculty development program on Cloud Infrastructure (AWS) organized by department of CSE, JNTUK University College of Engineering Narasaraopet,
- Dr. Arindam Patra and Ms. Suchismita Panda of SoS completed the NPTEL-AICTE Faculty Development Program course Developing Soft Skills and Personality with a consolidated score of 75 and 62 %, respective-
- Academic Staff College (ASC) of OPJU in association with Internal Quality Assurance Cell (IQAC), and NAAC Steering Committee organized a Faculty Development Program (FDP) on Outcome Based Education through Attainment of CO, PO and PSO on 16 September 2023.
- Prof. Narendra Dewangan and Prof. Princy Diwan of CSE actively participated in a 1-week online FDP on Research Methodology and IPR organized by Indian Institute of Information Technology, Ranchi, Jharkhand from 9 to 13 September 2023.
- Dr. Sushree Diptimayee Swain and Prof. Pushpanjali Shadangi of Electrical Engg. attended a FDP on Smart Grid and Integration of Distributed Generation during 28 August to 1 September 2023.
- Dr. Taniya Sengupta Rathore of SoS participated in 5-Days International Faculty Development Program on Recent Advancement in Nutraceuticals held on 18 to 22 September 2023 organized by Galgotias University.
- Dr. Ashish Sharma of CSE participated in 1-week online Faculty Development Program on Exploring Data Science: Foundations to Advanced Analytics, organized by Amity University, Patna, 2023. He also participated in one Week Online Faculty Development Programme on AI/ML and Data Science for Industry 4.0 ( Basic Level), organized by CSE Dept., NITTTR, Chandigarh from 21 to 25 September 2023.
- School of Engineering OP Jindal University Department of Electrical Engineering has organized a Short-term training program on "Role of IoT in Smart Systems and Infrastructure" from 3 - 7 October 2023.
- The Keynote speaker included eminent industry experts and academics from various NITs. In the STTP more than 150 candidates have actively participated across the country.

## Others

- Providing appropriately positioned and supported scholarship and financial assistance schemes for students in need.
- Sustainable economic sources for the local communities.

## Outcomes

- Allows all employees to work in good and safe conditions, to be paid fairly and to provide his or her family with social protection.
- Improvement in Living Quality.
- Allows the employees to progress from a professional perspective, to be understood in the workplace and
- Men and women employees are getting the same opportunities.
- Increase in girls' students' enrolment through different schemes.

## Future Planning

- Imparting more technical and vocational education and training aims to reduce the number of unemployed youth by increasing access to training opportunities.
- More appreciation programs for the value of different forms of work, such as paid work, unpaid care work, voluntary work and creative expression.



## Glimpses



OPJU  
OP Jindal University, Raigarh  
Presents  
A Session on  
**Problem Solving and Ideation  
Workshop for Innovation**

**Speaker**  
**Mr. Harishankar Dewangan**  
Asst. Manager and Team Lead  
Data Analytics (JSP, IT Department)

30 October 2023 11 AM-12 PM TB-01

**Coordinators**  
Dr. Arti Vaish, Prof. Pradeep Shrivastava

OPJU G20  
**Online Course on  
AUTOCAD  
Essentials**

**Training Objectives**

- Understanding the AutoCAD workspace and user interface.
- Using basic drawing, editing, and viewing tools.
- Organizing drawing objects on layers.
- Using reusable symbols.
- Preparing a layout to be plotted.
- Adding text, hatching, and dimensions.
- To present drawing in detailed and visually impressive way.
- To prepare file placements in various compatible.

**Resource Person**  
**Mrs. Leena Behara**

Date of Commencement: 12 Oct 2023  
Course Duration: 12 - 17 Oct 2023 (10 Hours)

Register Online (Free)  
<https://forms.gle/bH1XQ1KP2HHC8B9>

Organized by: Department of Mechanical Engineering, OP Jindal University, Raigarh

Robot Model and Controlling

**Hardware Model:**

- Passive hinges
- 6V DC motors
- Omnidirectional wheels
- Arduino mega controller
- Motor controllers
- Encoders
- 11.1 V LiPo batteries

Figure: Hardware platform.



**Dr. Gopal Krishna Rathore**  
Associate Professor  
School of Management, OPJU

“As a faculty at OPJU, I've witnessed our institution's pivotal role in nurturing skilled graduates who champion decent work and economic growth. Our multidisciplinary approach, research endeavors, and emphasis on ethical practices prepare students to become catalysts for inclusive economic development, fostering a brighter, fairer future for communities worldwide.”





## INDUSTRY, INNOVATION AND INFRASTRUCTURE



**Build Resilient Infrastructure, promote Inclusive and Sustainable Industrialization and Foster Innovation**

### Significance

We blend academic excellence with innovation, offering industry-aligned programs and a globally-minded, startup-friendly culture for transformative student experiences.

### Related Policies/ Guidelines

We create an eco-system to encourage and support innovation & entrepreneurial spirit among students, faculty members and society, leading to self-employment, creation of wealth and social values.

We create an ambience to help young entrepreneurs with potential to initiate and grow in business that involves innovation, sustainable and socially relevant technologies. We will ensure the right kind of advice and insight for its success.

OP Jindal University focuses on high-quality education with a mission to develop industry-ready talent, enhance employability, foster global collaborations, promote holistic leadership, and encourage innovation. The university's policies aim to align programs with industry needs, emphasize outcome-based education, and establish global partnerships. Core values include student-centric success, academic freedom, ethical integrity, social responsibility, and inclusive accessibility.

### Initiatives and Achievements

#### Courses/ Subjects

- OPJU has established this Section-8 non profitable company in the year of 2020. It gives a platform for stimulating, encouraging and mentoring the students, alumni and others within and outside of our University towards the journey of becoming successful entrepreneurs.
- OP Jindal University offers a specialized course in Industry Innovation and Infrastructure, prioritizing a practical and industry-centric approach. The curriculum is tailored for real-world applications, featuring live projects and utilizing a Learning Management System through Moodle.
- The interdisciplinary program at OP Jindal University is designed to meet industry demands by integrating principles of innovation and infrastructure development. It emphasizes hands-on experiences through live projects, fostering problem-solving skills and real-world application of theoretical knowledge. The Learning Management System, coupled with strategic collaborations and global exposure initiatives, ensures a dynamic and comprehensive learning environment.

#### Research

- OP Jindal University's Research and Development Cell (RDC) actively engages in industry-centric research across various disciplines, emphasizing innovation and infrastructure. The RDC, operating under the University Research Committee, promotes a culture of research excellence. Notably, the university undertakes sponsored projects in collaboration with industry partners to address specific challenges and contribute to technological advancements.



- In the Department of Computer Science & Engineering, the Intel Intelligence Systems Lab, developed in association with Intel Inc. and FICE, supports research in IoT and Embedded systems. Additionally, the department collaborates with industry partners on sponsored projects to address real-world challenges, utilizing tools like MATLAB and IBM Rational SEED.
- The Department of Civil Engineering provides technical support and consultancy services to Jindal Steel & Power Limited (JSPL) for a four-lane road project. This project serves as a practical application of research, with the department actively engaged in material testing, soil analysis, and other research-related activities, contributing to infrastructure development.

## Events

- OP Jindal University's Innovation Center boasts 11 startups, 45 prototypes, and 120 groundbreaking ideas—a testament to its success in fostering innovation and driving tangible solutions.
- Alien Innovations the startup incubated at OPJU Innovation center has secured the 2nd Runner Up position and a Funding of Rs 2,00,000/- for exceptional Innovation for Blind people.
- We have established Memorandum of Understanding (MoUs) with 50+ diverse multi-disciplinary industries spanning across various countries, specializing in prominent sectors such as Information Technology (IT), manufacturing, and other significant industries.
- Had an insightful interaction with the honorable Governor of Gujarat and Minister of Education Government of Gujarat, about the Innovation Ecosystem in India aim to foster Skills, Innovations, Employability and Entrepreneurship Globally.
- OPJU Innovation Center is announce that OPJU received a 4-star rating by IIC 5.0 for promotion Innovation & Start-up culture in the University. Our commitment to pushing boundaries and fostering creativity drives us towards continually excelling in groundbreaking initiatives. Ltd.
- Hexathon 2023, a 24-hour Hackathon hosted by Hexagon aimed at building sustainable solutions for a better future for the planet.
- We've organized impactful events including entrepreneurship workshops, innovation symposiums, National Education Day Orientation Session, R&D and Innovation Motivational Session, problem-solving sessions, and discussions on emerging trends. These occasions foster collaboration and contribute to our vibrant academic community.
- Entrepreneurship and Innovation Workshop by Dr. Mohd. Yasir Arafat: This workshop likely combines essential aspects of entrepreneurship and innovation, offering a comprehensive understanding of both areas, which could attract a wide audience seeking holistic insights.
- Pitching Event for Idea Generation and Mentorship Support: A pitching event not only encourages idea generation but also provides the opportunity for mentorship, making it attractive for students looking to showcase their ideas and receive guidance.



- Workshop on Achieving Problem-Solution and Product-Market Fit by Ashutosh Pastor: Understanding the fit between solutions and market needs is crucial for successful ventures. This workshop may attract individuals seeking practical insights into aligning their innovations with market demands.
- Seminar on Angel Investment/VC Funding Opportunities for Early Stage Entrepreneurs by Dr. K. Prabakaran: Access to funding is a significant challenge for startups. This seminar could draw considerable interest from aspiring entrepreneurs looking for guidance on securing financial support.

### Others

- Within the OPJU Innovation Center, a cutting-edge laboratory stands as a hub for transformative research. This facility is well-appointed with advanced equipment, including 3D printers, CNC routers, laser cutting machines, robotic welding arms, lathe machines, virtual machines, wind tunnels, XRD, and scanning electron microscopes. These sophisticated tools create a dynamic environment, facilitating a wide range of research endeavors and promoting innovation across diverse fields.

### Outcomes

- The university's Industry Advisory Board and extensive partnerships underline its commitment to robust industry ties, fostering collaborations that enrich academic experiences.
- Evidenced by the OPJU Innovation Center and successful ventures like Alien Innovations, the university thrives on nurturing a culture that encourages innovation and entrepreneurial initiatives.
- Offering diverse courses, cutting-edge infrastructure, and spearheading research projects, the institution maintains a steadfast commitment to delivering exceptional, well-rounded education.
- Active participation in international conferences, triumphs in prestigious competitions such as LVPEI STARTUP CHALLENGE, and securing a 4-star rating affirm the university's global acknowledgment and
- 496th International rank in Green metric ranking system.
- Community engagement by organizing events, symposiums, and workshops showcases the university's dedication to fostering community involvement, promoting knowledge sharing, and cultivating a vibrant academic ecosystem.

### Future Planning

- Our mission is to democratize innovation by offering inclusive opportunities for individuals of all ages to innovate, ideate, and design solutions. Through our expert-guided Business Development Assistance, we support entrepreneurs at different stages of establishing a venture.
- Our strategy involves establishing robust connections between academia, diverse industries, and financial institutions, fostering a network that enhances collaboration and knowledge exchange.
- Embracing a community-oriented approach, we encourage innovative solutions through advanced tinkering. We prioritize capacity building by empowering innovators with evolving technologies, guiding them through the entire journey from ideation to impactful solutions.



## Glimpses




### Grand finale of Smart India Hackathon-2023 from Dec 19

**■ Staff Reporter**  
RAIPUR, Dec 17

The grand finale of Smart India Hackathon-2023 (Software Edition) will be organised at OPJU, Raigarh during December 19 and 20. A total of 26 teams and more than 200 contestants from all over India will participate and showcase their talent.

Vice-Chancellor of the university Dr R D Patidar informed that OPJU has been selected as the Nodal Centre for the two-day grand finale of the sixth edition of Smart India Hackathon. The event is a nationwide initiative of the Ministry of Education Innovation Cell, which provides a platform for students to solve real-world challenges posed by government bodies, ministries, departments, industries and organisations.

Over 50,000 ideas have been submitted by over 44,000 teams in this year's Smart India Hackathon. During the Grand Finale of Smart India Hackathon, student teams work round the clock under the guidance of mentors and industry and ministry representatives to create working solutions to the selected problem statements. This competition in OPJU will start on December 19 at 9 AM and will end on December 20 at 9 PM.

All the participating teams will showcase their talent continuously for two days with 15 judges and mentors. There are total 47 Nodal Centres all over India for this competition and OPJU is one of them. In this competition, four teams have been selected from OPJU also, and they will showcase their talent by participating in various nodal centres. Chancellor of O



**Dr Saket Jeswani**  
Professor, Assistant Dean & Head  
School of Management, OPJU

“As we stand at the crossroads of Industry, Innovation, and Infrastructure, it is evident that the synergy between these pillars is vital for sustainable development. The interplay between forward-thinking industries, groundbreaking innovations, and well-designed infrastructure is not only a recipe for success but also a blueprint for a better future.”



## AICTE-CII Award 2021 for 'Best Industry Connect' to OPJU

■ Staff Reporter

RAIPUR, Sept 2

O P JINDAL University (OPJU) emerged as the winner for best industry-academia linkage at the AICTE-CII survey of industry-linked 'Technical Institutes 2021' awards.

The results of the 10th AICTE-CII Survey of top Industry-Linked Technical Institutes 2021 were announced at the AICTE headquarters, New Delhi on Thursday.

OPJU bagged two prestigious awards, Best Industry-Linked Emerging Engineering Institute (Degree) and Best Industry-Linked Mechanical and Allied Engineering Institute (Degree) out of the seven awards in the Engineering category. OPJU stood first in the pan India survey of 1,800 institutions.

Vice-Chancellor Dr R D Patidar and Director, Centre for Industry Academia Collaboration and HoD Dr Siddharth Chakrabarti, Mechanical Engineering received the award on behalf of OPJU. They also participated in the farewell-cum-felicitation function of Dr Anil Shashrabudhe, for his contribution as a Chairman AICTE



Vice-Chancellor of O P Jindal University Dr R D Patidar receiving the prestigious award.

for seven years.

The award assessment is based on the AICTE-CII survey in terms of partnership between institutions and industry on parameters like curriculum design, faculty selection, governance, infrastructure, placements, research projects, and skill development. Every year this award is conferred to the institutes for their outstanding industry linkages in producing a new generation workforce for industry, society, economy, and a sustainable planet to live with utmost harmony. OPJU from the time of its inception in 2015 strived to build strong industry linkages to realise the

mantra of Learning by Doing. With every new initiative, like establishing new centres of excellence with industry collaboration, offering six-month long internships in final year, offering courses on cutting-edge technologies, constantly bridging the gap between applied theories and engineering practices. OPJU ensures the students sense the pulses of the market, emerging trends and the industry practices through its industry linkages. It aims at building the students as the growth engines of India for which OPJU received such a prestigious award at the National level, said Dr R D Patidar, Vice-Chancellor

of OPJU.

Chancellor OPJU Shalu Jindal congratulated all concerned by expressing the truly happening motive of education to gain knowledge while learning new and contemporary skills of sustainability. It was more prideful to see the OPJU students fulfill the vision by developing innovative mind-sets, enabled by the industry connect. The value education imparted at OPJU makes its students good leaders, citizens and human beings. In addition, it received satisfactory note for promoting entrepreneurial skills and guiding start-ups through the incubation centre. This is how the university sets new benchmarks in higher education. Chairman, Jindal Steel and Power Naveen Jindal congratulated all members of the university. He was delighted to see the endeavour of outstanding honour in a competitive world. He appreciated the contribution of OPJU in the field of technical higher education while paying attention to education and all aspects of it. According to him, OPJU deserves congratulations and a special mention for its achievement.







## REDUCED INEQUALITIES



## Reduce Inequality Within and Among Countries

### Significance

Promoting respect among the students for all social and economic classes.

### Related Policies/ Guidelines

Providing academic knowledge and facilities to the under privileged.

### Initiatives and Achievements

#### Events

- NSS AND CENTRE FOR SOCIAL EMPOWERMENT, OPJU in association with the Department of Computer Science and Engineering, OPJU organised DIGITAL SKILLS DEVELOPMENT PROGRAMME at Govt. Pre-middle School, Tumidih (Adopted village) on 05th October, 2023. The volunteers taught basics of computers and gave hands-on training to all the students of class-6th, 7th and 8th.
- NSS AND CENTRE FOR SOCIAL EMPOWERMENT, OPJU donated two Carrom boards to Govt. Middle School, Samaruma (Adopted village).
- Donated a Cycling Suit to Mr Udit Narayan, a cyclist and winner of many competitions. All the best Mr Udit for your future endeavours.
- On the occasion of birthday of Shri O P Jindal ji (Babuji), the Vice Chancellor of OPJU Dr R. D. Patidar with USR team visited the schools of adopted villages- Tumidih, Samaruma and Chharratangar: interacted with the students and teachers and distributed Sports& games Items to the Schools.
- The volunteers of NSS and Centre for Social Empowerment, OPJU visited NETRAHIN BAL VIDYA MANDIR, AMLIDIH and donated a Cooler, Exhasust Fan, Drawing sheets and Sanitary napkins, etc.

#### Others

- Scholarship schemes for under privileged students.
- Providing free guest lectures on sustainability.
- Online webinars are arranged free for the students.

### Outcomes

- Increase in the attendance of the students from poor communities.
- Providing a supportive, inclusive and safe working and learning environment for people from financially and socially disadvantaged, backgrounds people from rural and regional areas.
- Testing and piloting innovative solutions to improving operations on campus.

### Future Planning

- Planning to develop more relationships with Institutes providing various scholarship schemes for under privileged students.
- More Industry-Academia collaborations for developing job opportunities for one and all.
- Innovations related to 100% student retention.





### Glimpses



**Prof. Anurag Vijaywargiya**  
Registrar, OP Jindal University

“ As an organization working at the grassroots level, we appreciate the emphasis on inclusivity and equity in the reducing Inequalities for sustains development. The commitment to reducing inequalities has not only transformed lives but also empowered communities, fostering a sense of belonging and equal opportunity for all. ”









## SUSTAINABLE CITIES & COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

### Significance

Sustainable Development for Cities and Communities is a critical area of focus due to its direct impact on the quality of life, environmental preservation, and long-term well-being of inhabitants. It addresses the need for urban planning, resource management, and societal development that ensures a balance between economic growth, social equity, and environmental sustainability.

### Related Policies/Guidelines

- Local Governance Framework: Collaboration with local government bodies to implement sustainable development policies.
- Zoning and Land Use Regulations: Policies to ensure sustainable land utilization and minimize urban sprawl.
- Environmental Protection Measures: Regulations focusing on waste management, air and water quality, and conservation of natural resources.

### Initiatives and Achievements

#### Courses/Subjects

- Urban Planning and Design: Focus on sustainable urban development principles, smart city concepts, and inclusive design strategies.
- Environmental Policy and Governance: Exploring policies and frameworks for environmental conservation and sustainable resource management.
- Community Development: Understanding community needs, participatory approaches, and social equity in development.
- Sustainable Infrastructure: Study of sustainable building practices, transportation, and infrastructure development.

#### Research

- Urban Sustainability Studies: Research on sustainable urban practices, climate change mitigation, and resilient city planning.
- Community Resilience: Investigating strategies to enhance community resilience to environmental and social challenges.
- Policy Analysis: Evaluating the effectiveness of existing policies and proposing innovative sustainable development frameworks.

#### Events

- Sustainability Conferences and Seminars: Hosting events bringing together experts, policymakers, and practitioners to discuss sustainable urban development.
- Workshops and Symposia: Interactive sessions focusing on practical aspects of sustainable city planning and community development.

#### Others

- Green Campus Initiative: Implementation of sustainable practices within the university campus as a model for sustainable urban development.
- Community Outreach Programs: Engaging with nearby communities for awareness campaigns, skill-building workshops, and sustainable development projects.





- Green Campus Initiative: Implementation of sustainable practices within the university campus as a model for sustainable urban development.
- Community Outreach Programs: Engaging with nearby communities for awareness campaigns, skill-building workshops, and sustainable development projects.
- Renewable Energy Integration: Adoption of renewable energy sources and energy-efficient technologies.
- Waste Management Programs: Implementation of waste reduction, recycling, and composting initiatives.
- Partnerships and Collaborations: Forging alliances with governmental bodies, NGOs, and industry partners for joint sustainable development projects.
- Student Engagement Programs: Involving students in real-world sustainable development projects through internships, fieldwork, and research opportunities.

## Outcomes

- Awareness and Advocacy: Increased awareness among students and local communities about sustainable development practices.
- Implementable Solutions: Development of actionable strategies and projects for sustainable urban development.
- Enhanced Research and Knowledge: Contributing scholarly work to advance the understanding of sustainable city planning and community development.

## Future Planning

- Expansion of Programs: Introducing more specialized courses and research initiatives in sustainable urban development.
- Community Impact: Extending sustainable development efforts beyond the campus to positively impact more communities.
- Innovation and Technology: Integrating emerging technologies for more sustainable urban solutions. This prospectus outlines OP Jindal University's commitment to educating, researching, and implementing sustainable development practices for cities and communities, aiming to prepare students and contribute to a sustainable and resilient future.

## Glimpses





**Dr Siddharth Chakrabarti**

Professor & Dean  
School of Engineering, OPJU

“  
*Embracing sustainability is not merely a choice at our university; it's a commitment woven into the fabric of our ethos. Our campus stands as a testament to the belief that universities play a pivotal role in shaping the future of our communities and the planet. From energy-efficient infrastructure to green spaces that breathe life into our surroundings, every corner of our campus reflects our dedication to environmental stewardship. Our waste management systems, renewable energy initiatives, and community engagement programs showcase the interconnectedness of our actions and their impact on the world around us. Beyond the physical infrastructure, our commitment extends to educating the next generation of leaders who will champion sustainability. Through academic programs, research endeavors, and hands-on initiatives, we empower our students to be catalysts for positive change in cities and communities worldwide.*  
”







## Significance

The commitment of O.P. Jindal University (OPJU) to responsible consumption and production holds significant implications. By ensuring compliance with approved building plans and embracing sustainable construction methods, OPJU sets a precedent for environmentally conscious practices in the education sector. The significance lies in establishing a model that prioritizes environmental responsibility, demonstrating that institutions can play a pivotal role in sustainable development through responsible consumption and production.

## Related Policies/Guidelines

OPJU's adherence to the building plan approved by the Department of Town and Country Planning and its compliance with Indian Green Building Council norms showcase a strong alignment with relevant policies and guidelines. These policies serve as a framework for responsible construction practices, emphasizing the importance of meeting stringent environmental standards. By integrating these guidelines into their operations, OPJU contributes to the broader objective of promoting sustainable practices in the construction and education sectors.

## Initiatives and Achievements

### Courses/Subjects

The university's commitment to responsible consumption and production can extend to academic offerings. Integrating courses or subjects related to sustainability, environmental science, or responsible business practices can further educate and empower students to champion sustainable development. By incorporating these topics into the curriculum, OPJU can nurture a generation of professionals who are equipped to address environmental challenges in various industries.

### Research

OPJU can contribute significantly to the field of sustainability through research initiatives. Engaging in research projects focused on sustainable construction methods, waste management, and climate impact mitigation can lead to valuable insights and innovations. The university can position itself as a hub for sustainable solutions, attracting researchers and collaborators interested in advancing responsible consumption and production.

### Events

- OPJU ECO Club in association with IIC organized a guest lecture on "Understanding the Science of Climate Change and its impact on Ground water."

### Others

- OPJU's greenhouse gas reduction program and energy conservation programs go hand in hand. Despite
- Campus growth, OPJU has reduced energy use and greenhouse gas emissions per square foot significantly.
- High-capacity treated water plants have been installed



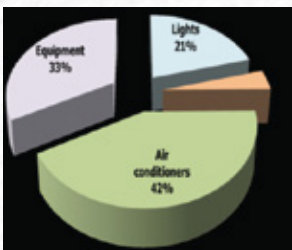
- Some ways that OPJU continuously works to improve outdoor air quality on campus include:
  - Replacing gasoline-powered equipment with electric versions
  - Designating OPJU as a Tobacco-Free Campus
  - Implementing a Refrigerant Management Program aimed at reducing the emission of hydrofluorbons (HFCs).
- Installing of water meter to identify the consumption and leak
- Use of hand faucets, self-close taps, auto sense urinal in restrooms
- Sprinkler System for horticulture

## Outcomes

- Robust waste handling system is in place in the campus.
- Understanding the future plans related to the LVPEI Startup Challenge provides insights into OPJU's ongoing commitment to fostering innovation and entrepreneurship in the realm of responsible consumption and production. This may involve scaling up the challenge, introducing new themes, or expanding

## Future Planning

- Committed to zero waste to landfill as per the call by Hon'ble Prime Minister of India.
- All mechanical flow meters to be replaced with an Electromagnetic Telemetry system.
- Five rainwater harvesting pits are to be added.
- Upcoming additional two piezo-meters in the remaining borewells.
- Two new borewells will be commissioned for the campus.



The above graph shows that air conditioners consume 42% whereas the equipment consumes 33% while the lights consume 21% the fans consume only 4% of the total calculated electrical energy.

## Glimpses





**Dr. S. Das**

Head & Steel Chair Professor,  
Dept. of Metallurgy, OPJU

“ Under the goal of Responsible Consumption and Production within the strategic sustainability plan of the University in the different areas of its activities; like academics, research, students, and management. A study is framed in the regular management area, specifically in the consumption of resources by every member of the institution, and it is focused on hospitality and other services, such as coffee shops, cafeterias, use of paper, waste separation, and student hostel services ”







## CLIMATE ACTION



**Take urgent action to combat climate change and its impacts**

### Significance

Reducing short-lived climate pollutants to prevent millions of premature deaths each year.

### Related Policies/Guidelines

Committed to reduce GHG emissions through various resource efficiency measures.

### Initiatives and Achievements

#### Courses/Subjects

- Renewable Energy Sources and Systems (SOE-B-EE604): The course introduces concepts related to renewable energy sources and systems and its applications in the power quality improvement.
- Installation Commissioning, Maintenance & Testing of Electrical Equipment (SOE-B-EE703 (6)): This course help the students understand the maintenance and testing techniques of electrical equipment that produces extraordinary results in getting affordable and clean energy.
- Electric Vehicles (SOE-B-EE510): This course introduces concepts related to Electric vehicle and its effectiveness in the reduction of carbon dioxide in environment i.e. in climate.
- Advanced Process Control & Instrumentation (SOE-B-EE703 (5)): This course enhances the students understanding on advanced process control and instrumentation, which will helpful to enhance quality of power in advanced technique and also reduce pollution of climate.
- Environmental Sciences (SOE-B-Civ-23-107): After completing the course, the students will be able to gain in-depth knowledge of natural processes and resources that sustain life. Develop critical thinking for shaping strategies for environmental protection, conservation of biodiversity, environmental equity, and sustainable development.

#### Research

- R.D Patidar, Shashikant Kaushaley, Rakesh Patidar, Mr.KapolNashine, “Electric Vehicle Head Light Console” Patent.
- Sandeep Biswal, “Taylor series based protection starting element for STATCOM compensated transmission line,” Electric Power Systems Research, vol. 204, 2022. (Impact Factor = 3.414)
- Sushree Diptimayee Swain, “Adaptive Controller based Shunt Active Power Filter for power quality enhancement in Grid-integrated PV systems” Elsevier.
- G.Madhusudhana Rao, R.D Patidar, Sushree Diptimayee Swain &Prasanta Kumar, “Solar Power Charger” Patent.



## Events

- The Five-Days Online Workshop on “Renewable Energies and Plug in Vehicles Integration in Microgrid ” on 14th November- 18th November 2022 at 2.30 pm to 4.30 pm had been organized by Department of Electrical Engineering, OP Jindal University, Raigarh (C.G.). The programme was co-ordinated by Dr Sushree Diptimayee Swain and more than 60 participants and 10experts from premiere institutes participated in the event.
- Department of Electrical Engineering, O P Jindal University has organized “A National Level Poster Presentation for Students Symposium” on the occasion of National Energy Conservation Day on 14th December 2022.
- The Centre for Industry-Academia Collaboration in association with the Department of Electrical, Mechanical & Metallurgical, and Materials Engineering, IQAC has organized an online one-day workshop on "Design and Development of sustainable technology Aligned Curriculum" on January 12, 2022 to discuss and implement an industry-linked curriculum for the ongoing B. Tech program in the departments.
- Dr Siddharth S Chakrabarti, Professor & Dean- SoE delivered a talk at IEEE R10 Industry-Academia Workshop on “Research and Innovation on Reduction of Carbon Footprint” organized by M/S Jindal Power Limited (JPL), Tamnar, and OPJU, Raigarh on 20th September 2022. The session was attended by industry professionals and academicians.
- Department of Mechanical Engineering organized a 5 Days Online Faculty Development Program on “Energy Management in Power Plants” in association with IEEE Chapter, Chhattisgarh state Renewable Energy Development Agency (CREDA), Institutional Innovation Council and Jindal Power Limited, Tamnar from September 05-09, 2022 in online mode.
- The five-day online workshop on power electronics and its applications using OPAL-RT has been conducted from 20.02.23 to 24.02.23. The workshop was designed to provide participants with practical knowledge and experience in the field of power electronics and its applications i.e., electric vehicle, solar pumps, PV applications, multi-port converters and so on.

## Others

- All the constriction practices and landscaping measures are monitored at the highest level.
- Successfully installed solar power plant in University Premises.

## Outcomes

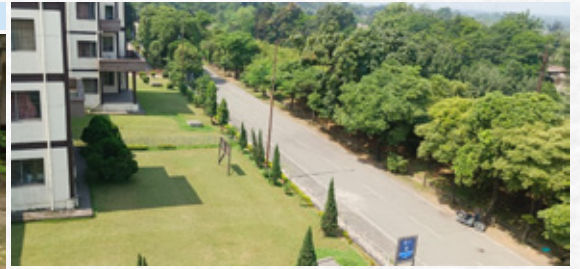
- Green cover is about 84% more than the required standard of 33%.
- 496 rank in UI Green Metric World University.

## Future Planning

- Land based waste management through scientific manner.
- Zero littering campus.



## Glimpses



**Dr. Mahasakti Mahamaya**

Head

Dept. of Civil Engineering, OPJU

“ I am proud to witness OPJU's unwavering commitment to Climate Action. In the past year, the institution has not only embraced sustainable practices but has become a beacon of change. From eco-friendly infrastructure to impactful research, OPJU exemplifies the spirit of environmental stewardship. Here's to a future where every action contributes to a greener, more sustainable planet.



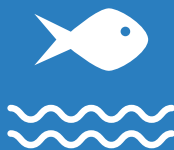








## LIFE BELOW WATER



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

### Significance

Reducing short-lived climate pollutants to prevent millions of premature deaths each year.

### Related Policies/Guidelines

Committed to reduce GHG emissions through various resource efficiency measures.

### Initiatives and Achievements

#### Courses/Subjects

Environmental Biotechnology [SOS-B-BT403]- The subject includes the management of solid and liquid waste. It includes the production and use of biofertilizers. It emphasizes on the process of Bioremediation.

#### Research

Taniya Sengupta Rathore: Emerging Microbial Enzymes for Future Industrialization, Springer Nature, 2023.

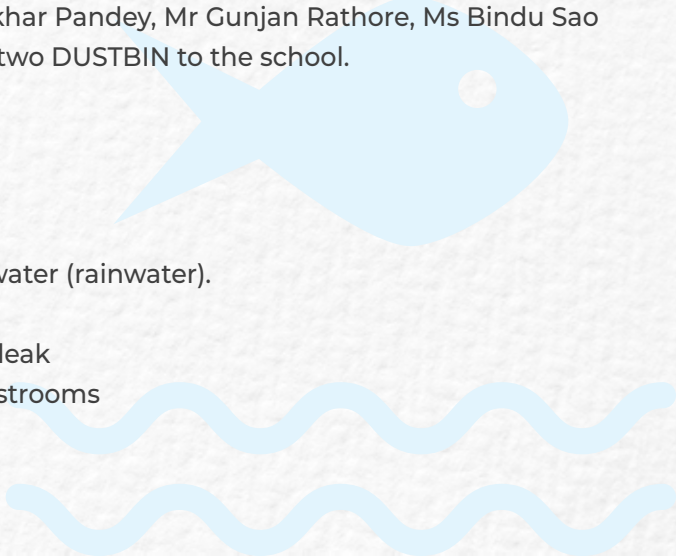
#### Events

- NSS and Centre for Social Empowerment organised a CLEAN CAMPUS DRIVE at OPJU and the Volunteers cleaned the campus on 24 November 2022.
- NSS and Centre for Social Empowerment organised a CLEAN CAMPUS DRIVE at OPJU and the Volunteers cleaned the campus on 29 November 2022.
- The Volunteers of NSS, OPJU organised a CLEAN CAMPUS DRIVE at OPJU. The Volunteers- Ms Neha Pandey, Ms Neha Singh, Ms Sneha Barua, Ms Sheersha Agrawal, Ms Kanishka Singh, Ms Shruti Singh and Ms Ankita cleaned OPJU campus.
- On the occasion of Human Rights Day, the volunteers of NSS, OPJU (in association with JSP Foundation) visited Govt High School, Samaruma and created awareness regarding-
  - Bio-degradable and non bio-degradable waste, also provided dustbins;
  - R's - Refuse, Reduce, Reuse, Repurpose, Recycle.
  - Problems caused by mismanagement of waste.
  - Utilization of waste management.

The volunteers- Mr Kritesh Kumar Sahu, Mr Vedaj Patel, Mr Sachin Sharma, Ms Sanjana Tiwari, Ms Shraddha Kothimbire, Ms Anusuya P., Mr Yogesh Rathore, Mr Harsh Shekhar Pandey, Mr Gunjan Rathore, Ms Bindu Sao and Mr Rounak Agarwal- conducted the session and donated two DUSTBIN to the school.

#### Others

- Recycling of water
- Ground Water Recharge System
- Methods to reduce water wastage.
- Separate sewerage system, for waste water and for clean water (rainwater).
- High-capacity treated water plants have been installed
- Installing of water meter to identify the consumption and leak
- Use of hand faucets, self-close taps, auto sense urinal in restrooms
- Sprinkler System for horticulture





## Outcomes

- Practices adopted have resulted in green, resource efficient campus.
- Awareness among students, faculty and staff about the hazardous effect of use of plastics.

## Future Planning

- All mechanical flow meters to be replaced with an Electromagnetic Telemetry system.
- Five rainwater harvesting pits are to be added.
- Upcoming additional two piezo-meters in the remaining borewells.
- Two new borewells will be commissioned for the campus.

## Glimpses



**Dr. Deepayan Priyadarshi**  
CEO  
Innovation Centre, OPJU

### E-waste initiative in OPJU

Raigarh, Oct 02:

OPJU (OPJ) Jindal University is hosting an E-Waste initiative at its campus. The Microsoft GIZ "Create to Inspire" programme on sustainable consumption is focused on E-Waste. The final aim is to become a nodal centre for E-Waste collection drive in the state of Chhattisgarh.

OPJU, presently running OPJ Jindal Institute of Technology (OPJIT) at Panigrahar, Raigarh, will be partnering with the Microsoft GIZ Youth Fellowship Programme, Kolkata, part of the Development Partnership Programme (DPP) project on Sustainable Consumption and E-Waste, which is being implemented on behalf of the German Federal Ministry for Economic Cooperation and Development (GIZ).

Students from several schools in Chhattisgarh, as well as OPJU students, will participate in this venture where students will be encouraged to collect E-Waste from their own homes and families and give it to the school from



where these can be brought to the event which will then be handed over to an authorized e-waste collector. A team of students from each school and students from OPJU will be asked to make a short presentation on their understanding of the sub-

ject and on their experience of collecting E-Waste for the project. An extensive poster campaign will be launched to educate the students about E-Waste. Certificates from Microsoft "Create to Inspire" will be given to the participants. The pro-

gramme will culminate with a 2 hr presentation by Arshward the Microsoft partner in Eastern India for this "Create to Inspire" initiative, performances and exposition in the OPJU campus by various groups of the Fellowship, featuring Film

Screenings, Street Play, a dance performance etc.

In this sequence, a series of programmes including theatrical street plays, dance-drama, paintings, folk songs etc. were presented to morning in the college premises of OPJ Jindal Institute of Technology (OPJIT), Panigrahar, Raigarh. Especially the theatrical play named "Eco Boom", presented jointly by the "Sapthar Dance Academy & Arts-Forward" both from Kolkata, successfully narrated the menace caused by the e-waste. Although it was a mute theatrical play which didn't carry a single verbal dialogue, even then it so effectively depicted the message of the play that the audience remained dumbfounded for few hours of the play.

The programme held to morning to send messages to the citizens about the threats posed by the solid and other wastes was quite successful in the sense that a huge gathering attended the programme and remained in a standstill position till the conclusion of the programme.



“As an educator passionate about environmental conservation, I applaud our university's resolute stand against plastic to protect life below water. By championing plastic reduction initiatives, we're safeguarding aquatic habitats and species. Our collective commitment echoes a vital message: a plastic-free ethos is pivotal to preserving the delicate balance of our oceans, ensuring their sustenance for generations to come.”





## LIFE ON LAND



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and half and reverse land degradation and halt biodiversity loss

### Significance

OPJU makes conscious efforts to keep green cover at 84%.

### Related Policies/Guidelines

- Treated wastewater is used for horticultural activities
- Efficient sprinklers and drip irrigation methods are used to conserve water

### Initiatives and Achievements

#### Courses/Subjects

- Basics of Civil Engineering SOE-B-FY204- This course describes the basic concepts of civil engineering in general. It explains the importance of civil engineering in the infrastructural development of the society.
- Environmental Engineering-I SOE-B-CE603- Environmental Engineering has its vast application and importance since the inception of civilization. From this course students learn about how to sustainably manage forest, biodiversity loss etc.

#### Research

- M. Rawani, Mithilesh Kumar Sahu, Siddharth S. Chakarabarti, Ajit Kumar Singh, Sustainable Approaches and Strategies for E-Waste Management and Utilization, DOI: 10.4018/978-1-6684-7573-7, 2023
- Dhahiya, Renu, Moumita Saha, Ashok Kumar, Pankaj Sharma, Ram Sevak Singh, Varun Rai, and Kamalakanta Behera. "Role of 2D Materials in Environmental Monitoring, pp. 195-216. CRC Press, 2022. DOI: 10.1201/9781003247890-10
- AK Singh, RS Singh, A Singh. "Overview of 2D Materials" pp 1-6, CRC Press, 2023. DOI: 10.1201/9781003247890-1

#### Events

- Erkey Motors is the evolution of a smart world that demands smart ideas, one of which is eco-friendly automobile innovations. To stand up with such natural cores, we have introduced electric bikes that run with no fuel and gas yet give you a regular motorbike experience.
- Explorica is committed to democratising opportunities for Talent by leveraging projects at a global level. And particularly serve the Core Engineering community. Over the past one-year we have been working hand-in-hand with 25+ Universities and up-skilled 20k+ students.
- Aarug is a brand of reusable pads and diapers made by women of Self-Help Groups (SHGs) in India. Aarug products are made with high-quality, sustainable materials and are designed to be comfortable and durable. They are also a great way to reduce your environmental impact.

#### Outcomes

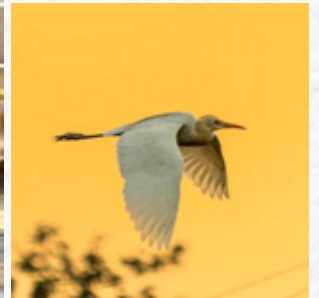
- The Eco-Club at the university is a step towards making a sustainable campus. Various activities are organized by the students to ensure a green and clean campus and neighbourhood. The National Service Scheme (NSS) plays an important role along with the Eco-Club for execution of the activities.



## Future Planning

- Practices adopted have resulted in green, resource efficient campus and OPJU is committed to maintain the green campus.

## Glimpses





**Dr. Rakesh Nayak**

Professor & Head  
Dept. of Computer Science  
& Engineering, OPJU

“

*The land life at OPJU is teeming with vibrant biodiversity, including various species of birds that can be observed throughout the campus. To promote sustainability, the university has implemented biodigester systems that employ anaerobic digestion. These biodigesters produce biogas, which is utilized for cooking in the hostel mess. This initiative enables the use of renewable energy sources while reducing environmental impact. Moreover, the biodigesters at OPJU generate nutrient-rich liquid fertilizer, which is utilized to nourish the plants and gardens within the campus. This circular approach to waste management fosters sustainable practices and minimizes the reliance on synthetic fertilizers. OPJU's commitment to biodiversity, waste management, renewable energy, and sustainable practices makes it a commendable institution in promoting a greener and more sustainable future.*

”







## PEACE, JUSTICE AND STRONG INSTITUTIONS



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

### Significance

OPJU believes in creating a platform that is fair, inclusive, and sustainable for both students and staff.

### Related Policies/Guidelines

- Formulating policies, procedures, and strategies to guarantee a secure environment for every member of the campus community, including staff, students, and visitors.
- Affirming that the institution's policies and cultural norms unequivocally denounce practices such as bribery, corruption, violence, crime, and acts of terrorism.
- Securing that the neighbouring communities surrounding the university are provided with readily available free legal assistance.

### Initiatives and Achievements

#### Event

- Internal Complaints Committee (ICC) in association with Social Empowerment Club organized a webinar on Sexual and Mental Harassment of Women at Workplace: Legal Outlook on 27 October 2023. Prof. Gagan-deep Kaur (School of Law, UPES, Dehradun) was the resource person.
- Various programs under the NSS of the university are conducted by the students for the people of neighbourhood villages. The university has adopted 5 villages in and around the campus and is continuously providing various kind of support including technology-enabled support for the betterment of the mankind. More than 150 programs each year is being conducted on various aspects of SDGs.

Project name	participants	Project duration	Project area
My Village, Clean Village	50	5 years	SI
Energy Conservation Initiatives	150	3 years	EC
Say No to Plastic and Waste Management	125	4 years	WS
Rain Water harvesting And health and hygiene	180	5 years	WR
IT Bus	450	5 years	ED

### Outcomes

- Facilitating access to justice for the underprivileged by organizing legal aid clinics through the institution.
- Promoting diversity and understanding by coordinating cross-cultural and inter-faith activities on campus that foster dialogue, inclusivity, and mutual respect among students.
- Anti-ragging committee is formed in order to prohibit ragging in accordance to rule of hon'ble Supreme Court of India as ragging is criminal offense.



## Future Planning

- Enhancing institutional governance involves fortifying processes that engage all stakeholders and students collaboratively.
- By fostering transparent and inclusive decision-making, the institution ensures that diverse perspectives contribute to its governance, promoting a more responsive and effective approach to meeting the needs and aspirations of its community.

## Glimpses



**Ms. Mushkan Singh**

Student

Dept. of Biotechnology, OPJU

“As a student of the O.P. Jindal University community, I am inspired by the institution's unwavering commitment to sustainability. The university's proactive stance towards environmental responsibility has not only enriched the academic experience but has also set a comebacks example for institutions aiming to make a positive impact on the planet. O.P. Jindal Universitie's have made admirable efforts towards creating a green campus and eco-friendly practices.

”





# PARTNERSHIP FOR THE GOALS



Strengthen the means of implementation and revitalize the global partnership for sustainable development

## Significance

The institution actively cultivates partnerships at both national and international levels, fostering collaboration on diverse fronts, including social, legal, and environmental concerns. These alliances reflect the institution's commitment to addressing global challenges through cooperative efforts, thereby contributing to meaningful solutions and advancements in areas that impact society, law, and the environment on a broad scale.

## Related Policies/Guidelines

Instituting a collaborative framework with national and international organizations to address issues pertaining to social, legal, and environmental matters.

## Initiatives and Achievements

### Event

- OP Jindal University of India and Sohar University, Sultanate of Oman signed MoU for academic development, innovation, student and faculty exchange programme, establishment of Centre of Excellence in steel technology and promotion of research and cooperation.
- O.P. Jindal University organizes conference International Conference on “The Role of Innovation, Entrepreneurship and Management for Sustainable Development (ICRIEMSD)” and OPJU Technology Conference on emerging technologies for sustainable development (OTCON) every year.

## Outcomes

Students undergo training that applies knowledge to foster comprehensive personality development, ensuring they acquire skills and insights that contribute to their overall growth and maturity.

## Future Planning

Establishing a framework and fostering a culture that openly encourages the creation, sustenance, and improvement of partnerships, both within the institution and externally. This approach is aimed at cultivating robust strategies and a collaborative atmosphere that actively promotes the growth and effectiveness of relationships, contributing to the overall success and vitality of the organization.

## Glimpses





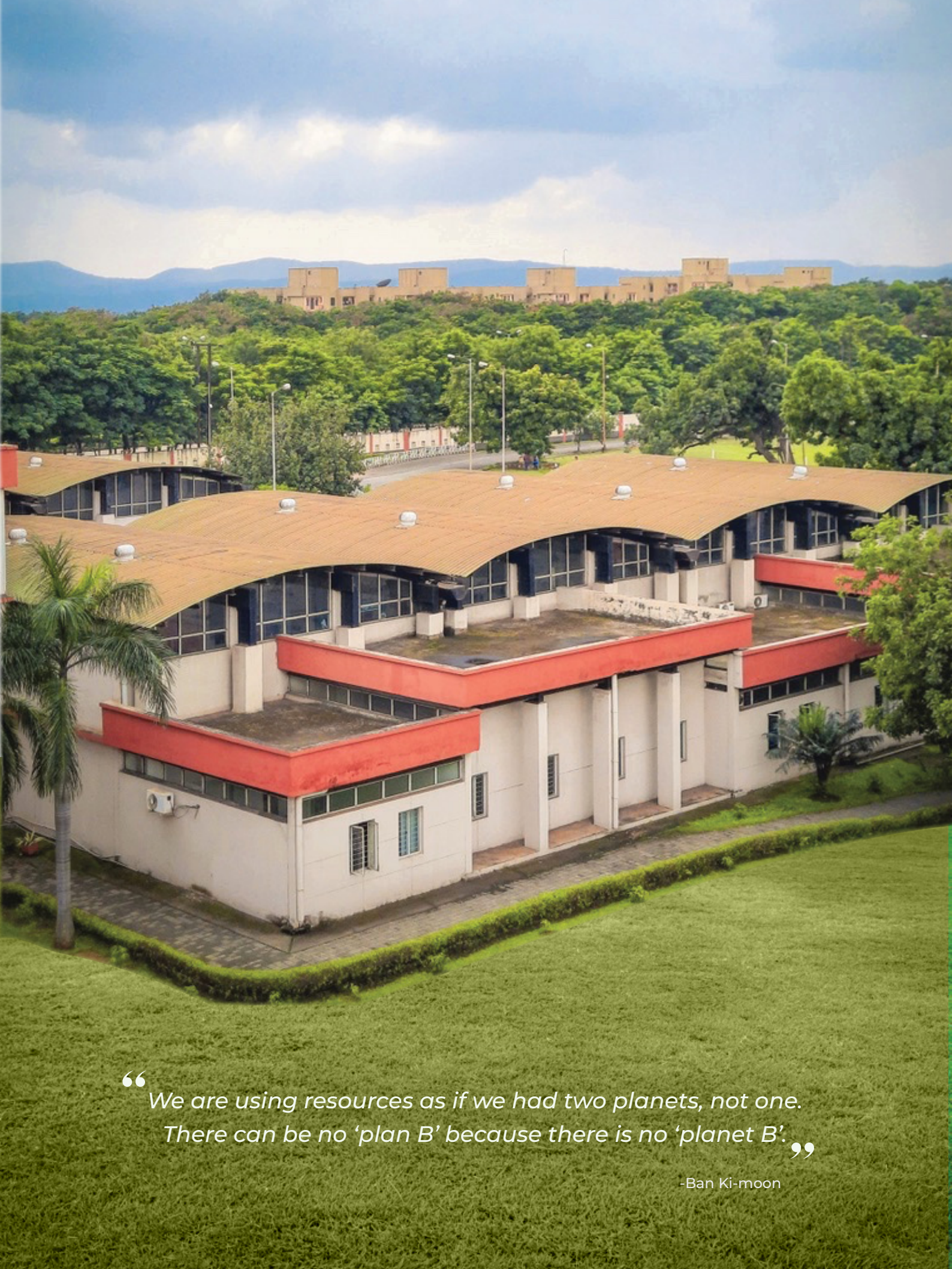
**Dr. Anurag Sharma**

Assistant Professor,  
Dept. of Civil Engineering, OPJU

“ At our university, Partnerships for the Goals are pivotal. OPJU believes in collaborative efforts with diverse stakeholders, fostering innovation and sustainable development. Through strategic alliances with industry, NGOs, and academia, it drives impactful research and initiatives. These partnerships amplify our collective ability to tackle global challenges, creating a brighter, interconnected future for all. ”







*“ We are using resources as if we had two planets, not one. There can be no ‘plan B’ because there is no ‘planet B’. ”*

*-Ban Ki-moon*



## INVESTMENTS TOWARDS SDGs (2023-24)

S. No.	Vertical	Proposed Projects	SDGs	Proposed Budget (2023-24)
1	Health and Nutrition	Workshops to promote health and hygiene awareness among the women of the adopted villages.	3. Good Health & Wellbeing	180000.00
		Mental Health Awareness Capacity Building Programme	3. Good Health & Wellbeing	60000.00
		Health Check-up camps in Schools	3. Good Health & Wellbeing	500000.00
		Blood Donation Drive	3. Good Health & Wellbeing	120000.00
2	Education	Setting-up of mini library facility in the schools of adopted villages	4. Quality Education	24,20,000.00
		Customized IT LAB BUS for Digital Skills Training	4. Quality Education 5. Decent Work and Economic Growth	1,00,00,000.00
		Scholarships to meritorius and financially weaker background students	4. Quality Education	40,00,000.00
3	Environment	Agriculture Development of Herbal Garden in Chharratangar (Adopted Village)	3. Good Health & Wellbeing	2,00,000.00
4	Sport	Khelo India: Sports Facilities and Infrastructure Development in the 5 Schools of adopted villages	3. Good Health & Wellbeing	7,80,000.00
5	Art & Culture	Customized IT LAB BUS for Digital Skills Training	9. Industry, Innovation and Infrastructure	7,50,000.00
		Scholarships to meritorius and financially weaker background students	9. Industry, Innovation and Infrastructure	10,00,000.00
Total				2,00,10,000.00



### Dr Makkuva Kalyan Phani

Associate Professor (Sr. Grade) & Director – RDC, OPJU  
Coordinator – Accreditation and Ranking/NAAC Steering Committee

“As an academican, I applaud our university's dedication to meeting accreditation and ranking criteria, harmonizing effectively with sustainable development objectives. This intentional commitment not only enhances academic excellence but also cultivates a comprehensive milieu that nurtures socially conscious individuals. The accreditation process serves as a driving force, steering our institution towards a more sustainable future, epitomizing excellence in education and societal contributions.”





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Associate Professor  
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School of Engineering, OPJU



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