



Research Conclave on Shaping Progress and Advancing Research Knowledge

(SPARK- 2K26)

31st January 2026

Organized by : Research & Development Cell

Gandhi Institute of Excellent Technocrats (GIET), Ghangapatna, Bhubaneswar

Web: https://www.gietbbsr.edu.in/conclave_2026/ Email: researchconclave@gietbbsr.edu.in



SPARK- 2K26

SPARK- 2K26 Mentors

ABOUT THE COLLEGE : Gandhi Institute of Excellent Technocrats (GIET), Ghangapatna, Bhubaneswar under the flagship of Gandhi Group of Institutions (G.G.I) is an AICTE approved institute established in the year 2009. The B.Tech, MBA and MCA programs of the institute are affiliated to Biju Patnaik University of Technology, Odisha and the Diploma programme is affiliated to State Council for Technical Education and Vocational Training, Govt. of Odisha, Bhubaneswar. The institute is set up by Vekateshwar Educational Trust and is being managed by distinguished governing council members comprising senior executives from Academics and Industries. The Institute works with a mission to provide quality education of national & international standard for producing technocrats and future leaders in a disciplined and conducive environment as an Integral part of our societal commitment to promote education globally. It was started with an intake of 240 students in four branches with a motto of providing quality engineering education in a highly disciplined environment. In less than a decade it has become a citadel of engineering education having 1080 intake with four Diploma Courses, seven B. Tech. Courses and two PG courses i.e. MBA and MCA. It has been regarded as Modern Gurukul by the students, alumni, faculty and all distinguished visitors for its learning environment, experienced faculty members, infrastructure and the facilities.

ABOUT SPARK-2K26 : SPARK-2K26, titled "Shaping Progress and Advancing Research Knowledge," encapsulates the core essence of academic inquiry and innovation. It reflects a deliberate effort to integrate research, knowledge creation, and technological advancement toward fostering sustainable progress in contemporary society. The theme underscores the interconnection between intellectual development and societal transformation, emphasizing that meaningful progress can only be achieved through systematic exploration, empirical understanding, and interdisciplinary collaboration.

In the present global context, marked by dynamic technological transitions and evolving economic structures, the pursuit of knowledge assumes critical importance. The notion of "Shaping Progress" implies the proactive role of research in influencing developmental trajectories. Research today extends beyond theoretical exploration; it is a driver of innovation that informs policies, enhances industrial performance, and improves quality of life. The theme therefore calls for a paradigm in which research outcomes are translated into actionable insights, contributing to scientific, technological, and managerial advancements. By aligning intellectual pursuits with practical implementation, research becomes a catalyst for sustainable and inclusive growth.

Equally significant is the emphasis on "Advancing Research Knowledge" Knowledge advancement constitutes the foundation of academic excellence and societal development. The process of expanding the frontiers of knowledge necessitates not only rigorous investigation but also critical reflection, open dissemination, and global collaboration. This conclave encourages the continuous evolution of research methodologies and the integration of emerging technologies such as Artificial Intelligence, Data Analytics, Renewable Energy Systems, and Sustainable Management Practices into mainstream academic and industrial applications. Through such multidimensional approaches, research can respond effectively to the complex challenges of the twenty-first century.

The conclave acknowledges the transformative potential of interdisciplinary research. Progress in science, technology, engineering, and management cannot occur in isolation; it emerges from the convergence of diverse domains of knowledge. The Programme seeks to promote an environment that facilitates cross-disciplinary dialogue and fosters synergies among researchers, academicians, and industry professionals. Such collaboration ensures that research remains contextually relevant, innovative in approach, and impactful in outcome.

An equally vital dimension of this theme is the ethical orientation of research. As the scope of knowledge expands, so does the responsibility of researchers to ensure its application for the collective welfare of society. Ethical research practices, integrity in data management, and commitment to sustainability form the cornerstone of responsible scholarship. The Research conclave aspires to reinforce these values by encouraging discussions on the social implications of research, the balance between innovation and ethics, and the role of academia in shaping an equitable and sustainable future.

WHO CAN PARTICIPATE : Students, Research Scholars, Academicians, and Industry Professionals.

HOW TO REACH GIET : GIET enjoys geographical advantage as it is well connected by air, rail, and road transportation. The institute is located in Ghangapatna, Bhubaneswar, making it accessible to several important centers in and around the city. If you are arriving by air, the Biju Patnaik International Airport in Bhubaneswar is the closest airport, approximately 20 kms from the institute. For those traveling by train, the Bhubaneswar Railway Station is about 18 kms away. If you are driving, take NH16 and follow the signs towards Chandaka, then proceed towards Ghangapatna. Public bus services and private buses also connect Bhubaneswar to nearby areas, and local transportation options are available to reach the campus from various points in the city. Also, the volunteers will be available to guide you at the airport or railway station. Local transportation will be provided to facilitate your travel from the airport and railway station to the institute.

CONCLAVE TYPE : The conclave will be in physical mode.

PRESENTATION : The conclave will consist of invited talks, oral and poster Presentations. Acceptance of the Paper and registration in the Conclave on payment is a prerequisite for attending the conclave.

PUBLICATION : All selected papers will be published in the proceedings and some selected good quality papers will be published in a peer reviewed indexed Journal.

PLAGIARISM POLICY : To avoid plagiarism authors are requested to submit their original and unpublished research work which is not under consideration for publication elsewhere. Manuscripts found to be plagiarized during any stage of review will be rejected. The plagiarism should be below 12% for final acceptance.

GUIDELINES FOR WRITING THE RESEARCH PAPER :

The research papers will be accepted in the English language only. The paper will be accepted in MS Word Document The selection of papers for presentation will be based on the full paper submission.

The decision of the Committee will be final.

The abstract of 250 to 300 words should include the purpose, objectives, major findings of the research, and keywords.

The paper format in MS Word: Font: Times New Roman Font Size 12 with single line spacing and a single column margin: 1 inch on all sides.

Title: Times New Roman with font size 14. Title Page Title Author (s), College affiliations & contact details. The full-length paper is to be mailed in electronic format to researchconclave@gietbbsr.edu.in.

The total length of the full paper must not exceed 2000-2500 words including graphs and tables. Referencing. APA style

MAJOR THEMES OF SPARK- 2K26

The Conclave focuses on a diverse range of research fields, including but not limited to:

DEPARTMENT OF MASTER IN BUSINESS ADMINISTRATION

- Circular Economy & Zero carbon Emission
- Green Fin Tech and Sustainable Value Creation
- Strategic Management and Organizational Leadership
- Technology, Innovation, and Digital Transformation
- Data-Driven Decision Making and Analytics
- Human-Centric AI and the Future of Work
- Sustainable Business and Green Economics

DEPARTMENT OF CIVIL ENGINEERING

- Sustainable Infrastructure & Climate-Resilient Development
- Advanced Construction Materials & Technologies
- Geotechnical Engineering for Future Infrastructure
- Coastal Engineering & Blue Economy Infrastructure
- Carbon-Neutral & Net-Zero Infrastructure Development
- Sustainable Transportation Systems & Urban Mobility
- Circular Economy in Construction & Waste Management Solutions
- Transportation Safety, Policy, and Human Factors Engineering
- Sustainable Housing & Rural-Urban Development
- AI-Driven Predictive Maintenance for Civil Infrastructure Systems

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- 5G/6G & Next-Generation Communication Systems
- RF, Microwave Engineering & Antenna Design
- AI, Machine Learning & Intelligent Computing
- Robotics, Automation & Autonomous Systems
- IoT, Wireless Networks & Cyber-Physical Systems
- Semiconductor Devices, VLSI & Embedded Systems
- Signal, Image & Biomedical Processing
- Conclave Theme Area for Research Conclave SPARK - 2K26

DEPARTMENT OF ELECTRICAL ENGINEERING/ELECTRICAL AND ELECTRONICS ENGINEERING

- Power & Energy Systems
- Power & Energy Systems: High Voltage (HV) Engineering
- Power Electronics & Machines
- Control, Automation & Intelligent Systems
- Control, Automation & Intelligent Systems
- Power & Energy Systems
- Power Electronics & Machines
- Power Electronics & Machines
- Control, Automation & Intelligent Systems
- Control, Automation & Intelligent Systems

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

- Data Warehousing,
- Semantic Web,
- Data Mining,
- Internet of Things (IoT),
- MANET,
- Image Processing,
- Big data,
- Machine Learning,
- Bioinformatics,
- Cloud Computing,
- Artificial Intelligence,
- Quantum Computing,

DEPARTMENT OF BASIC SCIENCE AND HUMANITIES

- Nanomaterials and their applications
- Advances in composites and polymers
- Smart and functional materials
- Material characterization and testing
- Mathematical sciences
- Differential Equations
- Number Theory
- Mathematical Modelling
- Graph Theory
- Analysis
- Fuzzy Set Theory
- Optimization Techniques
- Fluid Dynamics
- Humanities and Human Value Literature
- Culture & Human Values
- Technology for Language Learning & Teaching -ICT Tools
- Multi-Disciplinary Curriculum designing
- Literature in Language Teaching
- ESP & Testing Methods

DEPARTMENT OF MECHANICAL ENGINEERING

- Thermal Energy Storage
- HVAC and refrigeration systems
- Heat Transfer Enhancement Techniques
- Industrial robotics
- 3D Printing
- Sustainable Product Design
- Fluid mechanics and CFD
- Solar Thermal Energy Utilisation
- Electric Vehicles
- Mechatronics
- Industry 4.0 & Smart Manufacturing
- Production & Industrial Optimisation



Dr. Siba Sankar Mahapatra
Professor HAG
Department of Mechanical Engineering
NIT Rourkela, Odisha



Bibhuti Bhushan Das
Professor, Dept. of Civil Engineering,
NITK Surathkal, India



Dr. Bibhas Chandra Giri
Professor, Department of Mathematics
Jadavpur University, Kolkata 700032



Dr. Ajit Kumar Dash
Assistant Professor (Economics)
Birla Global University,
Bhubaneswar, Odisha



Dr. Arunanshu Mahapatro
Associate Professor,
VSSUT BURLA



Dr. Rudranarayan Pradhan
Assistant Prof., School of Electrical Sciences
Odisha University of Technology and
Research (OUTR), Odisha



Dr. Pradyut Kumar Biswal
Dean (Student Affairs), Assistant Professor
Electronics Engineering, IIIT BBSR, Odisha



Prof. (Dr.) Gopinath Palai
Prof., Engineering and Technology
Sri Sri University, Cuttack,
Odisha, India



Meera Viswavandya
Prof., School of Electrical Engineering
Odisha University of Technology and
Research (OUTR), Bhubaneswar, Odisha.



Dr. Jyoti Prakash Giri
Associate Professor
Department of Civil Engineering
CUTM Bhubaneswar, Odisha



Dr. Mrutunjaya Panda
Professor in Computer Science
Utkal University,
Bhubaneswar, Odisha

CHIEF PATRONS

Dr. Satya Prakash Panda, CHAIRMAN

Er. Rama Narayan Sabat, VICE CHAIRMAN

Smt. Minakshi Panda, SECRETARY

Prof. Niyati Naik, HOD CIVIL

Prof. Swarupa Arya, HOD MCA

Dr. Bibhuti Bhushan Behera, HOD CSE

Mr. Nilanchala Patra, Manager HR

PATRON

Dr. Subhrajit Pradhan, PRINCIPAL

Convenor

Dr. Chandan Kumar Sahoo, Dean R & D

Co-Convenor

Dr. Jyoti Prava Dash, Asso. Prof., Dept. of CSE

Prof. Abanikanta Pattanayak, Asst. Prof., Dept. of CSE

Prof. Shiva Ram Patnaik, Asst. Prof., Dept. of MBA

ADVISORY COMMITTEE

Dr. Dilip Senapati, Delhi University, India

Dr. Sadhana Dash, IIT Bombay

Dr. S. Nanda, KIIT DU, Bhubaneswar, India

Dr. Hrudaya Kumar Tripathy, KIIT DU, Bhubaneswar

Dr. Surendra Kumar, Delhi University, India

Dr. P K Ray, Sambalpur University, India

Dr. Susanta Kumar Das, GM University, Sambalpur

INTERNAL ADVISORY COMMITTEE

Dr. Dillip Dash, Dean Student Affairs

Mr. Jatindra Kumar Mishra, Dy. Registrar

Prof. Sibabrata Mohanty, Prof I/C, Academics

Prof. B. Srinivas Rao, Prof I/C, Exams

Dr. Maitrayee Rout, HOD MBA

Prof. BTM Nayak, HOD EE

Prof. Shakti Narayan Mishra, HOD ECE

Prof. Mamuni Arya, HOD MECH

EXTERNAL ADVISORY COMMITTEE

Dr. Vladimir Mladenovic, University of Kragujevac, Serbia

Dr. Dalibor Drljaca, Pan European University, Bosnia and Herzegovina

Dr. Elma Zanaj, Polytechnic University of Tirana, Albania

Dr. Ramesh Kumar Mohapatra, NIT Rourkela, India

Dr. Ratnakar Das, NIT Rourkela, India

Dr. Suwendu Rup, NIT Raipur, India

Dr. Debasish Jena, IIIT Bhubaneswar, India

Dr. Sabyasachi Patra, IIIT Bhubaneswar, India

Dr. Sanjay Panda, NIT Warangal, India

Dr. Pradosh Kumar Gantayat, ICFAI, Hyderabad, India

Dr. Manas Ranjan Kabat, VSSUT, Burla, India

Dr. Brojo Kishore Mishra, NIST University, Brahmapur

Dr. Sanjay Kumar, Birla Global University, Bhubaneswar

ORGANISING COMMITTEE

Dr. Jyoti Prava Dash,

Prof. Abanikanta Pattanayak,

Prof. Shiva Ram Patnaik,

Dr. Manoj Kumar Sahoo

Dr. Sridhar Parida,

Dr. Suryanarayan Tripathy,

Prof. Itishree Panda,

Prof. Tanushree Dalai

Mr. Prakash Kumar Sahoo



VENUE:

**Gandhi Institute of Excellent Technocrats (GIET),
Ghangapatna, Bhubaneswar**