



2<sup>nd</sup>

## International Conference

On

**“Innovative Research in Agriculture, Engineering, Technology, Applied Sciences, Humanities and Business Management for Sustainable Development” (AETAHBS-2023)**

**Organized by:**

**Pusa Institute of Technology (Delhi Skill and Entrepreneurship University (DSEU) Pusa Campus)**



**Dr. Rajinder Singh**  
Pusa Institute of Technology,  
Pusa, New Delhi  
(Organizing Secretary)

**Dr. Vikas Rai**  
University of Eritria  
(Convener)

### About the Host Institute:

**and**  
**“Krishi Sanskrit” New Delhi**  
**Supported by:- Dr.G.C. Mishra Education Foundation**

**On**  
**23<sup>rd</sup> & 24<sup>th</sup>**  
**February, 2024**

**Venue**

**Pusa Institute of Technology, Pusa, New Delhi**

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**Dr. O.P. Singh**  
Principal,  
Pusa Institute of Technology  
Pusa, New Delhi  
(Chairman)

**Dr. G.C. Mishra**  
President,  
Krishi Sanskriti  
(Convener)

Pusa Institute of Technology formerly known as Pusa Polytechnic is a premier engineering college in New Delhi, India established in 1962. It is affiliated to the Board of Technical Education, Delhi of the Government of Delhi. DSEU's Pusa campus resides in the heart of Delhi, where talent meets skill training.

The distance from New Delhi Railway station to Institute is 7.5 KM. and nearest metro station is Patel Nagar or Rajendra Nagar which is 3.5 KM. distance from IGI airport 13 KM. out station delegates wish to get accommodation can book hotel by OYO rooms by themselves.

### Call for Papers and Conference Themes

The Organizers cordially invites Abstracts and Full Research Papers for oral/poster presentation from all over the world to participate/present and publish their research papers in the International Conference on “Innovative Research in Agriculture, Engineering, Technology, Applied Sciences, Humanities and Business Management for Sustainable Development”(AETAHBS-2023) on the following scientific areas for presentations and discussions thereafter. These engineering subjects are emerging and promising discipline in shaping future research and development activities in both Academia and Industry. The conference aims at providing an opportunity for exchange of ideas and dissemination of knowledge among Academia, Industry, Research Scholars, Scientists, Entrepreneurs and N.G.O. for sustainable growth of the society. Contributions are invited from prospective authors from related areas. All contribution should be of high quality, Original and not published elsewhere or submitted for publication. During the review period, Papers will be reviewed by eminent scholars in the respective areas All selected papers will be published as chapters in edited book/conference proceeding with ISBN No. and few high-end papers will be published in international journal having ISSN No. which will be issued to authors on the day of conference.

**There will be best paper presentation awards in Oral / Poster category.**

**Topics of interest for submission include, but are not limited to:**

**Track No. I: Engineering/ Technology**

**Theme: 1 Mechanical, Aeronautical and Automobile Engineering**

**Mechanical Properties of Materials**

- Advanced Characterization
- Electronic Materials
- Materials for Energy and Environmental Applications

- Organic Polymer Materials

**New Materials and Advanced Materials**

- Non-ferrous Metal material
- Iron and Steel
- Composites
- Biomaterials
- Polymeric Materials

**Mechatronics**

- Design, Modeling and Simulation of Mechatronic systems
- Mechatronic Education

**Machine Design**

- Actuator Systems
- Coatings and Surface Modification
- Cutting/ Forming/ Grinding/ Polishing
- Design for Manufacturability (DFM)

**Production and Mechanical Engineering**

- Advanced and Digital Manufacturing
- Applied Mechanics
- Biomechanics
- Composite and Smart Materials

**Fluid Mechanics and Machinery**

**Manufacturing Engineering**

- Advanced Design, Production Processes and Devices
- Design of Machines and its Applications
- Engineering Design Methodology and Design Models

**Automation and Equipment Manufacturing**

- Advanced NC Techniques and Equipment
- Embedded System

- Industrial Robotics and Automation

- Intelligent automation

**Engineering and Automation**

- Advances in Metal Forming
- Advances in Quality Control in Multistage Manufacturing Systems

**Aerospace Engineering (Aeronautical and Astronautical)**

- Advanced In-Space Propulsion & Power Concepts
- Aero elasticity and Space faring
- Aerospace Propulsion Systems
- Aerospace Structures and Materials
- Aircraft Design and Technology
- Atmospheric Flight Dynamics
- Flight Dynamics, Control and Performance
- Spacecraft Design and Technology
- Unmanned Air Vehicle

**Nanotechnology: Fundamentals and Applications**

- Computational nanoscience and nanotechnology

- Mechanical Properties and Nanomechanics
- Multifunctional nanomaterials

## **Them II: Civil, Architecture and Environmental Engineering**

### **Architecture and Civil Engineering**

- Buildings, urban life and environment
- City Planning and daily life
- Modern architecture as a new way of producing space
- Multidisciplinary Studies on architecture
- Sustainable design, construction and development
- Constructional Safety
- Pre-Stressed concrete Box girders
- Seismic Analysis Of Structures (Bridges)
- Seismic Retrofitting In Buildings
- Smart Materials
- Smart Structures

### **Architecture and Urban Planning**

- Architectural Design and Theories
- Architectural Engineering

### **Civil, Structural and Material Engineering**

- Bridge and Tunnel Engineering
- Chloride Corrosion in Concrete Beams
- Civil Engineering Materials

### **Materials Science and Engineering**

- New constructive Techniques and Systems
- New Structure and Special Structure
- Non-Destructive Testing
- Urban Transportation Planning
- Water Supply and Drainage Engineering

### **Transportation and Urban Infrastructure:**

- Highway and traffic engineering
- Road structure and pavement

## **Theme III: Electrical and Electronics Engineering**

### **Electrical engineering**

- Automation, control and instrumentation
- Electrical and electronic materials
- Power management system
- Transmission lines

### **Power & Control Systems**

- Advanced Power Semiconductors
- Analysis of Power Quality and System Stability
- Circuits and Electronics
- Control Science and Control Engineering
- Converter/Inverter Topologies
- Electric Drivers and Application
- Electrical Machinery, Motor Drives and Power Electronics
- Embedded Systems and Software
- Industrial power systems
- Power Distribution

### **Power Generation – Conventional and Renewable**

- Hydropower technologies and applications
- Thermal power technologies and applications
- Bio-energy technologies, process and utilization
- New technologies and design for energy efficiency
- Wind, Solar and Renewable Energy Sources

### **Power Transmission and Distribution**

- Ultra High Voltage (UHV) technologies
- HVDC and flexible AC transmission system
- Over-voltage, lightning protection and grounding

### **Photonics, Optoelectronics and Quantum Electronics**

- 3D Semiconductor Device Technology
- Advanced Electromagnetics
- Digital Electronics
- Digital Signal and Image Processing etc

- Electronics & Nano Electronics
- Fiber-optic sensor and networks
- Instrumentation engineering

### **Smart Grid Technologies**

- Concept and structural framing
- Dynamic optimization and control
- Smart appliances and consumer devices

### **Advanced Communication**

- e-Governance, e-Government, e-Commerce, e-Learning, e-Health
- Network Management, Operation and Maintenance

## **Theme IV: Computer Science and Information Technology**

### **Software Engineering**

- Component Based Software Engineering,

### **Mobile Learning**

- Augmented Learning,
- Virtual Learning ,
- Blended learning,
- Cloud Computing for E-Learning,
- E-Learning Portals,

### **Information Technology**

- Artificial Intelligence and Machine Learning,
- Computational Intelligence,
- E-Learning & E-Business,
- Fuzzy, ANN & Expert Approaches,
- Information systems & Applications,
- Management Information Systems,

### **Computer Graphics and Modeling**

- Geometric Algorithms,
- Surface Modeling,

### **Human-Computer Interaction**

- Collaborative System Design,
- Graphical Interfaces,
- Web Designing,

### **Image and Image Processing**

- Digital Photography,
- Image Acquisition Techniques,
- Image Data Management,
- Internet Imaging,

### **Databases**

- Data Mining and Warehousing,
- Database and Information Systems,
- Distributed Databases,
- Text Mining,
- Web Databases and Filtering,

### **Algorithms**

- Fault Tolerant Algorithms,
- Optimization Algorithms,
- Fuzzy logic based system,
- High Performance Computing,
- Nano Computing,

### **Communications**

- Ad hoc and sensor networking,
- Cognitive science,
- Optical networks and systems,
- Wireless communications and networking

## **Track No. II: Applied Sciences**

### **Themel : Physical Sciences**

#### **Condensed Matter Physics**

- Computational solid state physics
- Crystallography
- Semiconductors physics and devices

#### **Refrigeration & air conditioning**

- Working principle of a refrigerator
- Cycle of refrigeration
- Advantages of refrigeration
- Main components of refrigeration cycle & its functions
- Condensation
- Expansion
- Evaporation
- Applications of refrigerations systems
- Compression
- Working principle of a refrigerator
- Cycle of refrigeration
- Advantages of refrigeration
- Main components of refrigeration cycle & its functions
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- Evaporation
- Applications of refrigerations systems
- compression

Note:

Some high quality Research papers will be published in Scopus indexed journals on additional processing charges.

## **Engineering and Industrial Physics, Instrumentation**

### **Metrology and Standards**

- Medical/biological physics, health physics
- Advances in instrumentation and techniques
- Applications of microscopy and imaging techniques in the physical sciences
- Applied non-linear physics
- Biomedical image processing and analysis
- Finite element analysis
- Microelectro mechanical Systems (MEMS)
- Optimization techniques
- Separation and purification processes

### **Physics and material science**

- Applications of Microscopy in the Physical Sciences
- Applied Solid State Physics/Chemistry and Materials Science and Technology Advanced Materials
- Physical Chemistry
- Semiconductors devices and Photonics, Opto-electronics

### **Theme2: Mathematics/ Statistics**

#### **Computational Mathematics, Computational Geometry & Statistics**

##### **Mathematics**

- Difference and Functional Equations
- Discrete Mathematics
- Fuzzy mathematics and its applications
- General Algebraic Systems
- Integral Equations
- Lattices, Algebraic Structures
- Measure Theory and Integration
- Operations Research, Optimization
- Operator Theory
- Ordinary and Partial Differential Equations

##### **Applied Mathematics & Statistics**

- Engineering Mathematics
- Logistics Management
- Operation Research

##### **Geometry & Its Applications**

- Geometry & Its Application
- Differential Geometry
- Kinematics

##### **Algebraic Statistics& Its Applications**

- Algebra & Mathematical Logic
- Algebraic Geometry
- Algebraic Statistics & Its Applications
- Financial Mathematics & Computation
- Functional Analysis
- Mathematical Actuary
- Mathematical Methods in Continuum Mechanics
- Number Theory
- Operator Algebra
- Ordinary Differential Equation
- Probability & Statistics Applications
- Probability Theory & Mathematical Statistics
- Stochastic Process

### **Theme 3: Energy and Environment**

#### **Energy Science and Technology**

- Alternative transportation fuels, sustainable transport
- Appropriate energy technologies for rural development,
- Clean coal technology and IGCC, fluidized bed systems
- CO2 Capture and Storage, CO2 and Emission Issues,
- Combustion system modeling and analysis, clean combustion
- Corporate Social Responsibility initiatives for energy management
- Development and Utilization of Biomass Energy

- Development and Utilization of Wind Energy
- Driving investment in power and renewable assets
- Eco-friendly power projects
- Emission, climate change, implementation of emission mitigation Technologies

#### **Environmental Science and Engineering**

- Architectural Environment & Equipment Engineering
- Clean Production Process
- Environmental Analysis and Monitoring
- Environmental Planning and Assessment
- Environmental Safety and Health
- Geographic Information and Remote Sensing Science
- Land Resources Environment and Urban Planning
- Pollution Control Project (Air, Water, Solid)
- Soil and Water Conservation and Desertification Control
- Waste Disposal and Recycling

#### **Theme 4: Basic and Applied Biology**

Botany

Zoology

Molecular Biology

Biochemistry

Cell Biology

Cancer Biology

Immunology

Genetics

Agro-ecology

Soil Science

Agronomy

#### **Track No. III: Humanities**

Gender,

Governance,

Education,

Laws

Anthropology

History

English

History

Linguistics

Literature

Philosophy

Politics

Psychology

Religious studies

Social Sciences

Women's studies

#### **Track No. IV: Various Business Management**

Business Management

Marketing

Banking

Finance

Economics

Accounting

Tourism

Business Statistics,

Business Ethics

#### **Important Dates**

##### **Abstract Submission:**

Abstracts not exceeding 300 words on any of the aforesaid themes should be sent to the Organizing Secretary through email at [info.pitconference@gmail.com](mailto:info.pitconference@gmail.com) on or before **10<sup>th</sup> February 2024**.

##### **Submission of Full Length Research Paper & Copyright Form**

Full length research paper, in word format double column maximum in 6 pages and copyright form should be submitted together as separate attachment latest by **15<sup>th</sup> February 2024** through email at [info.pitconference@gmail.com](mailto:info.pitconference@gmail.com)

### Submission of Registration Details:

Submission of Registration Form/Details: **18<sup>th</sup> February 2024.**  
Registration process can be initiated after receiving acceptance letter of full paper.

**NOTE:** In case Research article is accepted by the editorial committee it will be published and publication link will be shared to the delegates on the day of conference in case the delegates are not able to physically present their paper due to some or other reason his/her research paper will be published (in absentia) and their conference certificate will be dispatched to his/her correspondence address by post just after the conference at no extra cost. **All communication should be by e-mail/online only (no hard copy is required to be posted).**

### **Mandatory steps to be followed:-**

1. In case of multi authored research paper, at least one full Registration is mandatory.
2. In case other author/co-author wish to physically attend the conference they need to pay full Registration fees individually, separate Certificate along with the conference kit will be issued to them. Co- Authors are requested to fill & submit separate Registration forms in case they are physically attending the conference.

### **Registration Charges:**

| Categories                                 | Indian   | Foreigner                       |                       |
|--|----------|---------------------------------|-----------------------|
|  |          | SAARC/African Country Delegates | Rest of the countries |
| Academic faculty / Industrial Delegates    | 4000 INR | 175 USD                         | 300 USD               |
| Research scholars PhD                      | 3500 INR | 150 USD                         | 250 USD               |
| Student UG and PG                          | 3000 INR | 125 USD                         | 200 USD               |
| Students (I.T.I & Polytechnic / Diploma)   | 2500 INR | 120 USD                         | 135 USD               |
| Listener / Accompanying Member             | 1300 INR | **                              | **                    |
| Only Certificates (Co-Author in -absentia) | 800 INR  | 60 USD                          | 70 USD                |
| Additional Research paper for same authors | 1500 INR | 75 USD                          | 85 USD                |

### Member Organizing Committee:

**Sh. Atul Srivastava**, Lecturer, Dept. Mech. Engineering  
**Sh. Kapil Gauri**, Lecturer, Dept. Mech. Engineering  
**Dr. Sukhwinder Jeet Singh Bhatti**, Lecturer, Dept. Mech. Engineering  
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### Conference Organizing Committee:

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**Mr. S.S Parashar**, Lecturer Elec. Engineering  
**Dr. Reetu**, Lecturer Dept. Elec. Engineering  
**Mr. Hadev Meena**, Lecturer, Dept. Elec. Engg

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**For further information and Latest Updates, Write us at**  
"info.pitconference@gmail.com"

visit our Website: <https://krishisanskriti.org/AETAHBS-2023.html>

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Note:-

We can also Publish your research papers in scopus indexed or other indexed journal on paying additional processing fee.

