

#### FACULTY OF ENGINEERING AND TECHNOLOGY



6<sup>th</sup>Annual Series of National Conference

# JNANA CHILUME -2023

Industry Powered Pre-Conference Webinars | Pre-Conference

Tutorial

# 27<sup>th</sup>NOVEMBER 2023

Page No. 1

# **About JNANA CHILUME-2023**

JNANA CHILUME-2023, the 6<sup>th</sup> annual series of National Conference persist to be the premium event of the Faculty of Engineering and Technology, JAIN (Deemed-to-be University). This conference is a platform for bringing together young scientists, leading academicians, budding research scholars and industry professionals to share their research experiences as well as to exchange their ideas in interdisciplinary domains.

Six parallel conferences will be organized on the same day under the umbrella of *JNANA CHILUME-2023*. The conferences will be organized on the following themes:

- Recent Trends in Aerospace Engineering
- Technological Transformation in Materials and Infrastructure Development for Sustainable Future
- Recent Trends in Sustainable Energy Automation and Communication Systems
- Innovations in Food Processing Technology and Advance Chemistry: Powering sustainability through Industrial Application
- Recent Advances in Materials, Manufacturing, Design, Mathematical Computing and Sustainable Energy
- Technological Advancements in Humanities & Social Sciences, and Library Science

The participants will be able to experience and gain insight knowledge through pre-conference webinars, tutorial, brainstorming technical sessions and technical talks from various experts. The accepted papers which are presented will be published in proceedings with ISBN number. The best presentation will be awarded prize.

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Dr. Chenraj Roychand, Chancellor, JAIN (Deemed-to-be University)	<ul> <li>Dr. Raj Singh, Vice Chancellor, JAIN (Deemed-to-be University)</li> <li>Dr. Dinesh Nilkant, Pro-Vice Chancellor, JAIN (Deemed-to-be University)</li> <li>Dr.Jitendra Kumar Mishra, Registrar, JAIN (Deemed-to-be University)</li> </ul>	

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- Mr. Sunil M P, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering and Technology, JAIN (Deemed-to-be University)

Page No. 3

#### Convener

**Dr. N Beemkumar,** Professor, Department of Mechanical Engineering, School of Engineering and Technology, JAIN (Deemed-to-be University)

#### **Co-Conveners**

- Dr. Ashutosh Pattanaik, Assistant Professor, Department of Mechanical Engineering, School of Engineering and Technology, JAIN (Deemed-to-be University)
- Ms. Keerthana H Magadi, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering and Technology, JAIN (Deemed-to-be University)

# Pre - Conference Events

24th Nov 2023 - 12 Parallel Webinars by Industry /Academic experts

**25th Nov 2023** - Up-skilling Session on "Research Paper Writing using LaTeX" and "Role of AI in Core Engineering"

# Important Dates

Call for papers: **22 Oct 2023** Last date for Paper submission: **10 Nov 2023** Acceptance Notification: **15 Nov 2023** Last date for registration: **18 Nov 2023** Date of Conference: **27 Nov 2023** 

## **POWERED BY**



Selected papers will be published in Scopus Indexed/UGC Care Journals

Who can participate?

Academicians, Industry Professionals, Research scholars, R & D Institutes, Post- Graduation and Graduation students.

Page No. 4

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# **Registration Links**

# **JNANA CHILUME -2023**

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**Recent Trends in Aerospace Engineering** 



Link -<u>https://forms.gle/6jZXoDGWj6jxgHG29</u> email id: - jnanachilumae23aero@gmail.com

> Recent Trends in Sustainable Energy Automation and Communication Systems



Link - <u>https://shorturl.at/ijAX8</u> email id:- jnanachilume.rtseac2023@gmail.com

Recent Advances in Materials, Manufacturing, Design, Mathematical Computing and Sustainable Energy.



Link - <u>https://forms.gle/dWb4eygbf6Ufw8xV8</u> email id: - <u>jnanachilume23mech@gmail.com</u> Technological Transformation in Materials and Infrastructure Development for Sustainable Future



Link - <u>https://forms.gle/fampMhDfHZ94J3PF6</u> email id:-jnanachilume2023civilphysics@gmail.com

Innovations in Food Processing Technology and Advance Chemistry: Powering sustainability throug Industrial Application



Link- - <u>https://forms.gle/uTByW8uaAZCNhcD79</u> email id: - <u>fetftchejnanachilume@gmail.com</u>

Technological Advancements in Humanities & Social Sciences, and Library Science



Link - <u>https://shorturl.at/jOPS6</u> Email id: jnanachilume2023hsslib@gmail,com

Page No. 5

#### Presents

# **JNANA CHILUME -2023**

#### **RECENT TRENDS IN AEROSPACE ENGINEERING**

### **About the Conference**

The conference organized by the Departments of Aerospace Engineering, aims to be one of the leading National Conferences for presenting innovations and advancements in the fields of aerospace and aeronautical sciences. It also serves for creating a national forum for researchers, scientists and academicians to explore and discuss the recent advancements and improvements in the respective fields.

# **Topics of Conference**

- Green Aviation
- Composites, Smart Structures
- Aerodynamics and Computational Fluid Dynamics
- Aircraft Structures, Finite Element analysis
- Electric Propulsion
- Drones and Unmanned Aerial Vehicles
- Digital Technologies in Aerospace Engineering
- Other developments in Aerospace Engineering

**About the Department** 

Department of Aerospace Engineering, Faculty of Engineering and Technology JAIN (Deemed-to-be University), was instituted in 2009 in response to the growing need for quality and globally relevant education and research in the field of Aerospace and Aeronautical Engineering. The graduate, post graduate and research programs offered by us impart sound technical knowledge and provides strong application skills essential for successful professional careers in design, development and testing of structures and systems for aerospace vehicles.

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# **In Association With**



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Medical & Science

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<b>Organizing Secretaries</b>	Organizing Committee	Student Coordinators
Dr. Ashok Kuppusamy, Assistant	Dr. Allamprabhu C.Y, Program	M.Tech – Aerospace Engineering
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	Assistant Professor, Department of	
	Aerospace Engineering	
	Dr. Sundeep Rao P, Assistant	
	Professor, Department of Aerospace	
	Engineering	

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#### DEPARTMENT OF CIVIL ENGINEERING DEPARTMENT OF PHYSICS

#### **Presents**

# **JNANA CHILUME -2023**

#### TECHNOLOGICAL TRANSFORMATION IN MATERIALS AND INFRASTRUCTURE DEVELOPMENT FOR SUSTAINABLE FUTURE

### **About the Conference**

The conference focuses on innovations and sustainable developments in different fields of Civil Engineering and Physics. It is organized to integrate and pool the ideas, innovation/research and advancements in the area of Civil engineering and Physics. The conference will provide a necessary platform to share and exchange knowledge in different areas of Civil engineering and Physics. The conference features keynote/invited lectures by experts, technical paper presentations by research scholars, PG students, academicians, scientists, industry personnel and undergraduate students. All the accepted papers will be published as proceedings with ISBN.

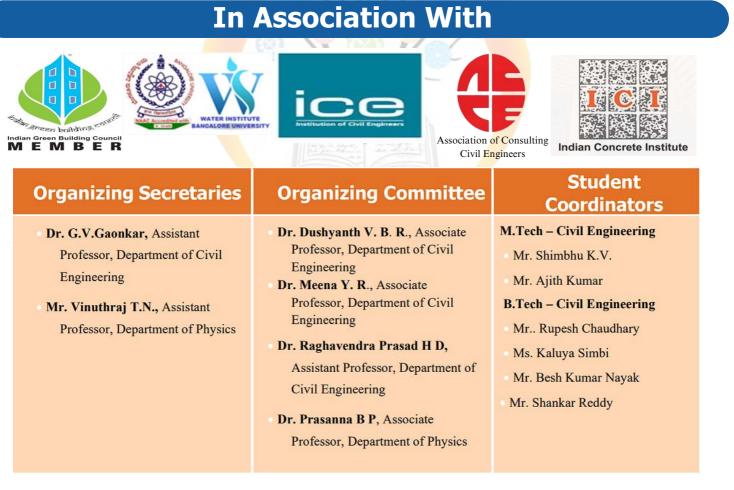
- Cutting-Edge Technologies and Eco-Friendly Materials
- Innovations in Structural and Construction Engineering
- Sustainable Practices in Environmental and Water Resource Management
- Assessing Risks in Smart Infrastructures and Urban Development
- Evaluating Safety, Reliability, and Hazards in Infrastructure
- Bio-cement Solutions for Sustainable Construction
- X-ray crystallography and docking studies
- Nanotechnology and materials
- Smart materials and sensors
- Materials and characterization

#### **About the Department** Department of Civil Engineering

The Department of Civil Engineering was started at FET-JU in the year 2009 with an intension to impart quality education to meet the technological development and industrial requirements. The vision of the department is to emerge as an excellent center for Civil Engineering education and enable our students to convert challenges into opportunities in the competent world and with the mission to Imparting value-added education enriched with state-of-the-art technologies and exceeding the set measurable benchmarks by focusing on integrity, innovation and sustainability parameters to ensure the success of students, fellow researchers and teaching faculty in society. Research & Development is committed and dedicated for the development of innovative and sustainable technologies directed towards the evolving societal and safety needs of infrastructure development, material science.

#### **Department of Physics**

Established under the Department of Basic Science, Faculty of Engineering and Technology, JAIN (Deemed-to-be University), the Department of Physics encourages the students to keep themselves abreast of new trends in science and technology. The department is involved in various research and development activities in various fields with the funded projects from VGST.



Page No. 9

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**DEPARTMENT of Electronics and Communication Engineering DEPARTMENT OF Electrical and Electronics Engineering** 

#### **Presents**

# **JNANA CHILUME -2023**

#### **RECENT TRENDS IN SUSTAINABLE ENERGY AUTOMATION AND COMMUNICATION SYSTEMS**

# **About the Conference**

The conference organized by the Departments of ECE and EEE, aims to be one of the leading National Conferences for presenting innovations and advancements in the fields of Communication, Control and Power Energy. It also serves for creating a national forum for researchers, scientists and academicians to explore and discuss the recent advancements and improvements in the respective fields.

- Signal processing
- Image Processing
- Antennas / Radar Systems
- Satellite and Space Communications
- Remote sensing
- Internet of Things (IoT)
- Nano Satellites, Geographic Information Smart Grid and Green Buildings and Applications
- MEMS and Nano Technologies
- Machine Learning and Artificial Intelligence
- Advancements in Health Engineering
- 5G Technology
- Renewable energy

- Industrial IoT Automation and Control Engineering
- Electrical Vehicles
- Intelligent Power Converters
- Sustainable Energy
- Energy Storage System
- JAIN Robotics and Control



# **About the Department**

#### **Department of Electronics and Communication Engineering (ECE)**

The Department of Electronics and Communication Engineering (ECE) offers undergraduate (B.Tech, ECE), post graduate (MTech Embedded Systems) and Ph.D (Electronics Engineering) programs. The Department was established in 2005 and all the programs are approved by AICTE and NBA accredited. Our highly selective B.Tech ECE program trains the students to become both skilled scholars and effective researchers. Students are given exposure to funded research by taking their final year projects in the ISRO sponsored NAVIC Lab under the supervision of faculty. Our graduates go on to a variety of successful careers including Embedded Systems, VLSI, Communication and Software Domains.

#### **Department of Electrical and Electronics Engineering (EEE)**

The Department of Electrical and Electronics Engineering (EEE) was established in the year 2006 & offers B. Tech. and Ph.D. programs. The Department has faculty well versed in academic and industrial fields ac- companied with experienced technical supporting staff. The B. Tech. EEE program has a highly flexible structure with a blend of industry & research-oriented courses. A student can pursue different specialized streams in the domains of design and development of electrical machines, smart grid, renewable energy, transmission and distribution, energy management, electrical material science.



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#### **Presents**

# **JNANA CHILUME -2023**

#### INNOVATIONS IN FOOD PROCESSING TECHNOLOGY AND ADVANCE CHEMISTRY: POWERING SUSTAINABILITY THROUGH INDUSTRIAL APPLICATION

# **About the Conference**

The annual conference persists to be the premium event for the Department of Food Technology & Department of Chemistry "Innovation in food processing technology and advance chemistry: powering sustainability through industrial application" will be a platform for leading academic scientists, industrialists & research scholars in the domain of interest from around the country for sharing their research findings and its major outcomes.

**Page** No. 12

- Food Processing & Engineering
- Advance Materials & Chemistry
- Food Safety and Quality Manageme
- Organic & Medicinal chemistry
- Food & Dairy Technology
- Food Biotechnology & Nutrition
- Food Microbiology
- Food Supply Chain Management JAIN
- Food Packaging Technology
- Novel Processing Technology
- Bakery and Confectionary Technology

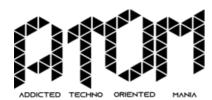
### **About the Department Department of Food Technology**

Department of Food Technology (DFT) have mission to churn out world class food technologists with integrated technological, managerial & behavioral aspects through quality education & advanced research towards interdisciplinary needs of global skill market. Department is funded by MoFPI (Gov. of India)New Delhi, for infrastructure development under the HRA Scheme.

#### **Department of Chemistry**

Department of Chemistry (DC) is one main Branch in Department of Basic Sciences (DBS) in Faculty of Engineering and Technology, JAIN Deemed to be University, with comprehensive research infrastructure with top-notch facilities for carrying cutting- edge research funded by DST, DBT and VGST.

#### **In Association With**







#### **Organizing Secretaries Organizing Committee Student Coordinators** Dr. Sundus Nida, M.Tech – Food Technology Dr. Sumit Kumar, Assistant Professor, Department of Mr. Rounak Ghosh, Assistant Professor, Food Technology Department of Food Mr. Siddharth L, Dr. Ishita Auddy, Assistant Technology Professor, Department of Dr. Deepak Ramesh Kasai, Food Technology Assistant Professor, Dr. Ramanathan Mani, Department of Chemistry Department of Chemistry

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#### Page No. 13

# Presents JNANA CHILUME -2023

#### RECENT ADVANCES IN MATERIALS, DESIGN, MANUFACTURING MATHEMATICAL COMPUTING AND SUSTAINABLE ENERGY

# **About the Conference**

The National conference on "Recent Advances in Materials, Design, Manufacturing, Mathematical computing and Sustainable Energy" is a forum to present recent trends in the field of materials, manufacturing, design, and energy engineering with a special emphasis on sustainable energy. This conference is a platformin bringing togetheryoung scientists, leading academicians, research scholars and industry professionals to share their experiences and research achievements as well as to exchange their ideas on all aspects of Materials, Manufacturing, Design, and sustainable Energy.

# **Topics of Conference**

- Hybrid and composite materials
- Advanced Manufacturing technologies
- Surface coatings and thin films
- Renewable energy systems
- Robotics & Automation
- Nanotechnology and materials
- Smart materials and sensors
- Mathematical modelling
- Differential geometry
- Fluid mechanics

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### **About the Department** Department of Mechanical Engineering

The Faculty of Mechanical Engineering, being a premier branch of engineering not only ensures a deep academic knowledge but also offers a rich exposure to research and industry to the graduating students. The Department has facility of repute supported by highly-proficient faculty, and a good student community who have all contributed to make it vibrant and achieve distinction in the areas of academics and research. The faculties and alumni of several international and reputed institutes such as the University of Michigan- USA, IITs, NITs, etc. are pro-actively involved in R&D activities leading to quality publications in national & international journals and opportunities to participate in renowned conferences.

#### **Department of Mathematics**

Department of Mathematics established in 2005, has qualified and dedicated faculty. The Department of Mathematics is at the forefront in laying a strong foundation and focuses on delivering quality education for meeting the global challenges of science and technology. Since its inception in 2005, the department has been engaged in imparting quality academic education and has focused on research to address key scientific problems. The faculty members have contributed to numerous research articles in peer-reviewed National and International journals. The main research areas are Mathematical modelling, operation research, Differential geometry, fluid mechanics, graph theory and Number theory.

#### **In Association With**



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#### DEPARTMENT of Humanities & Social Sciences DEPARTMENT of Library Science

# Presents JNANA CHILUME -2023

#### TECHNOLOGICAL ADVANCEMENTS IN HUMANITIES & SOCIAL SCIENCES, AND LIBRARY SCIENCE

# **About the Conference**

This conference, jointly organized by the Department of Humanities & Social Sciences and the Library, aims to be one of the leading national conferences for presenting recent economic trends, socio- cultural connects, and innovations in library services and practices for the engineers. It also provides a premier interdisciplinary and multidisciplinary forum for researchers and educators to present and discuss the most recent innovations, trends, policies, concerns, practical challenges encountered, and solutions adopted in the field of Engineering, Social Sciences and Library services.

- Sustainable developments
- Technological advancement
- Cultural fusion
- Social media and its influence
- Trade and Economic growth
- Corporate Social Responsibilities
- Entrepreneurship and Inclusive Growth
- Contemporary Issues in Economics
   Engineering
- Development and Digitalization
- Emerging Economies
- Library Automation
- Digital Library & content Management OWLE
- Library Preservation & conservation.
- E-resources and Inter Library loan
- Technology in ESL
- Teaching english as a Global Language:
- Syntax and Semantics
- Phonology and Phonetics

- Language and Culture:
- English Language Impact on Society:
- English Dialects and Varieties:
- Creative Writing in English



# **About the Department**

#### **Department of Humanities & Social Sciences**

The Department of Humanities and Social Sciences provides a strong academic foundation that delivers quality education for meeting the global challenges of society. It has been engaged in imparting quality academic education and has focused on research to address key scientific problems of society.

#### **Department of Library Science**

The Learning Resource Centre (LRC) provides a variety of information services to enhance student learning and research activities through its extensive collection of books, journals, magazines, e-resources, theses, dissertations, reports, and so on.

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<ul> <li>Dr. Ahmadi Begum, Assistant Professor, Department of Humanities &amp; Social Sciences</li> <li>Mr. Manjunath H N, Chief Librarian</li> </ul>	<ul> <li>Dr. Nanda R T,</li> <li>Assistant Professor, Department of Humanities &amp; Social Sciences</li> <li>Ms. Monika Anand, Assistant Professor, Department of Humanities &amp; Social Sciences</li> </ul>	<ul> <li>B.Tech – Computer Science Engineering</li> <li>Mr. Sulabh Bashyal,</li> <li>Mr. Roshan Singh,</li> <li>Mr. Vishnu</li> <li>Mr. Honey Kumari,</li> </ul>

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