



# SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE

In Association With



St. Cloud State University, USA

Announces

## **SANMANTRANA-2023**

A Multi-disciplinary International Congress

on

### **INDUSTRY 5.0 AND PARADIGM SHIFT: EMERGING CHALLENGES**

**February 1-3, 2023**

## ABOUT SHRI VAISHNAV TRUST

Year 1884 is a landmark year as the foundation stone was laid 138 years ago for Shri Vaishnav Group of Institutions by compassionate Cloth Merchants of Vaishnav cult of Indore, which was later reconstituted as Shri Vaishnav Sahayak Kapada Market Committee in the year 1934. Shri Vaishnav Vidyapeeth Trust believes in taking the Nation forward by improving the quality of life of its citizens by continuously working in the sphere of education, health and environment. It has been established to promote education and research in various disciplines through academic Institutions for the benefit of all sections of the society, but not with the motive of profit. Under the guidance of Shri Vaishnav Sahayak Kapada Market Committee, Shri Vaishnav Shekshanik Avam Parmarthik Nyas was established in the year 1981. Since then, Nyas has been working relentlessly for the upliftment of the society and country as a whole by providing better technical and professional education, health facilities, schools and other services. Shri Vaishnav Sahayak Kapada Market Committee is running University, Colleges, Schools and Institutes of Professional Studies and Research and also rendering social service.

## SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE (INDIA)

Shri Vaishnav Vidyapeeth Vishwavidyalaya is a private university established under Madhya Pradesh Niji Vishwavidyalaya (Sthapana Avam Sanchalan) Adhiniyam in 2015 at Indore (India). The university has been established with a vision to be leader in shaping better future for mankind through quality education, training and research. It pursues the mission to make a difference in sustaining the growth of global societies by developing socially responsible citizens. Value based education being at the helm, the University promotes endurance, excellence, fairness, honesty and transparency as its core values. Some of the objectives of the university are as under:

- To provide teaching and training in higher education and make provision for research as well as advancement and dissemination of knowledge.
- To ensure world class quality in its offerings and create higher levels of intellectual abilities.
- To create centres of excellence for research and development for sharing knowledge and its applications.

The University is offering Undergraduate, Postgraduate, Dual Degree and Doctoral programs in various disciplines through the following constituent Institutions :

- Shri Vaishnav Institute of Technology and Science
- Shri Vaishnav Institute of Textile Technology
- Shri Vaishnav Institute of Architecture
- Shri Vaishnav Institute of Science
- Shri Vaishnav Institute of Computer Applications
- Shri Vaishnav Institute of Fine Arts
- Shri Vaishnav Institute of Agriculture
- Shri Vaishnav Institute of Professional Studies
- Faculty of Doctoral Studies & Research
- Shri Vaishnav Institute of Paramedical Sciences
- Shri Vaishnav Institute of Information Technology
- Shri Vaishnav Institute of Forensic Science
- Shri Vaishnav School of Management
- Shri Vaishnav Institute of Journalism and Mass Communication
- Shri Vaishnav Institute of Social Sciences, Humanities and Arts
- Shri Vaishnav Institute of Commerce
- Shri Vaishnav Institute of Home Science
- Shri Vaishnav Institute of Law
- Shri Vaishnav School of Law

### Besides these Institutions, the University has established following Centres

- Centre of Excellence in Plasma Research
- Centre of Excellence in Happiness Studies
- Centre of Vocational Studies
- Centre of Excellence in Sustainable Development
- Centre of Excellence in Simulation & Gaming
- Centre for Women's Studies
- Centre of Excellence in Data Science

## ST. CLOUD STATE UNIVERSITY, MINNESOTA (USA)

St. Cloud State University is one of the largest public universities in Minnesota with more than 15,000 students. The university is located about an hour northwest of Minneapolis, along the oak-crowned west bank of the Mississippi River. The 100-acre campus is between downtown St. Cloud and the Beaver Islands, a group of more than 30 islands that forms a natural maze for

a two-mile stretch of the river. The St. Cloud metropolitan area is 24<sup>th</sup> on Forbes magazine's "Best Small Places for Businesses and Careers." St. Cloud State is ranked in Forbes magazine's "America's Top Colleges." St Cloud State University is offering undergraduate and graduate programs in Science and Engineering, Management, Liberal Arts, Education, Public Affairs and Health Services. The university has an Integrated Science and Engineering Laboratory Facility (SELF) actively engaged in experimental learning and innovation. University offers research programs in all the branches and externally funded research projects are running in many branches.

## ABOUT THE CONGRESS

Industry 5.0 is the successor of the 'Industry 4.0' concept which employed high technology in the manufacturing industry. Industry 5.0 is a new idea that adds a human touch to the work of robots and smart machines. The basic idea of humans and machines working together is to increase efficiency and effectivity, like the 'Internet of things' (IoT). It aims to merge the increasing cognitive computing abilities of the robots with the intelligence and resourcefulness of the humans. The progress of Industry 5.0 is inevitable. As the technology grows more each day, we find ways to make our work simpler. The development of such technologies to make the world more efficient requires its manufacturers, i.e., humans who collaborate with these machines and technologies. Humans are indispensable resources, as what a machine can do is limited. And with all these efficiencies we have come so far, there is no path leading us back. With adoption of new concepts comes a paradigm shift as development continues and we move from Industry 4.0 which speaks of the "future of production," its primary purpose continues to be achieving seamless connectivity between machines and IT systems for higher productivity and efficiencies across the value chain. Overall, it focuses mainly on traditional financial and operational KPIs. Whereas Industry 5.0 gives a human touch to the concept of 4.0 keeping in mind the well-being of the environment and society, making the machines and humans work together on a path of 'Green Future'. Industry 5.0 has the balance of both humans and technologies which benefits the ecosystem, with discovery of new energy sources and renewable resources, helping in a sustainable working environment. It can be used to reduce harmful residue caused due to manufacturing processes and recycle rare materials. Taking this theme, the multidisciplinary congress on "Industry 5.0 and Paradigm Shift-Emerging Challenges" will highlight research challenges and open issues that should be further developed to realize Industry 5.0.

## THEME : INDUSTRY 5.0 AND PARADIGM SHIFT : EMERGING CHALLENGES

### SUB THEMES

#### AGRICULTURE

- Farmers' Empowerment and Entrepreneurial Development
- Women's Empowerment in Agriculture
- Climate Change: Adaptation and Mitigation Strategies in Agriculture
- Biotechnological techniques for crop improvement

#### ARCHITECTURE

- Regeneration of built environment
- Blurring Boundaries for future through sustainability
- Paradigm shifts in field of Architecture, planning and design
- Reimagining built environment: potential changes & paradigm shifts

#### CHEMISTRY AND ENVIRONMENTAL SCIENCE

- Energy, Environmental and Sustainable Chemistry
- Functional Materials
- Chemistry Environment Interface
- Nano Chemistry
- Enabling technologies for Sustainable Synthesis
- Green Credentials: Safe and Sustainable Future

#### CIVIL ENGINEERING

- Emerging Technologies in Civil Engineering
- Post pandemic changes in the Field of Civil Engineering
- Advancements in Water Resources Engineering, Transportation Engineering and Structural Engineering
- Impact of Climatic changes on Environment

#### CS/IT ENGINEERING

- Digital Experience -From Channel to Human-Centered Design
- Business of Technology - Reengineering Technology
- Digital Reality - Reimagining Engagement
- Ambient Experience -Transparent, Ubiquitous Interfaces
- Analytics -Data Management, Architecture and Insights
- Risk - Cyber, Regulatory and Ethics
- Cognitive- Predict, Prescribe, Augment and Automate
- Exponential Intelligence -Symbolic, Deep, and Broad Reasoning
- Cloud-Flexibility and Ubiquity
- Core Modernization- Reshaping the Heart of the Business
- Blockchain- Distributed Trust and Assets
- Quantum- Exponential computation

- Digital Transformation – Modern Work Place of Technology
- Artificial Intelligence - Automation of Intelligent Algorithms
- Internet of Things – Smart Architecture of Connected Systems
- Robotic Process Automation (RPA) – Programmable Controlled Devices
- Virtual Reality – Live in the Virtual World of Technology
- Machine Learning - Cloning of Human Thoughts in Technological Form

#### **EE/EC/EI ENGINEERING**

- Quantum Technologies and QCA
- Renewable Energy
- Green Technologies
- Power Systems
- Wireless & Mobile Communications
- Network Security
- Smart Grids & Energy Management
- Wireless Power Transfer
- Signal and Image Processing
- EV Charging Methods
- IoT based Automated Systems
- Mechatronics & Avionics
- Robotics and Automation
- Embedded Systems and VLSI Design
- Sensor Technology & Virtual Instrumentation
- Virtual Mobile Networks
- Biometry and Bio Informatics

#### **FINE ARTS**

- Opportunities in the area of Visual Arts in the New Future
- Sustainable Art Practices in technological Era
- Future prospects and avenues in Fine Arts

#### **FOOD & NUTRITION**

- Food microbiology and food biotechnology
- Nutraceuticals and functional foods
- Nutritional therapies and treatments
- Food Allergens
- Nutrition education
- Sports and Exercise nutrition
- Plant based nutrition
- Nutrition, Health and Ageing
- Precision Nutrition

#### **FORENSIC SCIENCE**

- Crime Scene Management
- Forensic Physics
- Forensic Ballistics and Explosives
- Forensic Chemistry and Toxicology
- Forensic Biology and Serology
- Questioned Document Analysis

- Forensic Fingerprint Analysis
- Forensic Psychology
- Computer Forensics
- Forensic Anthropology
- Wildlife Forensics
- Forensic Engineering
- Environmental Forensics
- Forensic Science and Related Laws

#### **JOURNALISM AND MASS COMMUNICATION**

- Digital Media prospectus & challenges
- Media censorship & propaganda
- Mass media and Democracy
- Media and cultural representation

#### **LAW**

- Challenges and emerging developments in legal arena vis-à-vis technological revolution
- Adoption and adaptation of technology in Law
- Technology versus Law: a bane or a boon?

#### **LIFE SCIENCES**

- Applications of Biotechnology in Industries
- Sustainable Agriculture
- Advances in Drug Industry

#### **MANAGEMENT**

- Challenges in managing industrial projects in the era of fast-changing industrial revolution
- Changing perspectives in talent management in Industry 5.0
- Rethinking Circular Economy for Sustainable Development
- Industry 5.0 and Human Robot Coworking
- Leadership in the Era of 5.0
- WFH – Challenges for Team HR
- Rethinking HR: Home as Office
- Security Analysis and Portfolio Management
- Derivative and Commodity Market
- Emerging Digitalization Trends: Opportunity and impact on Indian Economy
- Building Resilience: Management Practices of new normal era
- Internet Marketing in the Era of Technological Disruption
- Technological Advancement in Banking
- Recent trends in BFSI
- Governance and Multi-stakeholder partnerships for resilient Planet

#### **MATHEMATICS**

- Analysis, Functional Analysis
- Topology, Graph Theory, Algebra, Mathematical Modelling
- Statistics

## MECHANICAL ENGINEERING

- Artificial intelligence (AI) & its role in industry
- Computer-integrated systems (CIS)
- Digitization & Computer-integrated manufacturing (CIM), CAD, CAE, CAM, CAPP,
- Communicating robots & systems
- Smart production systems
- Additive Manufacturing (3D printing)
- Autonomous Production
- Design principles in "Industry 5.0"
- Virtualization; Real-time acquisition and analysis of data; Customization of processes/ products
- Hybridization of physical & virtual operation (manufacturing) in Industry 5.0
- Engineering Education for Industry 5.0
- AI-based Bigdata analytics in Industry 5.0 for Supply chain management

- Digital twin technologies

## SOCIAL SCIENCES, HUMANITIES AND ARTS

- Impact of Technology on the pedagogy of language and literature
- Cultural impact on literature
- Cinematic adaptation of literature
- Indian diaspora
- Organisational Psychology in the digital world
- Occupational stress and health
- Gender sensitivity and sustainable work culture
- Global Governance for Sustainability
- Effective Governance for Pandemic Management

## TEXTILE TECHNOLOGY

- Green Textile 2030
- Diversification of traditional Textiles
- Smart Textiles

## ABSTRACT

An abstract of 150 words (Times New Roman Font –12) of the research papers to be presented in the conference has to be sent along with the registration fees. A soft copy of the abstract may be sent by E-mail to [sanmantrana2023@svvv.edu.in](mailto:sanmantrana2023@svvv.edu.in). Acceptance of the abstract as oral/poster presentation will be conveyed after screening. Selected research papers of the registered participants will be published in ISBN book/ Journal. Paper will be published after plagiarism check with a limit of 10% only.

## IMPORTANT DATES:

Last date for abstract submission  
November 30, 2022

Information about accepted abstracts  
December 15, 2022

Last date for submission of full paper  
December 31, 2022

Review report of full paper  
January 10, 2023

Last date for registration  
January 20, 2023

## REGISTRATION FEES

Category	Student	Research Scholar	Academician	Industry	Attendee
Indian	INR 400	INR 400	INR 500	INR 1000	INR 400
Foreign	USD 40	USD 40	USD 90	USD 100	USD 40

## CONGRESS ORGANIZING COMMITTEE

### Chief Patron

Shri Purushottamdas Pasari, Chancellor - SVVV, Indore (MP)

### Patron

Dr. Upinder Dhar, Vice-Chancellor - SVVV, Indore (MP)

### Chairpersons

Dr. Namit Gupta  
Dean, Faculty of Engineering &  
Architecture SVVV, Indore

Dr. Ben Baliga  
Graduate Director - EM,  
St. Cloud State University, USA

### Organizing Secretary

Dr. Roopa Shinde  
Head, Humanities, SVVV, Indore

### Conveners

#### Engineering and Architecture

Dr. Anand Rajavat	Dr. V.R. Sampath	Ar. Vishal Yardi
Dr. Shrikant Pandey	Dr. Anand Babu	Dr. Jigyasu Dubey
	Dr. Saurabh Jain	

#### Science and Agriculture

Dr. K.N. Guruprasad	Dr. Shishir Jain	Dr. Ashutosh Shukla
Dr. Satish Shukla	Dr. Uttam Sharma	Prof. Vinod Dhar
Dr. Kavita Sharma	Dr. M. P. Goutam	

#### Management, Law, Social Sciences, Humanities, Arts, Journalism, Library Science, Commerce

Dr. Santosh Dhar	Dr. T.K. Mandal	Dr. G.H.S. Naidu
Dr. Anu Ukande	Mr. Satish Patel	Dr. Anurag Joshi

Registration fee may be sent as DD in favor of Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore or by bank transfer [NEFT/RTGS: Name of Bank- HDFC Bank Ltd. Branch-Cloth Market, Indore (M.P.), CMS Code: SH97VSHVVD, A/c No. 50100256398597, IFSC Code- HDFC0000281, MICR:452240003, SWIFT Code: HDFCINBBXXX]

**For Further Details or any Enquiry, Please call +91 93037 00148 / +91 93037 00136**

### ABOUT INDORE

Indore is an important commercial centre of Madhya Pradesh. It boasts of well developed industrial areas like Dewas and Pithampur where major industrial houses have production facilities. Indore is the only city in India to house both, Indian Institute of Technology and Indian Institute of Management. Major IT giants such as TCS and Infosys have setup their new ventures at Super Corridor, which is new industrial area, developed by M.P. Government as IT and Medical Hub. Indore has been recognized as the cleanest city of India five times in a row and is also in the first 20 cities being developed as smart cities. Indore is well-connected by road, rail and air routes.

Organized by



**SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE**

University Campus : Indore-Ujjain State Highway, Indore