

National Conference on
Designing the Future: Interconnections of
Nature, Technology and Society
NCDFTS-2026

Organized by



Indira College of Engineering & Management

(DEPARTMENT OF MBA)

AN AUTONOMOUS INSTITUTE

AFFILIATED TO SAVITRIBAI PHULE PUNE UNIVERSITY (SPPU)

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National Conference on
Designing the Future: Interconnections of
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Editors

Dr. Nilesh Uke

Dr. Archana Salve

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Preface

Conference world and AR Research Publication are a fast-growing group of academicians in Engineering, Sciences, and Management. A R Research Publication is also known for its prompt response and high-quality publication standards. The conference world has organized various conferences at renowned places namely Delhi University; New Delhi, Jawaharlal Nehru University; New Delhi, PHD Chamber of Commerce and industry New Delhi, YMCA New Delhi, India International Centre New Delhi, Sri Venknteswara College of Engineering and Technology, Andhra Pradesh, Vedant Engineering Kota and many more places across the country.

We are very pleased to introduce the proceedings of the National Conference on Designing the Future: Interconnections of Nature, Technology and Society (NCDFTS-2026). The papers presented at the conference addressed the Recent Innovations & Development in field of Engineering and Technology. The level of Interest in the subject matter of the conference was maintained from previous events and over 70 suitable papers were submitted for presentation at the conference.

Papers were well represented at the conference to arouse a high level of international interest. The presented papers maintained the high promise suggested by the written abstracts and the program was chaired in a professional and efficient way by the session chairmen. The program was chaired professionally and efficiently by the session chairmen also highly gratifying, showing the high level of interest in the subject. This Proceeding provides a permanent record of what was presented. They indicate the state of development at the time of writing of all aspects of this important topic and will be invaluable to all authors in the field for that reason. Finally, it is appropriate that we record our thanks to our fellow members of the Technical Organizing Committee for encouraging participation from those areas. We are also indebted to those who served as chairmen, without their support, the conference could not have been the success that it was. We also acknowledge the authors themselves, without whose expert input there would have been no conference. Their efforts made a great contribution to its success.

About The Institute

Established in 1994 under the visionary leadership of Dr. Tarita Shankar, Shree Chanakya Education Society (SCES) has pioneered industry-oriented education, evolving into Indira University, nurturing over 8,000 students nationwide. Embracing the philosophy of "management education in a corporate environment," SCES emphasizes practical learning, global relevance, and strong industry integration across its undergraduate and postgraduate programs. The flagship Chanakya Campus, with state-of-the-art infrastructure and robust industry linkages, continues to drive innovation and professional excellence.

About Indira University

Indira University stands as a thriving educational ecosystem dedicated to delivering high-value, future-focused education. As a beacon of academic innovation, it empowers students with relevant skills and leadership capabilities to drive national growth and societal progress. Committed to lifelong learning and cultivating futuristic leaders, the university is reshaping education to meet global challenges, elevate excellence, and create meaningful impacts.

About The Host Institute (ICEM)

Founded in 2007, the Indira College of Engineering and Management (ICEM) is an autonomous institution accredited by NAAC and affiliated with Savitribai Phule Pune University. Offering diverse engineering and management programs, ICEM fosters innovation, research, and sustainable development through state-of-the-art infrastructure, strong industry partnerships, and a dynamic academic environment. **Committed to nurturing global-ready professionals**, the institute continuously adapts to meet evolving workforce demands.

About the Conference

The conference aims to bring together researchers, academicians, industry professionals, and students to exchange insights on emerging technologies and sustainable development. It emphasizes the responsible integration of technology with environmental and societal needs. The conference emphasized sustainable development and the responsible integration of technology with environmental and societal needs. It provides a platform for knowledge sharing, innovation, and collaborative learning, enabling participants to explore futuristic ideas that shape society, economy, and technological evolution.

About IARDO

International Association of Research and Developed Organization (IARDO) is a leading organization in the field of academic research activities under the banner of India Educational Charitable Trust (Regd).

International Association of Research and Developed Organization (IARDO) is an apex body that promotes and encourages commendable achievements from all over the country. The organization under conference world regularly organizes national and International level conferences with the help of its members to promote socially responsible education practices and sustainable development in economic as well social front in India.

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Dean ED Cell, Indira College of Engineering & Management, Pune

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Message

Ms. Reshu Gupta,
CEO Conference World

It is with great enthusiasm that I extend a warm welcome to the **National Conference on “Designing the Future: Interconnections of Nature, Technology and Society (NCDFTS-2026)”**, scheduled to be held on **16th–17th April 2026**.

This prestigious national conference is organized by the **Department of MBA, Indira College of Engineering & Management, Pune**, an autonomous institute affiliated with **Savitribai Phule Pune University (SPPU)**, Maharashtra. The conference is being conducted in association with **Conference World** and the **International Association of Research and Developed Organization (IARDO)**.

The conference aims to provide a dynamic platform for academicians, researchers, industry professionals, and students to exchange ideas, present innovative research, and deliberate on the evolving interconnections between nature, technology, and society. It seeks to foster interdisciplinary collaboration, promote sustainable thinking, and inspire innovative solutions to contemporary global challenges.

I am confident that this academic gathering will encourage meaningful discussions, enhance knowledge sharing, and contribute significantly to research and development across diverse domains.

I extend my sincere appreciation to the organizing committee and our esteemed partners for their dedicated efforts in making this conference possible. I wish the **NCDFTS-2026 Conference** a grand success and a highly enriching experience for all participants.

Ms. Reshu Gupta,
CEO Conference World



Director's Message

Dr. Nilesh Uke

Director,

Indira College of Engineering and
Management, Pune

It gives me immense pleasure to present the proceedings of the National Conference on *“Designing the Future: Interconnections of Nature, Technology and Society,”* successfully conducted on 16th and 17th April 2026. This conference stands as a significant academic endeavor that brought together scholars, researchers, academicians, and industry experts to deliberate on one of the most pressing themes of our time—the harmonious integration of nature, technological advancement, and societal development.

In today’s rapidly evolving world, the intersection of these three domains is not merely an area of academic interest but a necessity for sustainable progress. The insightful research contributions presented during this conference reflect a deep understanding of emerging challenges and innovative solutions. The discussions emphasized the importance of responsible technological development, environmental stewardship, and inclusive societal growth, thereby reinforcing the need for interdisciplinary collaboration.

I would like to extend my sincere appreciation to all the participants, keynote speakers, session chairs, and organizing committee members whose dedication and intellectual contributions made this conference a grand success. The diversity of perspectives shared has enriched the academic discourse and provided valuable insights that will guide future research and policy-making.

These proceedings are a compilation of selected research papers that represent the collective knowledge and scholarly rigor demonstrated during the conference. I am confident that this publication will serve as a valuable resource for academicians, researchers, students, and practitioners, inspiring further exploration and innovation in the fields of technology, environmental sustainability, and social development.

At our institution, we remain committed to fostering a culture of research, critical thinking, and knowledge dissemination. Initiatives like this conference not only enhance academic excellence but also contribute to building a more sustainable and equitable future.

I congratulate the entire team for their commendable efforts and extend my best wishes for continued success in all future academic endeavors.



Conference Convener's Message

Dr. Archana Salve

Dean ED Cell, Indira College of
Engineering and Management Pune
National Conference Convener

It is with great pride and privilege that I present the proceedings of the National Conference on *“Designing the Future: Interconnections of Nature, Technology and Society,”* held on 16th and 17th April 2026 at Indira College of Engineering and Management, Pune, an autonomous institute affiliated with Savitribai Phule Pune University. The publication of these proceedings reflects our commitment to documenting and disseminating meaningful scholarly contributions that emerged from this intellectually enriching platform.

The theme of the conference is both timely and significant, addressing the critical need to understand the dynamic interplay between nature, technological advancements, and societal transformation. In an era marked by rapid innovation and pressing environmental challenges, the importance of interdisciplinary research cannot be overstated. This conference served as a platform to explore sustainable, inclusive, and forward-looking solutions by integrating perspectives from diverse academic and professional domains.

The conference received an overwhelming response, with more than 150 research papers contributed by academicians, researchers, industry professionals, and students. A substantial proportion of these submissions reflected high-quality research, demonstrating strong analytical depth and relevance. The enthusiastic participation and scholarly engagement throughout the sessions created a vibrant academic environment conducive to knowledge exchange and intellectual growth.

The research contributions presented during the conference showcased innovation in thought and application, employing a range of methodologies including conceptual frameworks, empirical analysis, and case-based studies. The papers addressed key domains such as technological innovation, environmental sustainability, and societal development, thereby contributing meaningfully to knowledge creation and research advancement.

The conference was effectively organized through multiple technical sessions, enabling structured paper presentations and in-depth discussions. These sessions fostered an interactive and collaborative atmosphere, encouraging participants to engage in constructive dialogue and exchange ideas.

This volume of proceedings comprises carefully selected and peer-reviewed papers, serving as a valuable repository of contemporary research. It is envisaged that this publication will benefit researchers, academicians, policymakers, and students by providing insights and directions for future inquiry.

I extend my sincere gratitude to our Chief Guest, Dr. Santosh Bhave, Former Director (HR & IR), Bharat Forge, and Guest of Honour Mr. Yogesh Shinde, Social Entrepreneur, Bamboo India, for their valuable presence.. I also thank our Conference Chair, Dr. Nilesh Uke, Co-Convener, Dr. Priyanka Shinde, keynote speakers Dr. Tamil Nidhi M and Dr. Parwinder Kaur, along with all session chairs, reviewers, participants, and the organizing committee for their dedicated efforts.

The successful completion of this conference marks a significant step in strengthening a research-oriented academic culture. I am confident that the outcomes of this conference will inspire continued exploration and innovation in the years ahead.



Co-Convener

Dr. Priyanka Shinde

It gives me great pleasure, as Co-Convener, to present this message for the Conference Proceedings of the National Conference organized by the Department of MBA, Indira College of Engineering and Management.

The theme, “Designing the Future: Interconnections of Nature, Technology and Society,” reflects the growing need to harmonize innovation with sustainability and social responsibility. In an era driven by rapid technological advancements, it is essential to adopt an interdisciplinary approach that integrates environmental consciousness with technological progress.

The collection of research papers in this proceeding highlights diverse perspectives, innovative ideas, and practical solutions contributed by academicians, researchers, and industry experts. These contributions not only enrich academic discourse but also provide valuable insights for addressing real-world challenges.

I sincerely appreciate the efforts of all authors, reviewers, and the organizing committee for their dedication and commitment in making this conference a success. Their contributions have played a vital role in maintaining the quality and relevance of this publication.

I am confident that this proceeding will serve as a valuable resource for researchers and practitioners, inspiring further exploration and innovation.



Dr. Santosh Bhawe

Former Director (HR & IR)

Bharat Forge Ltd.Pune

It gives me great pleasure in communicating my congratulations for the successful organization of two days Conference on important topic on ‘DESIGNING THE FUTURE: INTERCONNECTION OF NATURE, TECHNOLOGY & SOCIETY “, at Indira College of Engineering & management (ICEM) , Pune. It was my honor to be Chief Guest for inaugural ceremony of the conference.

The subject selected for conference is very much connected with each stakeholder in today’s era. Nature, Technology & society are pillars of development. With industrialization is catching with newer challenges, there is a growing need of involvement of every one to support healthy livelihood leading to upbringing of society. Strengthening these pillars will help the administrators to eradicate the poverty level.

At international level also much is talked about preserving nature & we as a important part of our nation, are bound to take responsibility to spearhead the knowledge of protecting it. With advancement of approach through artificial intelligence, life will be easy but at the same time, we as a member of society will experience newer challenges. However, in years to come, we would come up with it, as we have successfully done in past on different Issues.

ICEM has received over 100 research articles as a part of this conference. It’s a acknowledgement that, researchers as getting more & more sensitive to this subject.

I compliment organizing team, especially Dr.Nilesh Uke , Director , Dr. Archana Salve , Conference Convener for exhibiting excellency in each aspect of conference process. Great Team work.

I extend my best wishes to ICEM for all future activities.



Mr. Yogesh Shinde
Founder & CEO - Bamboo India

On April 16, 2026, I had the privilege of being invited as Guest of Honor and Keynote Speaker at Indira College of Engineering and Management, Pune and Management for the National Conference 2026. The theme "Designing the Future: Interconnection of Nature, Technology, and Society" , couldn't have been more relevant in today's rapidly evolving world.

I extend my sincere gratitude to Dr. Nilesh Uke and Dr Archana Salve for curating such a meaningful platform. It was encouraging to see academia fostering conversations that truly matter. One of the highlights was the address by Dr. Santosh Bhave, Director – HR & IR at Bharat Forge Ltd. In just 20 precise minutes, he shared powerful insights from his journey, emphasizing sustainable development. His example of E. Sreedharan, known as the Metro Man and Prof. Madhu Dandavate bringing the Konkan Railway to life, without compromising nature, was truly inspiring. Imagine: 90 tunnels and over 2,000 bridges, all built with vision and responsibility. Sometimes we forget our heroes.

A special mention to student anchors Ayushi and Dnaneshwari for their confident and seamless hosting. And to the students .. your presentation and curiosity stood out. You didn't just attend; you absorbed. Thanks to @Dr. Priyanka Shinde for the vote of thanks. To every student reading this: the future isn't something you wait for, it's something you design. Stay curious, stay responsible, and never underestimate the impact of thoughtful innovation.

It was truly a wonderful and enriching experience.



Dr. M Tamilnidhi

Associate Professor

Department of ECE, Sri Krishna College
of Engineering
Coimbatore, Tamil Nadu

It is a privilege to serve as a keynote speaker at the National Conference on *Designing the Future: Interconnections of Nature, Technology and Society (NCDFTS-2026)*. This conference arrives at a moment when the boundaries between natural ecosystems, technological advancement, and human society are increasingly intertwined, demanding thoughtful dialogue and responsible innovation. From my perspective, the central theme of this conference is both timely and essential. Technology today is no longer a separate domain; it actively shapes environmental outcomes and social structures. At the same time, nature is not merely a resource to be managed but a system whose balance is critical to our collective future. Bringing these dimensions together encourages us to move beyond isolated solutions and toward integrated, sustainable approaches. As we engage in discussions, presentations, and exchanges of ideas, I see this platform as an opportunity to question conventional thinking and explore new frameworks. I express my gratitude towards the college management Indira College of Engineering and Technology for organizing such a wonderful and productive National conference which is really required at this era. I wish to thank The Director Dr .Nikilesh Uke sir for his valuable opening remarks and also a special appreciation to Dr. Archana Salve , the Conference Convenor and Dean ED cell. This conference preached that the Future we design must not only be technologically advanced but also environmentally conscious and socially equitable. It is through such shared efforts that we can create meaningful, lasting impact.



Dr.Parwinder Kaur

Assistant Professor, CT University
Ludhiana, Punjab

The Indira College of Engineering & Management's National Conference on "Designing the Future: Interconnections of Nature, Technology, and Society," which took place on April 16-17, 2026, was a very enlightening and thought-provoking event. In order to debate new trends and multidisciplinary approaches influencing the future, the conference effectively gathered academicians, researchers, industry experts, and students together on a common platform. The conference's well-organized sessions, which addressed a variety of topics relating technology to societal advancement and environmental sustainability, were one of its main advantages. The keynote addresses were enlightening and offered a more comprehensive view of how research and innovation can tackle global issues. The presenters successfully linked academic knowledge with real-world applications and shown a high level of experience.

Particularly interesting were the paper presentation sessions, which gave participants a chance to share their findings and get helpful criticism. Each presentation was followed by lively, thought-provoking discussions that promoted knowledge sharing and teamwork. By emphasizing the value of combining several areas to address challenging real-world issues, the conference also encouraged interdisciplinary study.

The event's management and organization were excellent. The organizing committee made sure that everything ran smoothly, that everything was scheduled on time, and that everyone was welcome. The entire experience was further improved by the use of digital tools and efficient communication. All things considered, the conference was very helpful in expanding academic knowledge, creating networking possibilities, and stimulating creative thought. It highlighted the need for sustainable and technologically advanced solutions and offered insightful information about potential future research topics. These kinds of programs are essential for promoting a culture of research and fostering interdisciplinary cooperation.

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National Conference on Designing the Future: Interconnections of Nature, Technology
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Management, Pune, Maharashtra** Total 150 papers were received for the conference
and 70 papers were shortlisted by the committee.

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