

## NATIONAL ADVISORY COMMITTEE:

**Dr. G. Ravi**, Vice Chancellor & Professor of Physics, Alagappa University, Karaikudi

**Dr.P.Christopher Selvin**, Registrar, Homi Bhabha National Institute (HBNI), Mumbai

**Dr. R. Jayavel**, Professor and Dean, AC Tech Campus, Anna University, Chennai

**Dr.S. Ramapabhu**, Emeritus Professor, Indian Institute of Technology Madras, Chennai

**Dr. A Pandikumar**, Sr. Scientist, Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

**Dr. Kuppusamy Thangaraju**, Professor of Physics, National Institute of Technology Warangal

**Dr. K. Ramesh**, Principal Research Scientist, Dept .of Physics, Indian Institute of Science, Bengaluru

**Dr. G. Anbalagan**, Professor of Physics, University of Madras, Chennai

**Dr. M. Arivanandhan**, Professor, Centre for Nanoscience and Technology, Anna University, Chennai

**Dr. V. Ganesh**, Sr. Scientist, Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

**Dr. K. Mohanraj**, Associate Professor of Physics, Central University of Tamil Nadu, Thiruvavur

**Dr. D. Rajan Babu**, Professor of Physics, Vellore Institute of Technology, Vellore

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**Dr.S.Manikanadan**, DRDO, Bangaluru

**Dr.G.Vairavel**,Professor, SRM University, Chennai

**Dr. Arvind K. Singh**, Scientist - ISRO

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**Dr. Binoy Krishna Roy**,NIT Silchar

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**Dr. S. Vasantharathna**, Professor,CIT Coimbatore,India

**Dr. SakshiKaushal**, UIET Panjab University, Chandigarh

**Mr. PreetamTadeparthi**, Architect and Chief Technologist at Texas Instruments, Bangalore, India

**Mr. AnkurBhargava**, Cloud Engineering at Google, USA

**Dr. Srinivas Bhaskar Karanki**, IIT Bhuvneshwar,India

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**Prof S N Singh**, Professor, IIT Kanpur UP, India

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**Dr.M.B.Shyam Kumar**, Professor,VIT,Chennai

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**Dr.R.Venkatraman**, Sastra Deemed University, Thanjavur

**Dr.Vinod Kushava**, Professor,IIT Jammju

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**Dr.V.P.Chandramohan**, Professor,NIT,Warangal.

**Dr.G.Vairavel**, Professor,SRM University, Chennai

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**Smt.T.R.K.Sarasuwathi Khannaiyann**  
Secretary

**Dr. K.Priya**  
Executive Secretary  
Hindusthan Educational Institutions

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Principal

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Professor / Dept .of ECE

## ORGANIZING CONVENER

**Dr.A.Purushothaman**  
Professor/ Dept .of ECE

## ORGANIZING COORDINATOR

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Associate Professor / Dept. of ECE

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**Dr.K.Mahendran.,** Associate Professor / Dept. of ECE  
**Dr. K.Kalpana.,** Associate Professor / Dept. of ECE  
**Mr. B.Hakkem.,** Associate Professor / Dept. of ECE  
**Mr. A.Abdul Hayum.,** Associate Professor / Dept. of ECE  
**Mrs.S.Suganya.,** Associate Professor / Dept. of ECE

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**Mr.E.Babu Thirumangai Alwar.,** Professor / Dept. of ECE  
**Mr. R.Karuppusamy.,** Assistant Professor / Dept. of ECE  
**Mr. A.Vidhyasekar.,** Assistant Professor / Dept. of ECE  
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**Mr. K.R.Kannan.,** Assistant Professor / Dept. of ECE

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**Mrs. T.Sivamani.,** Assistant Professor / Dept. of ECE  
**Ms.S Saranya.,** Assistant Professor / Dept. of ECE  
**Mrs. S.Brindha.,** Assistant Professor / Dept. of ECE

## ALL CORRESPONDANCE MUST BE ADDRESSED TO :

**Organizing Secretary**  
**(NCAIOOC-2025)**  
**Dept.of Electronics and Communication Engineering**  
**HiTech,Coimbatore(TN), India-641 032**  
[ncaiooc2025@gmail.com](mailto:ncaiooc2025@gmail.com)

## CONFERENCE VENUE

**Hindusthan Institute of Technology,**  
**Coimbatore-641 032,Tamil Nadu,India**

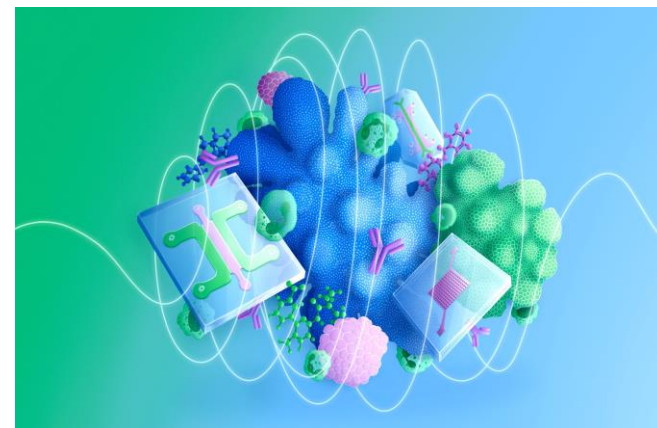
## A Two-Day National Conference

on

## “Next Generation Artificial Organs and Organ-on-Chip Micro-Devices – Organ Chip Technology: Longevity Science and Medicine”

**(NCAIOOC-2025)**

**Date: 25.06.2025 - 26.06.2025**



**Organised by.,**  
**Department of**  
**Electronics and Communication Engineering**



**HINDUSTHAN INSTITUTE OF TECHNOLOGY**  
**( Autonomous)**  
**Othakkalmandapam, Coimbatore – 641 032**  
**Tamil Nadu,India**



## ABOUT THE COLLEGE:

Hindusthan Institute of Technology is one of the leading Engineering Colleges imparting quality Technical Education to the aspirants from Tamilnadu and other neighboring states. It is run by Hindusthan Educational and Charitable Trust under the leadership of Sri.T.S.R.Khannaian and Smt. T.R.K Sarasuwathy Khannaian. The Institution was established in the year 2007 and is affiliated to Anna University Chennai. The Institution is well known for its high educational standards with excellent infrastructures, spread over 200 acres and is located on the Coimbatore - Pollachi National Highway. The Institution currently offers 7 UG and 3 PG programs.

## ABOUT THE DEPARTMENT:

The Department of Electronics and Communication Engineering was started in the year 2007 with vision to develop Centre of Excellence in the wide area of Electronics & Communication Engineering Field and to promote innovative research and development. The department has well equipped laboratories with latest simulation Software and eminent faculty member with good academic records. Our Department got Research Centre Recognition from Centre for Research Anna University Chennai. Under R&D many students doing their project in our department itself.

## ABOUT THE CONFERENCE:

In this conference "Next Generation Artificial Organs and Organ-on-Chip Micro-Devices - Organ Chip Technology", a dynamic two-day event at the forefront of bio convergence. This is your chance to connect with key decision-makers from the pharma and biotech industries, clinicians, organ-on-chips suppliers, regulatory experts, and leading research organizations. Our conference features inspiring keynote presentations from top-tier speakers and offers a unique platform to:

- Propel the translation of advanced in-vitro models into clinical and drug development applications
- Innovate with groundbreaking technologies to create cutting-edge products and services
- Navigate and overcome the challenges of adopting new methods and technologies in a regulated environment

## CONFERENCE OVERVIEW:

A conference on "Next Generation Artificial Organs and Organ-on-Chip Micro-Devices - Organ Chip Technology: Longevity Science and Medicine" would focus on innovations in bioengineering and regenerative medicine. Key topics would include the design and development of artificial organs, the use of stem cells for organ regeneration, and microfluidic organ-on-a-chip models for drug testing and disease modeling. Technological advancements like 3D printing, AI, and nanomaterials would also be discussed. Challenges such as bio-compatibility, ethical issues, and regulatory hurdles will be addressed.

The conference aims to promote collaboration among researchers, clinicians, and industry professionals. Future directions include personalized medicine and the global impact on organ shortages. The event would foster innovation in creating functional, bio-integrated artificial organs and advanced tissue models.

## CALL FOR PAPERS:

Registration is mandatory for the submission of abstract. Abstracts should have 350-word limit of text (excluding presenter information and title) and should be in one of the following topics under the Competitive category from professionals:

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

- **Organ-on-chip Disease Models**
- **Organ on Chip for Regenerative Medicine**
- **Personalized Organ-on-chip Models**
- **Drug Pharmacodynamics and Pharmacokinetics Organ on Chip**
- **Multi-organ on Chip**
- **Organoids on Chip**
- **iPSC-derived Organ on Chip**
- **Microfabrication Technologies for Organ on Chip**
- **Materials and Biomaterials for Organ on Chip**
- **Sensors and Monitoring in Organ on Chip**
- **Advanced Materials for Artificial Organs**
- **Microfluidics in Organ-on-a-Chip Systems**
- **Stem Cell-Based Tissue Engineering**
- **3D Bioprinting for Organ Fabrication**
- **Artificial Intelligence and Computational Models**
- **Perfusion and Nutrient Delivery in Artificial Organs**
- **Vascularization and Integration in Artificial Organs**
- **Biological and Mechanical Integration**
- **Regulatory and Clinical Challenges**
- **Future Directions and Innovations**

These topics are not exhaustive, submissions are welcome on the topics relevant to the conference theme.

## RESOURCE PERSONS:

This national conference extends invitations to speakers from the fields of digital technology, healthcare education, and industry. It aims to unite professionals from both industry and academia, fostering an environment where they can collectively delve into the revolutionary potential of digital technology across diverse sectors, facilitating the sharing of expertise and collaboration with leading professionals

## STRATION FEE INCLUDES

- Admission to attend the conference
- Inaugural Ceremonies
- Lunch & High Tea (During 2 conference days)
- Breakfast and dinner (2 days)
- Delegate kit
- Certificate of participation and/or presentation
- Awards and honour if any

## WHO CAN ATTEND?

Professionals from Medical, Engineering, Pharma, Healthcare, Agriculture sectors along with research scholars from various disciplines like:

- Pharma Industry/ IT and Information Service Providers / Computer Industry
- Scientist / Research Scholar
- Academics from Pharmacy / Engineering / Healthcare
- Engineering, Management and Healthcare Fraternity

## ABSTRACTS MAY BE ACCEPTED INTO ONE OF THE FOUR CATEGORIES :

- Oral Presentation
- E-Poster Presentation
- Symposia
- Innovative Aids

The best Scientific Paper of NCAIOOC-2025 will be awarded for the best presentation at the conference

## REGISTRATION FEES:

<b>Academia</b>	<b>:Rs.1500/-</b>
<b>Industry</b>	<b>:Rs.2000/-</b>
<b>Non-Industry</b>	<b>:Rs.2000/-</b>
<b>Students(UG/PG/Ph.D)</b>	<b>:Rs.1000/-</b>

<b>Abstract of all categories of presentation</b>	<b>: 15.06.2025</b>
<b>Notification of Acceptance</b>	<b>: 18.06.2025</b>
<b>Submission of full paper</b>	<b>: 20.06.2025</b>

## REGISTRATION FORM

Name:.....  
Degree: UG / PG / FACULTY  
Designation:.....  
Department:.....  
Institution:.....  
Mailingaddress:.....  
.....  
Phone:.....  
Mobile:.....  
Email:.....  
Demand      Draft      No.      &      Bank      :  
.....  
.....  
Accommodationrequired:Yes /No

**Date:**

**Place:**

**Signature**

## PLACES TO VISIT IN COIMBATORE & QUEEN OF HILLS (OOTY)

**Isha Yoga Centre**



**Nilgiri Mountain Railway Train**



**Mudumalai Tiger Reserve-Ooty**



**Doddabetta Peak-Ooty**

