INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

TPLC 10th Year Celebrations

# INTERNATIONAL COLLOQUIUM ON TRANSLATIONAL ENGINEERING & RESEARCH

# ICTER 2025

## Translational AI : Engineering Solutions for Society

### *Govt. Engineering College Barton Hill Thiruvananthapuram*

***Organised By***

*Translational Research and Professional Leadership Centre (TPLC)*

**&**

*Department of Information Technology*

**21/03/2025 and 22/03/2025**

**S P Grand Days, Thiruvananthapuram**

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**In association with**

# Welcome Note

With great pleasure and enthusiasm, I welcome you to the prestigious International Colloquium on "Translational AI: Engineering Solutions for Society." The Translational Research and Professional Leadership Centre, TPLC, and the Department of Information Technology, Government Engineering College Barton Hill, are jointly organising this event.

In today's rapidly evolving world, Artificial Intelligence (AI) is not just a field of academic research; it is a powerful tool that is transforming industries, improving lives, and addressing some of the most pressing challenges facing our global community. This conference brings together brilliant minds from academia, industry, and government, all focused on harnessing AI's potential to create practical, scalable, and sustainable solutions. The theme of Translational AI emphasizes the need for bridging theoretical advancements with real-world applications—where cutting-edge engineering meets tangible societal impact.

As an institution committed to fostering innovation and excellence, we are excited to explore how AI can revolutionize sectors like healthcare, agriculture, education, transportation, and beyond. With the collective expertise of our distinguished speakers and attendees, this conference aims to spark collaborations that will push the boundaries of what is possible.

I invite all participants to engage deeply in the discussions, share ideas, and embark on a journey of discovery. Together, let us create a future where AI empowers not only industries but also enhances the quality of life for individuals around the world.

***Wishing you an insightful and enriching experience!***

***Warm regards,***

Dr. Shiny G

***Principal, GECBH***

# Welcome to ICTER 2025

The third International Colloquium on Translational Engineering and Research, ICTER 2025, aims to provide a platform for professionals to present, discuss, and explore emerging trends in Artificial Intelligence from a multidisciplinary perspective. As a collaborative forum for experts from academia, industry, and research organizations, ICTER 2025 encourages exchanging ideas, experiences, and case studies to bridge the gap between research and practical applications across diverse engineering fields. The Translational Research and Professional Leadership Centre (TPLC) and the Department of IT, Government Engineering College Barton Hill jointly organise the colloquium.

# Organising Committee

## Organising Chair

**Dr. SHINY G.**

*Principal*
*GEC Barton Hill*

## Organising Secretaries

**Dr. SUJA R.**
*Professor & Coordinator in TPLC,*
*GEC Barton Hill*

**Dr. HARIPRIYA A. P.**
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## Members

**Dr. BIJULAL D.**
*Professor in ME & Dean ( UG Studies )*
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*Professor in IT & Dean ( Student and International Affairs), GECBH*

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*Assoc. Professor in IT*
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*& Asst. Coordinator TPLC, GECBH*

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**Dr. SARANYA C. NAIR**
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*GECBH*

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*GECBH*

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*Assoc. Professor in IT*
*GECBH*

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*Assoc. Professor in IT*
*GECBH*

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*Asst. Professor in CE*
*GECBH*

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*Accounts Officer, GECBH*

**Dr. ANISH K. JOHN**
*Asst. Professor in ME*
*GECBH*

**Mr. RAJESH KUMAR K.**
*System Analyst in IT*
*GECBH*

**Dr. POUSHALI PAL**
*Asst. Professor in TPLC*
*GECBH*

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*IIT Bombay*

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*Professor in CE*
*IIT Madras*

**Dr. BIJU K.**
*Assistant Director (Research)*
*APJ Abdul Kalam Technological University*

# Organising Institute

Government Engineering College, Barton Hill (GECBH), established in 1999, offers five full-time B.Tech. and eight full-time M.Tech. degree programs. It also provides a one-year Advanced Diploma in Automotive Mechatronics in collaboration with Mercedes Benz India. The institution has partnered with industry leaders like Mercedes Benz and BOSCH Ltd, academic institutions such as IIT Madras, and research organizations like VSSC and CDAC. Additionally, GECBH has signed MOUs with the ICT Academy to strengthen professional collaborations.

# Organising Departments

***The Translational Research and Professional Leadership Centre (TPLC)*** at Government Engineering College, Barton Hill, was established in 2015 through a Public-Private Partnership (PPP). It offers an AICTE-approved postgraduate program in Translational Engineering, affiliated with APJ Abdul Kalam Technological University. TPLC collaborates with institutions like IITs, various government and semi-government agencies, Integrated Rural Technology Centre, Smart City Trivandrum Limited, ANERT, ULTS, and NGOs such as Thanal and Druvansh and has facilitated the launch of four start-ups through its M.Tech. students. In addition, 23 students have undergone international internships and obtained global exposure as part of their curriculum.

***The Department of Information Technology*** at Government Engineering College, Barton Hill, Thiruvananthapuram, established in 1999, is accredited by the NBA and affiliated with the APJ Abdul Kalam Technological University. It offers a B.Tech. in Information Technology and two M.Tech. programs, one in Network Engineering and another in Artificial Intelligence & Data Science. The department focuses on excellence in education and research in AI, machine learning, cyber security, and data analytics projects. It maintains strong industry ties for internships, industrial visits, expert lectures, supports student entrepreneurship, and encourages innovation and startups.

# Collaborating Partners

- Agency for New and Renewable Energy Research and Technology (ANERT)
- Indian Institute of Technology Bombay
- Indian Institute of Technology Delhi
- Indian Institute of Technology Madras
- Smart City Thiruvananthapuram Limited (SCTL)
- Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum
- UL Technology Solutions (ULTS)

# AI Research Frontiers

The International Colloquium on Translational AI: Engineering Solutions for Society focuses on integrating AI with engineering to tackle real-world challenges. It gathers experts from academia, industry, and research to discuss AI-driven innovations in healthcare, sustainability, infrastructure, and more. The event emphasizes collaboration and knowledge exchange to advance sustainable AI applications in areas like circular economy, waste management, renewable energy, smart cities, agriculture, environmental conservation, education, and healthcare.

1. Circular Economy & Waste Management
2. Water Management & Conservation
3. Urban Sustainability & Smart Cities
4. Sustainable Agriculture
5. Education
6. Environmental Monitoring & Conservation
7. Health Care
8. Renewable Energy Optimization & Smart Grid Technology

# Keynote Speaker

**PROF. JAWAHAR C V,**
**DEAN, RESEARCH & DEVELOPMENT, IIIT HYDERABAD**

# Special Address

### AI Powered Education.

**Dr. SAJI GOPINATH**
FORMER VICE CHANCELLOR OF DIGITAL UNIVERSITY
& A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY
PROFESSOR, IIM KOZHIKODE,

### AI Smart Cities.

**Mr. RAHUL KRISHNA SHARMA IAS**
CEO, SMART CITY THIRUVANANTHAPURAM LTD.
PROJECT DIRECTOR KSTP

### AI in Waste Water Management.

**Mr. INDRAKANT JHA**
CEO - EMERGY ENVIRO PVT. LTD.
MUMBAI

### Revolutionary Research with AI: From Data to Decision-Making.

**Dr. RAJASREE M. S.**
*FORMER VICE-CHANCELLOR*
*A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY*

### AI in Waste Management.

**Mr. U.V. Jose IAS (Retd)**
EXECUTIVE DIRECTOR
SUCHITWA MISSION,
KERALA

### AI in Governace.

**Mr. SANDIP KUMAR IAS**
*DIRECTOR*
*KERALA STATE IT MISSION*

### AI in Renewable Energy & Smart Grid Optimization

**Mr.NARENDRANATH VELURI IFS**
CEO - ANERT
GOVT. OF KERALA

### AI in Education, Research & Entrepreunership.

**Dr. ACHUTHSANKAR S. NAIR**
FORMER PROFESSOR
DEPT. OF COMPUTATIONAL BIOLOGY &
BIOINFORMATICS, UNIVERSITY OF KERALA

# Our Speakers

### Dr. K. P. Sudheer

Ex Officio Principal Secretary S &T Dept.
Executive Vice President , Kerala State Council for Science, Technology & Environment

### Dr. Anil Kumar Dixit

Professor
Dept. of Environmental Engineering
IIT Bombay

### Dr. Shekhar Kuriakose

Member Secretary
Kerala State Disaster Management Authority, Thiruvananthapuram

### Mr. Antony Tharayil

VP of Al & Data Practice
Focus Technology Solutions Inc, USA

### Mr. Arunkumar T. V.

CEO, Saasvaap Inc.,
USA

### Dr. Brajesh Kumar Dubey

Professor, Dept. of Civil Engineering,
Chair - School of Water Resources,
IIT Kharagpur

### Mr. Manoj M. Parackattu

Principal Consultant & Client Partner
Tata Consultancy Service, USA

### Dr. Roshini Mary Sebastain

Waste Management Advisor Government of Northwest Territories,
Canada

### Er. Thomas Kuruvilla

Managing Partner, Head of Arthur D. Little Middle East & India , Member of the Global Board

### Dr. Bharatiraja Chokkalingam

Centre Head - SRM Centre for Electric Mobility ( SCEM) & Professor, Dept. of EEE, SRMIT

### Dr. Selva Balan M.

Scientist E (Joint Director)
CWPRS Pune

### Dr. Monica Rivas Casado

Reader in Environmental Systems Engineering
Cranfield Environmental Centre,
Cranfield University, U K

### Dr. Smita V.

Professor
Division of Neuroanesthesia,
Dept of Anesthesiology, SCTIMST.

### Mrs. Divya D. Kulkarni

Research Fellow
Harvard Medical School - MGH

### Er. Sreeganesh V. Nair

Founding Partner & Chief Consultant at Ganesh Technical Consultancy Services (GTCS)

### Dr. Ajith Gopi

Additional Chief Technical Manager, ANERT, Govt. of Kerala

### Dr. V. S. Santhosh Mithra

Principal Scientist CTCRI
Trivandrum

# Our Chairs

### Dr. Babu J. Alappat

Professor, IIT Delhi
Chairman, BOG - GECBH,

### Dr. N. C. Narayanan

Professor and Head
Ashank Desai Centre for Policy Studies,
IIT Bombay

### Dr. K. V. Jayakumar

Visiting Professor
Indian Institute of Technology Dharwad

### Mr. Krishnakumar S.

General Manager
Smart City Thiruvananthapuram Ltd.

### Dr. Jairaj P. G.

Former Professor in Civil Engineering
College of Engineering, Trivandrum

### Dr. Anil B.

Former Professor in ME
& Former principal - GEC Barton Hill

### Dr. Bijulal D.

Professor in ME & Dean (UG Studies)
GEC Barton Hill

### Dr. Bindu Kumar K.

Professor in ME GEC Barton Hill

### Dr. Deepthi Sasidharan

Assoc. Professor in IT
GEC Barton Hill

### Dr. Rendhir R. Prasad

Assoc. Professor in IT
GEC Barton Hill

### Dr. Dinesh Gopinath

Professor in EEE & Dean (Research)
GEC Barton Hill

# Sponsorship

**PLATINUM SPONSOR - ₹2,00,000**

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- Details will be displayed in main event hall.
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- 1 stall

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- Free participation of 2 delegates.
- Details will be displayed in main event hall.
- 1 stall

**BRONZE SPONSOR - ₹25,000**

**Benefits:**

- Free participation of 1 delegate.
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*Organizations can participate as event sponsors.*

# How To Apply

## WHO CAN APPLY

All professionals, research scholars, and students interested in the fields of Artificial Intelligence, Climate Modelling, Renewable Energy, Water Management, Circular Economy, Urban Planning & Smart Cities, Environmental & Monitoring, Sustainable Agriculture, Education, Health care, Shipping, Freight Management, Banking, Communication, Big Data Analytics and Remote sensing are welcome to attend this colloquium.

## HOW TO APPLY

You can register for the colloquium via the link below or the TPLC website. To complete the registration process, you must upload the registration fee payment receipt. Upon successful registration, a confirmation email will be sent to your registered email address.

Scan & Register

***Link for regstration:***

***https://forms.gle/iZsF5sRKeSbWDbiy8***

## REGISTRATION FEES

Working Professionals: ₹2000
Startup exhibition registration fee: ₹1000
Faculty: ₹1000
Student (UG & PG), Research Scholars: ₹750

## ONLINE PAYMENT DETAILS

**Payment can be made online to the account given below:**

**Account No.: 6731 4066 447**
**Account Name: TPLC**
**SBI Branch: VIKAS BHAVAN**
**IFS Code: SBIN0070415**

## CONTACT US

**Dr SUJA R. - +9199955 27866**

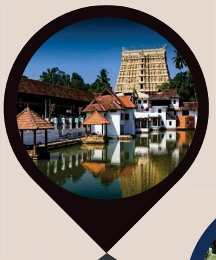
**Dr HARIPRIYA A. P. - +919446084405**

## Venue

**S P GRAND DAYS, PANAVILA JUNCTION, THIRUVANANTHAPURAM**

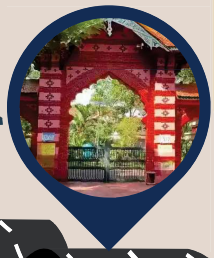
## Nearby Attractions

*Trivandrum is a vibrant city that blends rich cultural heritage with modernity. Nestled along the Arabian Sea, it is known for its pristine beaches, lush greenery, and historical landmarks. Trivandrum is famous for its scenic landscapes, historical significance, and technological advancements.*



**PADMANABHA SWAMI TEMPLE**

*The temple is dedicated to Lord Vishnu. Known for its stunning architecture and immense wealth, it is one of the richest temples in the world.*



**NAPIER MUSEUM & ZOO**

*The Zoological Park in Thiruvananthapuram houses diverse animals, the Napier Museum displays art and historical artifacts of Kerala.*

**KOVALAM**

*Kovalam is a popular beach destination near Thiruvananthapuram, Kerala, known for its picturesque beaches, clear waters, and vibrant tourism.*

**POOVAR**

*Poovar is a serene and picturesque coastal village in Kerala, India, known for its tranquil backwaters, golden beaches, and the unique confluence of the sea, river, and lake.*

**PONMUDI**

*Ponmudi, a serene hill station in Thiruvananthapuram, is renowned for its lush green valleys, mist-covered peaks, and winding trails, offering a perfect escape into nature.*

# Glimpses of ICTER 2022

# Govt. Engineering College Barton Hill Thiruvananthapuram

www.gecbh.ac.in

principal@gecbh.ac.in

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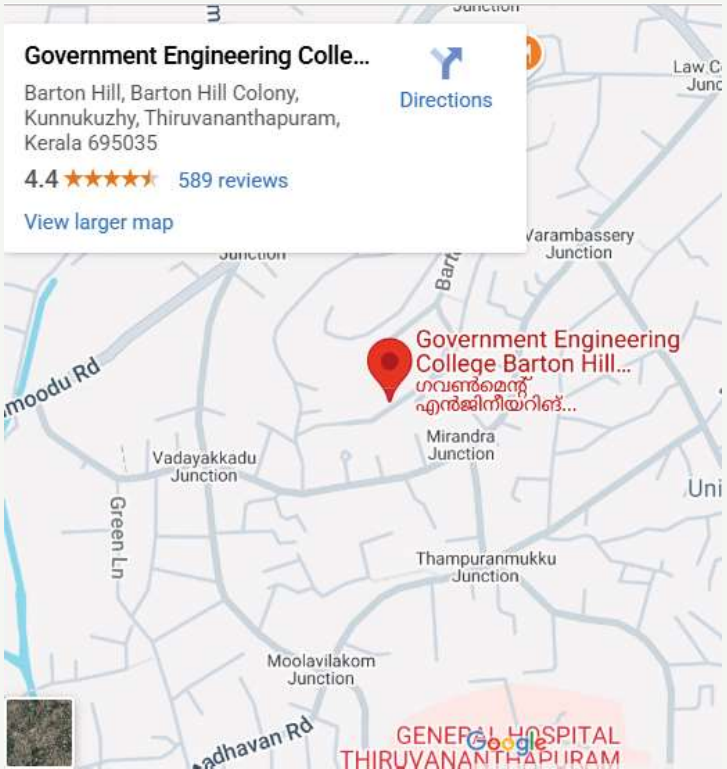
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