



ਪੰਜਾਬ ਕੇਂਦਰੀ ਵਿਸ਼ਵਵਿਦ্যালਯ/ਪੰਜਾਬ ਕੇਂਦਰੀ ਯੂਨੀਵਰਸਿਟੀ  
**Central University of Punjab**

A Central University established by an Act of Parliament

**4<sup>th</sup> to 6<sup>th</sup> December 2024**

# **International Conference on Translational Trends in Natural and Health Sciences (TTNHS-2024)**



**Organized by**

**Central University of Punjab**

**VPO Ghudda, Bathinda, Punjab  
151401, India**



Web: <http://cup.edu.in/ttnhs2024>



## Introduction

Scientific discoveries often remain theoretical until they are translated into real-world solutions. Translational research acts as the conduit between theoretical knowledge and practical applications, hastening the development of impactful innovations. This interdisciplinary approach amalgamates insights from diverse fields to tackle intricate challenges and ensuring a sustainable future.

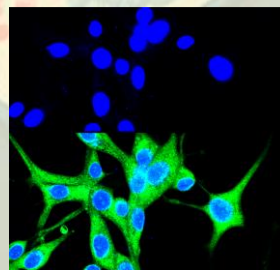
The International Conference on Translational Trends in Natural and Health Sciences (TTNHS-2024) is a sincere effort by the Central University of Punjab to bring together esteemed academicians and scientists from globally renowned institutions. The conference facilitates exchange of scientific advancements in the translational research involving Chemical, Physical, Mathematical, Biological, and Health Sciences while nurturing the aspirations of young scholars. In Chemical and Physical Sciences, discussions will be focused on translating theoretical models into tangible technologies, focusing on renewable energy, quantum computing, and advanced materials. Sessions on Mathematics and Computational Sciences will explore real-world applications such as big data analysis, environmental modelling, and risk management. A special session is planned on the Indian Knowledge System inviting deliberations on the spirituality and its correlation with the quantum and metaphysics.

In Biological sciences, the conference will highlight biotechnological, agricultural and medical breakthroughs. The discussions will be focused on plant biotechnology, marine resources, future crops, agricultural waste management for sustainable development. Health Science sessions will feature emerging therapeutic modalities, breakthroughs in drug discovery, vaccine development and translation of basic scientific discoveries into clinical practice for improved health outcomes. There will be deliberations on traditional health care systems including AYUSH.

TTNHS-2024 will feature plenary, keynote, and invited talks by distinguished experts, providing invaluable insights into the latest trends and challenges. The three-day event will encourage dialogue and collaboration between Academicians, Scientists, Clinicians, Researchers, Policymakers, and Industry stakeholders. Moreover, the conference will offer excellent opportunity for the budding scientists and research scholars to display their work before eminent experts and compete for various awards. Best Poster, Best Oral Presentation, and Young Scientist Awards will be given in different categories. We cordially invite you to join us for TTNHS-2024 as we embark on a transformative journey of innovation, and inspiration at Central University of Punjab, Bathinda.

## Sub-themes

- Green and Sustainable Chemistry
- Natural and Synthetic Therapeutics
- Material Designing and Semiconductors
- Quantum Computation and Technologies
- Data Science, AI and Machine Learning
- Computational Biology and Bioinformatics
- Mathematical Modelling and Simulation
- Environment and Climate Change
- Blue Economy and Marine Resources
- Plant and Agricultural Biotechnology
- Science of Quantum & Metaphysics and Spirituality
- Indian Knowledge System
- Omics Technologies in Diagnosis and Therapeutics
- Medical Biotechnology and Nanomedicine
- Diagnostic Techniques and Biomedical Devices
- Microbial Biotechnology and Vaccine Development
- Traditional Health Care and One Health
- Regenerative Medicines and Stem Cell Therapy
- Drug Discovery and Development
- Artificial Intelligence in health care
- Pharmacogenomics and Personalized Medicine
- Environmental Hazardous and Human Health





## About the University



The Central University of Punjab, Bathinda (CUPB) was established in 2009 by an Act of Parliament. CUPB has completed a remarkable journey of 15 years and accredited with an 'A+' grade by NAAC. Since last five years, CUPB is amongst the top 100 universities in the NIRF India Rankings. The University is granted Category-II status (Graded Autonomy) by UGC and is ISO-9001:2015 certified for quality management in education.

CUPB has received 3<sup>rd</sup> Prize in the National Water Award 2022 in the category of 'Best Institution for Campus Usage' conferred by Ministry of Jal Shakti.

The university is equipped with a state-of-the-art infrastructure and research facilities and promote innovation in teaching, learning and cross-pollinate new ideas and technologies. The faculty members are working in the frontier areas of research getting research grants from various funding agencies. Nine Departments of the University have received prestigious DST FIST grant. The University is promoting interdisciplinary and transdisciplinary research and recently granted a DST-PURSE grant of Rs 8.5 Cr. CUPB has an innovation and entrepreneurship oriented ecosystem and established an iTBI under NIDHI scheme of DST with a funding of Rs 5 Cr and also received a grant of Rs 2.6 Cr under E-Yuva scheme of BIRAC. According to Scopus database, CUPB has an h-index of 87 with 55229 citations and 2968 research papers. The University has 31 departments, 11 schools and hosts students from 17 different countries, 28 States and 8 Union territories of India belonging to diverse cultural and geographical backgrounds. The Central Instrumentation Laboratory is equipped with sophisticated instruments such as NMR-600 MHz, Powder XRD, FESEM, Raman Spectrophotometer, Confocal Laser Scanning Microscope, Flow-cytometer, ICPMS, GCMS and HRMS etc.

CUPB is working in collaboration with the neighbouring Institutes, Universities and played a pivotal role in setting up two Consortiums for Higher Educational Institutions of North India and Bathinda. University is committed to create an ignited workforce responsive to regional, national and global needs in tune with the requirements of academia and industries.



## Important dates

Start of registration and abstract submission	: <b>June 5, 2024</b>
Last date for abstract submission	: <b>Aug. 15, 2024</b>
Abstract acceptance date	: <b>Aug. 20, 2024</b>
Last date of early bird registration	: <b>Aug. 25, 2024</b>

### Oral and Poster presentation:

Interested percipients are requested to send an abstract within 300 words to [TTNHS2024@cup.edu.in](mailto:TTNHS2024@cup.edu.in) by Aug. 15, 2024.

Abstract should be mailed in MS word format in Times New Roman, font size 12, line space 1.5.

There will be 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> prizes for the Best oral and Best poster presentation under four different categories: **Chemical, Physical, Biology** and **Health sciences**.

There will be **Young Scientist award** for the budding scientists below the age of 35 year.

### Registration Fees:

Sr No	Participants	Early bird before 25 <sup>th</sup> Aug. 2024	Upto 15 <sup>th</sup> Sept. 2024	On Spot registration
1	International Delegates	\$150	\$250	\$300
2	Indian delegates/Academia	Rs 5000	Rs 5500	Rs 6000
3	Industry delegates	Rs 7000	Rs 7500	Rs 8000
4	Research Scholars	Rs 3000	Rs 4000	Rs 4500
5	Students (UG/PG)	Rs 1500	Rs 2500	Rs 3000

\*Accompanying person will be charged Rs 2000 extra

Registration fee includes conference kit, lunch, dinner and refreshment

Details for the Registration is available on University website

Registration form:

<https://forms.gle/9zxs52L32QaaWe19>

Abstract submission form:

<https://forms.gle/fTZpC2QjauKpKusFA>

### How to reach Central University of Punjab, Bathinda

#### Nearby International Airports

1. Indira Gandhi International Airport, Delhi  
Delhi to Bathinda flight (Tue, Fri, Sat)  
Delhi to Bathinda by Road/Train; 332 km
2. Sri Guru Ram Das Ji International Airport, Amritsar  
Distance to Bathinda: 200 km
3. Shaheed Bhagat Singh International Airport, Chandigarh  
Distance to Bathinda: 222 km



**Central University of Punjab**



**Expert Speakers**

Prof. Goverdhan Mehta, University of Hyderabad  
Prof. Jose Angel Martin-Gago, CSIC, Spain  
Prof. Niels Tommerup, University of Copenhagen, Denmark  
Prof. Ssang-Goo Cho, Konkuk University, South Korea  
Prof. Masako Kinoshita, Kyoto University, Japan  
Prof. Thomas Liehr, University Jena, Germany  
Prof. Tanja Maria Sheldrick-Michel, Denmark  
Prof. V K Singh, Chair Professor, IIT Kanpur  
Prof. TP Singh, AIIMS Delhi  
Prof. Rajiv Ahuja, Director, IIT Ropar  
Dr. D. Srinivasa Reddy, Director, ICT Hyderabad  
Prof. AK Tripathi, Director, IISER Mohali  
Prof. D. S. Rawat, Vice Chancellor, Kumaun University, Nainital  
Prof. Laxmidhar Behera, IIT, Mandi  
Prof. N. Senthil Kumar, Mizoram University, Aizwal, Mizoram  
Prof. Tankeshwar Kumar, Vice Chancellor, CU Haryana  
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Prof. Dinesh Mohan, JNU, New Delhi  
Prof. I. N. N. Namboothiri, IIT, Bombay  
Prof. Sashi Bala Singh, Former Director, NIPER, Hyderabad  
Prof. D. Samba Reddy, Texas University, USA  
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Prof. Dulal Panda, Director, NIPER, Mohali  
Prof. Bhushan Patwardhan, Savitribai Phule Pune University  
Prof. Stefania Butini, University of Siena, Italy  
Prof. RNK Bamezai, Director, Delhi School of Public Health





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## In and around Bathinda

### Talwandi Sabo

Talwandi Sabo, located in the Bathinda district of Punjab, India, holds historical and religious significance. It is renowned for its Gurudwara Sri Damdama Sahib, one of the Five Takhts (seats of authority) in Sikhism. The town is associated with Guru Gobind Singh, the tenth Sikh Guru, who stayed here and completed the Guru Granth Sahib, the holy scripture of Sikhism.



### Qila Mubarak

This fort was earlier known as Tabar-e-Hind or the gateway to India. Qila Mubarak Gurudwara Sahib is a very important historical site in Bathinda. This majestic architecture looks very similar to the shape of a boat. It is a popular place among people who love historical sites.

### Shri Harmander Sahib Amritsar

Sri Harmandir Sahib, the Holy Golden Temple of Amritsar is one of the jewels of Punjab. As the spiritual and cultural heart of Sikhism, the Golden Temple attracts millions of pilgrims and visitors each year from around the world.



### Attari Wagah Border

The Lowering of the Flags ceremony at the Attari Wagah border is a daily ceremony that the security forces of India (Border Security Force) and Pakistan (Pakistan Rangers) have jointly followed since 1959. The drill is characterized by elaborate and rapid dance-like maneuvers and raising legs as high as possible. It is both a symbol of rivalry and a display of brotherhood and cooperation between the two nations.

### Hussainiwala Border

Hussainiwala Border is located near Bathinda and is famous for its historical significance. This border crossing gained prominence due to its association with the India-Pakistan Partition and the subsequent Indo-Pak wars. It holds the National Martyrs Memorial, dedicated to Bhagat Singh, Rajguru, and Sukhdev.

