

# 3<sup>rd</sup> International Conference of Integrative Chemistry, Biology & Translational Medicine

## ICBTM 3.0

March 8-10, 2024  
Udaipur, Rajasthan  
Bharat



### Organizers

Hansraj College, University of Delhi, Delhi, Bharat  
Pacific University Udaipur, Rajasthan, Bharat  
HeteroChem InnoTech Private Limited, Bharat

15:00 – 16:30

Navigating opportunities  
*A Guide to Effective  
Communication Skills*

**Pawan K. Dhar, Ph D**  
Professor & Head  
Synthetic Biology Group  
School of Biotechnology  
Jawaharlal Nehru University, New Delhi

16:30 – 18:00

Artificial  
Intelligence  
in Biology

**Binay Panda, Ph D**  
Professor & Head  
Computational Genomics Group  
School of Biotechnology  
Jawaharlal Nehru University, New Delhi

workshop venue: Computer Lab, Pacific College of Engineering

## CONFERENCE SCHEDULE

ICBTM 3.0 Pacific University

Day 1: March 8

07:00 – 08:20 Registration | Tea | Coffee

08:30 – 09:35 Inaugural Ceremony

09:40 – 10:20 Inaugural Lecture

### Chair

**Dr. Sudhir Chandna**, Director & Sc 'G', Institute of Nuclear Medicine and Allied Sciences (INMAS), Defence Research and Development Organisation (DRDO), Government of Bharat

### Prof. Julien Lescar

Interim Director & Professor, NTU Institute of Structural Biology, Singapore & Principal Investigator, Singapore-MIT Alliance for Research and Technology Centre, Singapore  
Title: Using the Cellular Thermal Shift Assay Combined with Structural Biology to Identify and Validate Malaria Drug Targets.



[www.he-cit.com](http://www.he-cit.com)



# CONFERENCE SCHEDULE

## Day 1: March 8

ICBTM 3.0

Venue: Pacific University

### HALL - A

Invited Lecture

Theme: Biology of Infectious Diseases & Drug Discovery

#### Chair

**Prof. KK Dave**, President, PAHER, Udaipur

**Prof. Yogendra Singh** 10:35 – 11:10

Delhi School of Public Health, IoE, University of Delhi, Bharat  
Title: Role of protein phosphorylation in orchestrating the proteome to run the life

**Prof. Pawan K. Dhar** 11:15 – 11:50

Jawaharlal Nehru University, New Delhi, Bharat  
Title: Dark Genome - a new drug discovery platform

**Dr. Vera Alferova** 11:55 – 12:25

Russian Academy of Sciences, Russia  
Title: Current trends in natural antibiotic discovery

**Dr. Soumyananda Chakraborty** 12:30 – 13:00

ICMR-National Institute of Malaria Research, Bharat  
Title: Antimalarial delivery with ferritin-based protein cage: A step towards developing smart therapeutics against malaria

### HALL - B

Invited Lecture

Theme: Chemistry of Bioactive Molecules

#### Chair

**Prof. Suresh C Ameta**, Professor Emeritus, Pacific University, Udaipur

**Prof. Akhilesh K Verma** 10:35 – 11:10

Department of Chemistry, University of Delhi, Bharat  
Title: Real-time monitoring organic reactions: Mechanistic analysis of reaction intermediates/species using online mass spectrometer

**Prof. K. Rajshekhar** 11:15 – 11:50

University of KwaZulu-Natal, South Africa  
Title: Palladium-catalyzed regio divergent C-H olefination of Imidazo[1,2a] pyridine carboxamide and unactivated Alkenes

**Dr. Bakai-Bereczki Ilona** 11:55 – 12:25

University of Debrecen, Hungary  
Title: Glycopeptide antibiotic derivatives against viruses

**Prof. Ashutosh K. Mishra** 12:30 – 13:00

Indian Institute of Technology, Hyderabad  
Title: Modulating intrinsic behavior of the flavin core for biological applications

### HALL - C

Invited Lecture

Theme: Global Health & Challenges

#### Chair

**Prof. Ravi Durvasula**, Chair of Infectious Diseases, Mayo Clinic, Florida, USA

**Prof. Ravi Durvasula & Dr. Prakasha Kempaiah** 10:35 – 11:15

Mayo Clinic Florida, USA.  
Title: Immunobiology of long COVID-19 syndrome

**Dr. Pulin K. Gupta** 11:20 – 11:50

Dr. Ram Manohar Lohia Hospital (RML), Delhi, Bharat  
Title: Management of dengue fever and malaria--current scenario and counteracting strategies in India

**Dr. Rohit Chitale** 11:55 – 12:25

Mayo Clinic Florida, United States of America.  
Title: Artificial intelligence will change humanity forever: proactive health solutions for disease prevention

**Dr. Atulabh Vajpayee** 12:30 – 13:00

Neurologist, Pacific Medical College and Hospital, Pacific Medical University, Udaipur Bharat  
Title: Advances in neurochemistry

## 13:00 – 14:00 LUNCH & POSTER SESSION

#### Chair

**Prof. Hemant Kothari**, Dean, PG Studies, Pacific University, Udaipur

**Prof. Mandira Varma Basil** 14:00 – 14:30

Patel Chest Institute, DU, Bharat  
Title: Unveiling the importance of nontuberculous mycobacteria as potential human pathogens

**Dr. Vinoth Rajendran** 14:35 – 15:00

Pondicherry University, Bharat  
Title: Zinc pyrithione inhibits blood stage parasites of *plasmodium falciparum* in culture

#### Chair

**Prof. P.K. Chaudhary**, Dean, Faculty of Pharmacy, Pacific University, Udaipur, Bharat

**Prof. Ram Sagar** 14:00 – 14:25

JNU, New Delhi, Bharat  
Title: Metal-free synthesis of natural product-inspired glycohydrids as anticancer agents

**Prof. Ronaldo Oliveira** 14:30 – 15:00

UFRPE, Recife, Brazil  
Title: Carbohydrate-based Small Molecules Derivatives: Stay on the Roads Toward Bioactive Compounds

#### Chair

**Prof. Mahendra Rana**, Kumaun University Nainital, Uttarakhand, Bharat

**Dr. Sinka David** 14:00 – 14:30

University of Debrecen, Hungary  
Title: The importance of collaboration between academia and industry in pharmaceutical R&D

**Dr. Prerna Sharma** 14:30 – 15:00

Institute of Human Behaviour & Allied Sciences (IHBAS), Delhi, Bharat  
Title: Youth mental health - Imagining safer and enabling spaces for young people

## SIGHTSEEING

15:00 – 19:00



City Palace



Jagdish Temple



Shilpgram

09:00 – 09:40

HALL - A

## Plenary Lecture

Chair: **Prof. Aniko Borbas**, Head, Department of Chemistry, University of Debrecen, Debrecen, Hungary**Prof. Peter Preiser**

MIT-SMART &amp; NTU, Singapore

Title: Role of the Epitranscriptome in Posttranscriptional Regulation of Expression in Malaria Parasites

09.45 – 9.55 TEA | COFFEE

HALL - A

Invited Lecture

Theme: Biology of Infectious Diseases &amp; Drug Discovery II

**Chair****Prof. Yogendra Singh**, Director, DSPH, IoE, University of Delhi, Bharat**Dr. Lindomar Pena** 10:00 – 10:35

Principal Investigator, AggeuMagalhaes Institute (IAM), Recife, Brazil

Title: Antiviral Discovery Against Emerging Viruses

**Prof. Rupesh Chaturvedi** 10:40 – 11:15Jawaharlal Nehru University, New Delhi, Bharat  
Title: Single Cell-Driven Spheroids: A Tool to Capture Functional and Genetic Heterogeneity**Dr. Satish Mishra** 11:20 – 11:50CSIR-Central Drug Research Institute, Lucknow, Bharat  
Title: The multifunctional autophagy pathway as a potential drug target for malaria**Dr Ferenc D. Petroczi** 11:55 – 12:15University of Debrecen, Hungary  
Title: Synthesis of fluorine-containing Cannabinoid Derivatives with various biological activities**Dr. Richard Kajtar** 12:20 – 12:35University of Debrecen, Hungary  
Title: Pharmacological Research of Newly Synthesized CBD Derivatives

HALL - B

Invited Lecture

Theme: Chemistry of Bioactive Molecules II

**Chair****Prof. S.K. Verma**, Pacific Medical College and Hospital, Pacific Medical University, Udaipur**Dr. Siew Pheng Lim** 10:00 – 10:35Singzyme Pte. Ltd., Singapore  
Title: PALs: high-speed precision bio-conjugation**Prof. B.K. Singh** 10:40 – 11:10Department of Chemistry, Univ. of Delhi, Bharat  
Title: Regioselective Chalcogenation of Quinoxalinones and Benzoxazines via C-H activation**Prof. Ramendra Pratap** 11:15 – 11:45Department of Chemistry, Univ. of Delhi, Bharat  
Title: Synthesis of various functionalized Aza heterocycles from aryl methyl ketones of biological importance**Dr. Neeraj K. Mishra** 11:50 – 12:20Lucknow University, Bharat  
Title: Catalyst-controlled C-H allylation and annulation of (Hetero)arenes using cyclic carbonates**Dr. Dhruv Kumar** 12:20 – 12:35UPES, Dehradun, Uttarakhand, Bharat  
Title: Combinatorial therapeutic approach for head and neck cancer through targeting tumor microenvironment

HALL - C

Mini Invited Talks

**Chair****Prof. M.M. Mangal**, Principal, Pacific Medical College & Hospital, Pacific Medical University, Udaipur**Dr. Vijay K Goel** 10:00 – 10:20Jawaharlal Nehru University, New Delhi, Bharat  
Title: Leveraging Bioinformatics Tools for the Discovery of Novel Anti-Malarials.**Dr. Kapil Vashisht** 10:20 – 10:40HeteroChem InnoTech, Pvt. Ltd. Delhi Bharat  
Title: Rapid Diagnostic Tests (RDTs) for malaria: why we need new targets now?**Dr. Pawan Kumar** 10:40 – 11:00Rajdhani College, University of Delhi, Bharat  
Title: Secondary Phosphine Chalcogenides Decorated Gold Nanoparticles as Potential Antiparasitic Agents.**Dr. Manisha Vajpayee** 11:00 – 11:20Pacific IVF centre, Pacific Medical College and Hospital, Pacific Medical University, Udaipur Bharat  
Title: Gut microbiota influencing fertility**Dr. Deepender Kaushik** 11:20 – 11:40University of Nebraska Medical Center, USA  
Title: Toll-like receptors – 7/8 agonists as potential vaccine adjuvants**Dr. Sunil Kumar** 11:40 – 12:00JC Bose, University of Science & Technology, YMCA, Faridabad, Bharat  
Title: Synthesis of 2-Aminothiazole Functionalized Imidazo[1,2-a]pyridines via Transition-Metal Free Approach as Novel Antibacterial Agents**Dr. Anamika Gulati** 12:00 – 12:20Jawaharlal Nehru University, New Delhi, Bharat  
Title: Evaluating the impact of AI and ML on MDD treatment strategies**Dr. Ágnes Homolya** 12:20 – 12:35University of Debrecen, Hungary  
Title: Synthesis of Novel Antidiabetic SGLT2-Inhibitors

12:35 – 14:00 LUNCH &amp; POSTER SESSION

Pacific University  
Udaipur, RajasthanPacific Medical University  
Udaipur, Rajasthan



## HALL - A

## Invited Lecture

Theme: Biology of Infectious Diseases & Drug Discovery II

## Chair

**Prof. DS Rawat**, Vice Chancellor, Kumaun Univ., Bharat

**Dr. KC Pandey** 14:00 – 14:30  
ICMR-National Institute of Malaria Research, Bharat  
Title: Recent update on antimalarials; Parasite proteases are potential target.

**Dr. Agam P Singh** 14:30 – 15:00  
National Institute of Immunology, New Delhi, Bharat  
Title: HEA (hydroxyethylamine) based potent and safe anti-malarials.

**Dr. Anant N. Bhatt** 15:00 – 15:30  
Scientist 'F', INMAS-DRDO, Delhi, Bharat  
Title: Upregulation of energy metabolism and pro-inflammatory signaling confers radio-protection in in-vitro and in-vivo small animal models.

**Prof. Ajeet Jaiswal** 15:30 – 16:00  
DHSGSU, Bharat  
Title: Indigenous Knowledge of Healing Among the Tribes.

## HALL - B

## Invited Lecture

Theme: Chemistry of Bioactive Molecules II

## Chair

**Prof. Dilendra Hiran**, Chairman, S&T, Pacific University, Udaipur, Bharat

**Dr. Alexey Ustinov** 14:00 – 14:30  
Russian Academy of Sciences, Russia  
Title: Current Trends in Photosensitizing Antiviral Drugs

**Dr. Alexandra Gyongyosi** 14:30 – 15:00  
University of Debrecen, Hungary  
Title: BGP-15 protects against doxorubicin-induced cell toxicity via enhanced mitochondrial function.

**Prof. Sadhna Sharma** 15:00 – 15:30  
MH, University of Delhi, Bharat  
Title: Diagnostic and Vaccine potential of early and late protein antigens of Mycobacterium tuberculosis.

**Prof. I. K. Singh** 15:30 – 16:00  
DBC, University of Delhi, Bharat  
Title: ZINC1250228067: A Promising Therapeutic for Permanent Vision Loss.

## HALL - C

## Mini Invited Talks

## Chair

**Prof. Karpoormath Rajshekhar**, Academic Leader, University of KwaZulu-Natal, South Africa

**Dr. Bhupesh Goyal** 14:00 – 14:20  
Thapar Institute of Engineering and Technology, Patiala, Bharat  
Title: Illuminating the destabilization mechanism of small-molecule inhibitors against  $\alpha$ -Syn oligomers in Parkinson's disease using molecular dynamics simulations

**Dr. Monika Sharma** 14:20 – 14:40  
MH, University of Delhi, Bharat  
Title: PE/PPE family proteins of Mycobacterium tuberculosis modulate host cellular pathways as molecular mimics of host proteins.

**Dr. Shikha Agarwal** 14:40 – 15:00  
MLSU, Udaipur, Bharat  
Title: Exploring the Unique Usage of g-C<sub>3</sub>N<sub>4</sub>.SO<sub>3</sub>H Ionic Liquid as an Efficient Catalyst for One-Pot Synthesis of Biologically Active 1,1-Dihomoarylmethane Scaffolds.

**Dr. Mansi Verma** 15:00 – 15:20  
Hansraj College, University of Delhi, Bharat  
Title: Exploring Dengue Virus: multi-omics approach using in silico studies.

16:05 – 16:50

## PANEL DISCUSSION

## HALL - A

## “Next Wave of Drug Discovery: Opportunities &amp; Challenges”

Moderator: Prof. Rupesh Chaturvedi, Jawaharlal Nehru University, New Delhi, Bharat

Panelists: Prof. Peter Preiser, MIT-SMART & NTU, Singapore

Dr. Siew Pheng Lim, Chief Scientific Officer, Singzyme, Singapore

Prof. Ravi Durvasula, Chair of Infectious Diseases, Mayo Clinic, Florida, USA

16.50 – 17.10 TEA | COFFEE

17:10 – 17:50

## Keynote Lecture

Chair: Dr. Rohit Chitale, Mayo Clinic Florida, USA

## Prof. Diwan S Rawat

Senior Professor of Chemistry, University of Delhi; Vice Chancellor, Kumaun University Nainital, Uttarakhand, Bharat  
Title: Navigating the Expected and Unexpected Twists and Turns of Lead Optimization: The Discovery of Clinical Candidate for the Treatment of Parkinson's Disease.

## HALL - A

17:50 – 18:00

## Tips and Tricks for Academic Networking

venue: Pacific University

18.00 – 19.00 Rajasthani Cultural Event

19.00 – 20.30 Dinner



HALL - A

## Plenary Lecture

Chair: **Prof. Lescar Julien**, MIT-SMART, NTU Singapore

09:00 – 09:40

### Prof. Aniko Borbas

Head, Department of Pharmaceutical Chemistry, University of Debrecen, Hungary.

Title: **Sugar-Modified Nucleoside Analogs with Anticancer, Antiviral and Antimalarial Activity**

09.45 – 10.00 TEA | COFFEE

10.00 – 12.00

## ORAL PRESENTATIONS

HALL - A

OP 1- 10

HALL - B

OP 11- 30

HALL - C

OP 31- 50

HALL - D

OP 31- 50

HALL - A

12:00 – 13:30

## Workshop

on

**“ROLE OF STRESS MANAGEMENT IN PSYCHOSOMATIC (SOMATOFORM) DISORDER”**Mentor: **Dr. Deepak K Salvi & team**, Professor & Head, Pacific Medical College & Hospital, Udaipur

13:30 – 14:30 LUNCH

14:35 – 15:30

Certificate Distribution, Awards, Valedictory, Vote of Thanks and Group Photo

Hansraj College  
University of Delhi