

## ORGANIZING TEAM

### Organizing Secretary

**Dr. Aditya Kumar Padhi**

School of Biochemical Engineering  
IIT (BHU) Varanasi

### Co-organizing Secretary

**Dr. Sumit Kumar Singh**

School of Biochemical Engineering  
IIT (BHU) Varanasi

### Organizing Committee

Prof. Vikash Kumar Dubey, Dean (R&D), IIT (BHU)

Dr. Rajeev Kumar Singh, Coordinator, I-DAPT Hub  
Foundation IIT (BHU),

Dr. Abhishek Suresh Dhoble; Dr. Pranjal Chandra, Dr. Prodyut  
Dhar; Dr. Sanjay Kumar; Dr. Rajendra Prasad Meena

## ABOUT NM-ICPS and IDAPT

The National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) is identified as one such emerging field to have a significant impact on health care, urban transportation, water distribution, energy, urban air quality, manufacturing, and governance. The activities envisioned under this Mission will give impetus to Indian manufacturing via the invention of new products and services and the creation of skilled young human resources, from technicians to researchers and entrepreneurs. It will have modernization and digitalization of socio-technical systems and services. The Interdisciplinary Data Analytics and Predictive Technologies (IDAPT) has been regarded as one of the most prominent fields whose progress will add significant impact on various socio-economic issues. At IIT (BHU) five verticals 1)Telecommunications, 2) Power, 3)Road Transport and Highways, 4) Defence Research and Development, and 5) Health and Family Welfare, have been identified under IDAPT. The endeavour shall catalyse the creation of skilled young engineers, researchers, technicians, and entrepreneurs, together with the human resource at all levels, besides becoming a key contributor to realizing the vision of "Digital India", "Innovate in India", and "Make in India".

## KEY SPEAKERS



**Prof. B. Jayaram**, Coordinator, Supercomputing Facility for Bioinformatics and Computational Biology, IIT Delhi (*Genome analysis, protein structure prediction & drug design*)



**Prof. Neel Sarovar Bhavesh**, International Centre for Genetic Engineering and Biotechnology, New Delhi (*Structural Biology, Biophysics, Metabolomics, NMR Spectroscopy*)



**Prof. R. Sankararamkrishnan**, Department of Biological Sciences & Bioengineering, IIT Kanpur (*Structure-function relationship of membrane-binding proteins/peptides, Computer simulations*)



**Prof. Sanjib Senapati**, Department of Biotechnology, IIT Madras (*Protein dynamics, Structure-based drug discovery, Green chemistry, In vitro studies*)



**Dr. Janesh Kumar**, Senior Principal Scientist, CSIR – Centre for Cellular & Molecular Biology (CCMB), Hyderabad (*Cryo-electron microscopy, X-ray crystallography, Electrophysiology, Biophysics*)



**Dr. Saugata Hazra**, Department of Biosciences and Bioengineering, IIT Roorkee (*Antimicrobial Drug Resistance, Structural biology, Protein crystallography, Structure based drug development, Enzymology, Enzyme kinetics*)



**Dr. Timir Tripathi**, Biochemistry Department, North-Eastern Hill University, Shillong (*Protein folding, dynamics, and interactions, Drug discovery for neglected parasites, Nuclear-cytoplasmic transport in neurodegenerative diseases*)



**Dr. Anshuman Dixit**, Institute of Life Sciences, Bhubaneswar (*Analysis of biological networks, Modeling and structural studies of C. albicans DNA Polymerases, Virtual screening of chemical libraries to identify FtsZ inhibitors*)



**Dr. Narendra Chirmule**, SymphonyTech Biologics, Philadelphia (*Vaccine immunology, drug development, disease modeling*)



**Dr. Anshu Bharadwaj**, Principal Scientist, CSIR-IMTECH Chandigarh (*Bioinformatics and Computational Biology, Genome annotation, Drug discovery, Crowdsourcing*)



**Dr. Mayank Saraswat**, Senior Researcher, Sanford Burnham Prebys Medical Discovery Institute (*Glycoproteomics, mass spectrometry, Glycobiology*)

## Short-Term Course on Computer-Aided Drug Design and Structural Bioinformatics (CADDSB-2023)

March 13-17, 2023

At



Indian Institute of Technology (BHU),  
Varanasi

Supported by

A TECHNOLOGICAL INNOVATION HUB  
ON  
INTERDISCIPLINARY DATA ANALYTICS  
AND PREDICTIVE TECHNOLOGY  
(IDAPT)

Under

NATIONAL MISSION ON  
INTERDISCIPLINARY CYBER-PHYSICAL  
SYSTEMS (NM-ICPS)

## THEME OF SHORT-TERM COURSE

Computer-Aided Drug Design and Structural Bioinformatics (CADDSB-2023) is a one-week event that covers invited lectures from experts and hands-on emerging areas of drug design and structural bioinformatics. The course comprises topics related to biophysics, structural biology, Cryo-EM, protein sequence & structure analysis, protein-ligand docking, molecular dynamics simulation, various softwares, tools, and databases. It also aims to cover mutational analysis methods, computational protein design, and with a complete overview of genomics, proteomics, and structure-based drug-design aspects. The event will provide an excellent platform to keep up with cutting-edge techniques in computation biology, structural bioinformatics, and computer-aided drug designing, including emerging areas of vaccine informatics, glycoinformatics, and disease modeling. We cordially invite you to register for the event.

## INDIAN INSTITUTE OF TECHNOLOGY (BHU)

Indian Institute of Technology (BHU) Varanasi is an Institute of national importance created by an Act of the Parliament through the Institutes of Technology (Amendment) Act, 2012. Previously, it was known as IT, BHU. Founded in 1919 as the Banaras Engineering College, it became the Institute of Technology, Banaras Hindu University, in 1968. IIT (BHU) Varanasi has 14 departments and 3 interdisciplinary schools. IIT(BHU) Varanasi has been able to build up the necessary infrastructure for carrying out advanced research and has been equipped with state-of-the-art engineering and scientific instruments. The city of Varanasi is well connected by road, rail, and air with all the important places of India. Regular flights are there from Varanasi to Delhi, Mumbai, Chennai, Bangalore, Kolkata, Khajuraho, and Lucknow. The IIT (BHU) campus is only 10 Km from Varanasi railway station, 20 Km from Deen Dayal Updhayay (old name Mughalsarai) railway station, and 35 Km from the Varanasi airport.

## ELIGIBILITY

The conference is open mainly to faculty members, scientists, post-doctoral fellows, Ph.D., MTech and MSc, MPharma, B Pharma, MBBS, B.Tech. and other undergraduate students, etc.

## REGISTRATION FEE

*\*(A GST of 18% should be paid additionally in each registration fee)*

**\*For faculty members:** Rs. 2000/- (non-refundable)

**\*For UG, PG, Ph.D., and post-doctoral fellows:** Rs. 500/- (non-refundable)

**\*For Industry:** 4000/- (non-refundable)

**Payment may be made by one of the following methods:**

(i) Demand draft in favor of I-DAPT-HUB-FOUNDATION  
2 Payable at SBI, IIT(BHU) Varanasi.

(ii) For online payment

Branch: SBI, IIT (BHU) Varanasi

Bank Name: State Bank of India

IFSC Code: SBIN0011445

Name: I-DAPT-HUB-FOUNDATION 2

Account No: 40298890505

Account type: Current

*Note: Mention payment details in the registration form*

## IMPORTANT DATES

Opening of Registration: 15 January 2023

Last Date of Registration: 20 February 2023\*

## CONTACT

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School of Biochemical Engineering, IIT (BHU), Varanasi-221005

**Dr. Sumit Kumar Singh**, Assistant Professor,  
School of Biochemical Engineering, IIT (BHU), Varanasi-221005

## Computer-Aided Drug Design and Structural Bioinformatics (CADDSB-2023)

March 13-17, 2023

### Registration form

1. Name (in block letters):
  2. Designation:
  3. Organization:
  4. Address for communication with mobile number and e-mail:
- Pin: \_\_\_\_\_ Mobile. No: \_\_\_\_\_  
Fax no: \_\_\_\_\_ E-mail: \_\_\_\_\_
5. Academic Qualifications:
  6. How is this participation useful for you
  7. Payment details (DD Number/online payment reference with amount and date):

Place: \_\_\_\_\_  
Date: \_\_\_\_\_ Signature of the applicant

**Note:** Please send/email the soft copy of the form to [aditya.bce@iitbhu.ac.in](mailto:aditya.bce@iitbhu.ac.in) & [sumit.bce@iitbhu.ac.in](mailto:sumit.bce@iitbhu.ac.in)

Photocopy of the form may also be used.

The decision about the final selection is made by the organizing secretaries and the organizing committee.

*The list of selected participants will be informed by 23 February 2023*