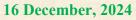
A Workshop on 3D Modelling and Bioprinting for Applications in Healthcare Research

Organized by Dept. of Pharmaceutical Engg. & Tech., **HT-BHU** 

In collaboration with CELLINK





# **INSTITUTE ORGANIZING COMMITTEE**

**Prof.** Amit Patra Director, Chief Patron **IIT-BHU** 



Prof. Vikash K Dubev Dean R & D. IIT-BHU



**Prof. S Hemalatha** HOD, Department of Pharm. Engg & Tech.



Dr. Ruchi Chawla Associate Professor Organizing Secretary, IIT-BHU



## **ABOUT THE WORKSHOP**

The "3D Modelling and Bio-Printing for Healthcare Research" workshop is being organised by the Department of Pharmaceutical Engg. & Technology in collaboration with CELLINK. It explores 3D bio-printing principles, including fabrication techniques, bio-printer types, and bio-ink preparation.

It highlights applications in regenerative medicine, drug testing, and personalized healthcare, along with trends like 4D bio-printing and AI integration. A hands-on session with the BioX Bio-Printer will provide practical skills in bio-ink preparation, 3D model design This workshop combines theory and practice, equipping participants to apply bio-printing for innovative healthcare and biomedical research solutions. The workshop will open may avenues for further exploration in

- Fabrication techniques (layer-by-layer). .
  - Types of bio-printers (inkjet, extrusion, laser-assisted).
  - Preparation and use of bio-inks.
  - Regenerative medicine (tissue and organ scaffolds).
  - Drug testing and development
- 4D bio-printing innovations.
- AI and automation in bio-printing.
- Operating the BioX bio-printer.

#### WHO CAN ATTEND?

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All existing faculty members, research scholars and students working in the field of healthcare and research. Applicants can join the workshop by paying a course fee given below. The fee includes a kit containing the study material, tea snacks and Lunch.

### **REGISTRATION FEE**

Participants from IIT-BHU- Rs. 900/-

Participants from other institutions- Rs. 1062/-(Including 18% GST)

Account name: Institute Development Fund Account Details: - Acc No. 32778803937

**IFSC code: SBIN001145** 

**HOW TO APPLY?** 



Scan this or Visit https://forms.gle/ dZMOkHodSMkfX24RA

### **IMPORTANT DATES:**

Last Date of Registration: December 9, 2024 Intimation of Selection: December 11, 2024 Workshop Date: December 16, 2024





Varanasi, also known as Kashi or Banaras, is a city of spirituality, culture, and timeless charm. Nestled along the sacred Ganges, it is one of the world's oldest inhabited cities, where life and death intertwine in divine harmony. Its narrow lanes brim with ancient temples, vibrant markets, and ghats alive with prayers and rituals. At dawn, the Ganges glows with sacred rites, while the evening Ganga Aarti at Dashashwamedh Ghat illuminates the city with devotion. Iconic sites like Kashi Vishwanath Temple reflect its spiritual core. More than a city, it is a sacred, eternal experience.

#### HOW TO REACH?

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 Banaras Hindu University campus is only 10 Km from Varanasi railway station, 20Km from Mughalsarai railway station and 35 Km from Lal Bahadur Shastri International Airport.

#### INDIAN INSTITUTE OF TECHNOLOGY IIT (BHU)

IIT (BHU) is a public engineering institute founded in 1919 as an integral part of Banaras Hindu University. IIT (BHU) is residential and co-educational within the larger BHU campus which is spread over nearly 1,300 acres at the southern end of Varanasi on the banks of the River Ganges.

Department of Pharmaceutical Engg. & Technology was established by Late Professor M.L. Schroff (Father of Pharmacy Education in India) in 1932. Being the first Institution in the country to start the Degree level Pharmacy Education, it offers 4-year B.Tech (Pharmacy), 5-year Integrated Dual Degree (B Tech & M Tech) in Pharmacy alongwith M.Pharm and PhD Programme. The Department has Faculty members with expertise in Drug discovery and Formulation Development.

CELLINK is committed to providing the most advanced 3D bioprinting products, services and technologies needed to understand and master biology. They develop technologies that democratize 3D bioprinting - providing the leading researchers in the world the tools they need to create the future of health.