

#### The Indian Pharmaceutical Association Maharashtra State Branch's

# **BOMBAY COLLEGE OF PHARMACY**

An Autonomous Institute Affiliated to University of Mumbai





#### **Patrons**

- **Dr. N Sivaprasad** President, IPA-MSB
- Mr. Nitin Maniar Chairman, Governing Body

#### Convener

**Prof. Krishna Iver** I/C Principal

#### Coordinator

- **Dr Ujwala Shinde** Assoc. Professor of Pharmacy
- **Dr Harita Desai** Asst. Professor of Pharmacy

#### **Advisors**

- **Prof. Mangal Nagarsenker Prof. Emeritus**
- Prof. Mala Menon **Adjunct Professor**

# **Organising Committee**

- **Dr. Clara Fernandes**
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# **Two Day Hands-on Workshop 3D Printing Technology**



**Organized** by Department of Pharmaceutics, under the aegis of IQAC Cell, **Bombay College of Pharmacy** 

In association with

**Knowledge Partner** 



**Publicity Partner** 





### Who should attend?

- Undergraduate, Post-graduate students and Ph.D. Scholars
- Researchers from Academia and **Industry** working in multidisciplinary fields including Pharmaceutical Sciences, Biomedical Engineering, Biotechnology, Life Sciences and Medical Sciences

Registration Fees		
	Early Bird Registration (Up to 10 <sup>th</sup> Oct 2023) INR	Spot Registration INR
Faculty	1200	1500
Student	800	1000
Industry	2000	2500
		*(Inclusive of 18% GST)

Mode of payment: Online

Name of the Accounts :- THE IPAMSB's Bombay College of Pharmacy Autonomous

Account No. 0116101079370 IFSC Code:- CNRB0000116

\*In case of cancellation, no refund will be provided.







- Registration will be confirmed only after receipt of registration fees.
- Attendance is compulsory.
- Participants will be awarded a certificate upon successful completion of the workshop

# ABOUT INSTITUTE AND DEPARTMENT OF **PHARMACEUTICS**

Bombay College of Pharmacy (BCP) is a pioneer institution in Pharmaceutical education in India. BCP was founded in 1957 by the Indian Pharmaceutical Association- Maharashtra State Branch (IPA-MSB). The institute offers Bachelors, Masters and Doctoral programs of study in Pharmaceutical Sciences. BCP has a DST-sponsored National Facility for Research and training that is equipped with various sophisticated instruments for characterization of pharmaceuticals and other products. The Department of Pharmaceutics is engaged in highly collaborative and collegial environment for empowering the students with knowledge and skills for outstanding careers in pharmaceutical industry, academia, regulatory agencies, and research institutions. Faculty of the Pharmaceutics Department are involved in cutting-edge, multidisciplinary and translational research in advanced drug delivery system. The department of pharmaceutics is well-equipped to take-up research projects in drug delivery, nutraceuticals and cosmeceuticals.

### ABOUT THINCR TECHNOLOGIES INDIA PVT LTD

ThInCR technologies is among one of the very early players in India involved in the 3D printed pharmaceuticals development. ThInCR aims at bridging the gap between the ideation and development of commercial scale 3D printed pharmaceuticals by providing product centric approach to build high quality cost-effective 3D printers and handholding from ideation stage to scalable production.



3D-ThInCr solid dosage form



3D-ThInCr **Oral film Printer** 

# **About the 3D Printing**

The foundation for development of 3D printing technology was rapid prototyping. Prototyping helps in development of products ensuring best outputs of final product.

3D printing is also known as additive manufacturing. It is a method for creation of three-dimensional solid objects using digital file. The object is created by deposition of successive layers of material

# **Advantages Of 3D Printing**

- Design flexibility
- Faster rate of prototype development
- Durable and lightweight parts
- Minimization of the waste
- Cost effectivity
- Versatile applications

# **Applications Of 3D Printing**

- Personalization of medicine
- Biomedical implants
- 3D organ microchips
- Prosthetics
- Dosage form designing





# **Workshop Schedule**

#### DAY 1

## **Morning Session**

- Introduction to 3D printing in **Pharmaceuticals**
- Advantages over conventional method
- Major companies using 3D technology

#### **Afternoon session**

• Demonstration of 3D printer

Hands on training

#### **Workshop Take-aways**

- CAD designing slicing software
- Training on industrial grade 3D printers
- Introduction and details on different types of 3D printers
- Expert's sessions on novel 3D designs and applications
- Knowledge on operation of 3D printing machine
- Hands-on skills on formulation development using 3D printing



