

DEPT.OF PHARMACEUTICS

As an integral and flagship wing of FPH, Department of Pharmaceutics at RUAS is committed to advance pharmaceutical sciences through innovative research, education and collaboration for the development of efficient drug delivery systems for the unmet clinical needs. Our commitment to innovation extends to our laboratories, which are equipped with sophisticated instruments to facilitate hands-on learning and experimentation to provide students with a comprehensive understanding of drug formulation and delivery, preparing them for impactful roles in the pharmaceutical industry. In addition to research, we are committed to knowledge dissemination and capacity building. Our department's unwavering dedication to excellence, innovation, and collaboration has paved the way for transformative advancements in pharmaceutical sciences.

DON'T MISS THIS OPPORTUNITY TO EXPLORE THE CUTTING EDGE TOOL OF HEALTHCARE!

PROGRAM OUTCOMES

- Fundamentals behind 3D-modelling and bioprinting technology
- Bioinks Demystified: Exploring different types of bioinks used in bioprinting
- Printing Techniques
- Applications of 3D printing
- Hands-on Exposure

TARGET AUDIENCE

- PG, Ph.Ds, Faculties of Pharmacy and Allied Sciences
- Researchers, scientists, and medical professionals interested in regenerative medicine and tissue engineering
- Healthcare researchers
- Students and individuals passionate about bioengineering and its impact on healthcare

SDP BENEFITS

- Gain in-depth knowledge of 3D bioprinting technology and its potential applications
- Learn from leading experts in the field
- Network with like-minded individuals passionate about bioprinting
- Gain practical experience with bioprinting



DEPT. OF PHARMACEUTICS

in collaboration with



SKILL DEVELOPMENT PROGRAM ON 3D MODELING AND 3D BIOPRINTING: AN AUGMENTED TOOL FOR HEALTHCARE RESEARCH

9th - 10th AUGUST 2024



Have you ever wondered how scientists visualize the intricate structures of cells, tissues, and organs? 3D Bioprinting is a revolutionary technology at the forefront of medicine and biology that holds immense promise for transforming various aspects of healthcare with potential applications in Regenerative Medicine and Drug Discovery and Testing. This SDP will introduce you to the exciting world of 3D biomodeling, where computers become powerful tools for building digital representations of biological systems

ONLY 60 REGISTRATIONS

CONTACT - ORGANIZING MEMBER

Dr.Tanmoy Ghosh
Assistant Professor
Dept.of Pharmaceutics
FPH, RUAS

+91-8867763868

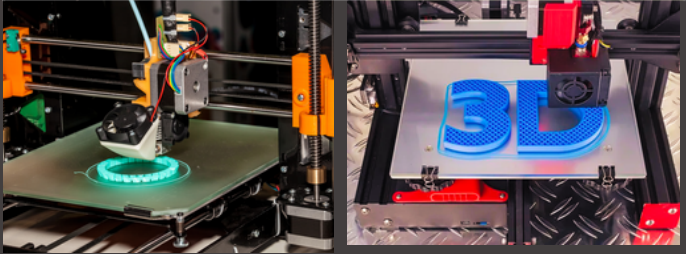
tanmoy.ps.ph@msruas.ac.in

PROGRAMME SCHEDULE



Day 1: August 9 th 2024	
Timings	Session
10:00 – 10:30 AM	Inauguration
10:30 – 10:45 AM	Tea Break
10:45 AM – 12:00 PM	Guest Talk by Dr. Kaushik Chatterjee Professor, Department of Materials Engineering, Indian Institute of Science, Bangalore
12:10 – 1:15 PM	Mr. Vishal Sivakumar Demo & Talk (Founder & MD, 3D crafts)
1:15 – 2:00 PM	LUNCH
2:00 – 5:00 PM	Mr.Indhar Saidanyan Scientist, PS Therapy Aravind Eye Care Centre Coimbatore

Day 2: August 10 th 2024	
10:00 – 11:15 AM	Dr. Manasa Nune, Bioinks Associate Professor, Manipal Institute of regenerative Medicine, Bangalore
11:30 – 1:00 PM	Ms. Vijeta Jaiswal, Field Application Scientist CELLINK
2:00 – 4:00 PM	Hands on Session with BioX
4.00-5.00 PM	Valedictory Function



REGISTRATION DETAILS

PG/Ph.D Scholars:	Rs. 1600	Coverage:
Faculty	: Rs..1800	Registration kit, Lunch, High tea, Certificate
(Inclusive of 18 % GST)		

PAYMENT LINK

https://ruasportal.msruas.ac.in/as_d_EventPublicUserMaster.htm?eventID=79



SCAN ME

SPEAKERS PROFILE

DR. KAUSHIK CHATTERJEE

Professor
Dept. of Materials engineering
IISc , Bangalore

Dr. Kaushik Chatterjee joined the Indian Institute of Science, Bangalore, in 2011, where he is currently a Professor in the Department of Materials Engineering and the Department of Bioengineering. His research group focuses on materials for biomedical applications. Specifically, they are using 3D printing and additive manufacturing technologies to prepare medical devices and tissue scaffolds. He has obtained his Ph.D. (Bioengineering) Pennsylvania State University, USA 2007 : M.S. (Materials Science and Engineering) University of Virginia, USA 2003 :B.E. (Metallurgical Engineering) Bengal Engineering College (now IIST), India 2001

Chair, Department of Bioengineering, Indian Institute of Science (IISc), Bangalore, India 2023 - Present

Adjunct Faculty, Datta Meghe Institute of Higher Education and Research, Wardha, India 2022 - Present

Adjunct Faculty, Manipal Institute of Regenerative Medicine, Manipal Academy of Higher Education, Bangalore, India 2019 - Present

MR.VISHAL SIVAKUMAR

Founder and MD
3D Crafts

Mr.Vishal Sivakumar is the founder Director of 3D craft (3D printing firm) established in 2020. He has incorporated his 3D Printing Company in Madurai, Bengaluru, Boston (USA). He obtained his bachelor's degree in Engineering with a specialization in Mechanical Engineering from Vickram College of Engineering, Madurai. He was the recipient of the DBT INSPIRE award in 2011. He has trained over 500 students in additive manufacturing techniques and has provided extensive support in 3D printing to various commercial companies and government organizations. He holds good experience in Solid Modelling, FDM, SLA and SLS models of 3D manufacturing. He has experimented with and developed various raw material composites for FDM based fabrication

DR. INDHAR SAIDANYAN R

Scientist
PS Therapy
Aravind Eye Care Centre,
Coimbatore, TN,India

Mr. Indhar Saidanyan is a researcher currently working as a Research Scientist, PS Therapy (Aravind Eye Care), Coimbatore, India.

His research interest includes invasion ecology, metabolomics, additive manufacturing, and computer aided design. He has published several research papers and worked in collaboration with governmental agencies. He has organized and conducted training program on 3D printing and holds 2 years of experience in CAD and 3D printing.

3D MODELING AND 3D BIOPRINTING: AN AUGMENTED TOOL FOR HEALTHCARE RESEARCH

MS. VIJETA JAISWAL

Field Application Specialist
(India)
CELLINK Bioprinting

Ms. Vijeta Jaiswal earned a post-graduate degree in Microbiology from Pondicherry University in 2018. With five years of academic research experience and expertise in Molecular biology and cell culture, she has a strong publication record and has passed several national exams. Now as an Application Specialist for Cellink Bioprinting in India, she supports researchers and industrialists in 3D bioprinting, handling high-end extrusion and DLP-based printers. In her presentation, she will discuss 3D bioprinting applications and demonstrate extrusion-based bioprinters

The Bio X is a user-friendly, standalone system with unique features ensuring unparalleled flexibility. It includes a built-in air compressor, touchscreen, and USB flash drive, requiring no extra hardware. Its compact design fits both on benchtops and inside biosafety cabinets. Equipped with CELLINK's Clean Chamber Technology, it boasts a dual HEPA filtration system and a UV-C germicidal lamp for sterile bio-printing. The printer has three printheads compatible with CELLINK's intelligent printheads, supporting various printing technologies such as pneumatic, thermoplastic, temperature control, syringe-based, and more. It also features a temperature-controlled print bed (4°C to 60°C) and is compatible with standard petri dishes, multi-well plates, and custom inserts. The system operates at various pressures, allowing users to print hydrogels and control cell stress, and is compatible with diverse printing materials and cells.

DR. MANASA NUNE

Associate Professor
Manipal Institute of Regenerative Medicine
(MIRM), Manipal Academy of Higher
Education (MAHE)

Dr. Manasa Nune completed her Ph.D. in Biomedical Nanotechnology from the SASTRA University, Thanjavur. She worked as a Post-doctoral Research Associate at the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore. She is an Associate Professor at the Manipal Institute of Regenerative Medicine (MIRM), Manipal Academy of Higher Education (MAHE), Bengaluru campus. She is also the Ph.D. Co-Ordinator and Member Secretary for the Institutional Committee for Stem Cell Research (IC-SCR) of MIRM, MAHE

Her research interests are in biomaterials and bioink design for neural, uterine, and liver tissue engineering applications.

Awards & Honors:

One of the 20 Indian women scientists invited to participate in the inaugural ASEAN-INDIA Women Scientists Conclave (AIWSC) co-organized by Singapore's Agency of Science, Technology and Research (A*Star) with India's Department of Science & Technology and Anushandhan National Research Foundation (ANRF) with the support of the ASEAN Secretariat held from 24-26 April 2024, Singapore.

- American Chemical Society (ACS) membership as an appreciation in recognition for being an ACS peer-reviewer in March 2024.
- SBAOI-MAHE Young Scientist Award and first prize for her talk at the International Conference on Biomaterials, Regenerative Medicine and Devices (BIO-Remedi 22) held at IIT Guwahati from 14th-18th December 2022.
- Awarded Life member of the Society for Biomaterials & Artificial Organs India (SBAOI) and the Society for Tissue Engineering & Regenerative Medicine India (STERMI).
- Certificate of Appreciation awarded for being the resource person for the faculty development program titled "Institutional Committee for Stem Cell Research: Guidelines and Screening Procedures for Protocols" organized by Manipal College of Dental Sciences, Mangalore on January 28th 2022 & July 2nd 2021.
- Received about 7 research grants and published about 20 articles, 2 book chapters and made 40 conference presentations.

ABOUT MSRUAS

M S Ramaiah University of Applied Sciences (RUAS) was created under the University Act of 2013 with approval from the Government of Karnataka.

Ramaiah University commonly referred as RUAS, is characterized by a vibrant academic curriculum, experiences faculty, the state-of-the-art facilities cum infrastructure and an ecosystem to actively participate in co- and extra-curricular activities. We take pride in fostering an environment that encourages innovation, critical thinking, and holistic development of our students. Whether you are pursuing a degree in Science & Technology, Engineering, Management, Health Sciences, social sciences, or any other discipline, our curriculum is designed by accomplished experts to prepare you to face and overcome the challenges of the future. At RUAS, we believe in the power of education to shape your destiny. Our commitment to excellence extends beyond the classroom, with a focus on research, entrepreneurship, and community service.

Since its inception, RUAS has served as a platform that bridges the existing gaps between academia, industry and society. With every program it offers, the University charts its own unique path, creating students who comfortably adopt multidisciplinary thinking and are driven by a strong desire to build to a better tomorrow.

RUAS seek to move our society towards greater harmony and inclusiveness

ORGANIZING COMMITTEE

PATRON

Dr. M. R. Jayaram, Honorable Chancellor, RUAS

ADVISORY COMMITTEE

Dr. Kuldeep Kumar Raina, Vice Chancellor, RUAS

Dr. Om Prakash Kharbanda, Pro Vice-Chancellor, HS, RUAS

Dr. G.S.Venkatesh, Registrar, RUAS

CHAIR PERSON

Dr.S.Bharath, Dean, FPH

CONVENOR

Dr. B.V.Basavaraj

Professor and HOD, Dept. of Pharmaceutics, FPH

CO-CONVENOR

Dr. Tanmoy Ghosh

Ast. Professor , Dept. of Pharmaceutics, FPH

EXECUTIVE COMMITTEE

Dr. R.Deveswaran, Professor

Dr. Sindhu Abraham, Asst.Professor

Dr. Sharon Caroline Furtado, Asst. Professor

Dr. Sandhya K V, Asst.Professor

Dr. Aswathi R Hegde, Asst. Professor

Mrs. Shwetha K, Asst.Professor

Ms.Nikitha S, Asst.Professor

**APPLIED BRILLIANCE MAKES
ALL THE DIFFERENCE**