

Eligibility: Anyone

Duration: 15 Hours

Registration Fee: 1000/-

Registration link

<https://forms.gle/gc4DUNboBU1AXa2m9>

Account Details

Acc. Name : Dean, School of Life Sciences
Acc. No. : 165701000019853
IFSC code : IOBA0001657
Bank : Indian Overseas Bank (IOB)
Branch : Vandalur, Chennai



Get in touch

Contact

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HEFA
Environ private Limited

HLRJ
Biotech Private Limited

Crescent
Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

CERTIFICATE COURSE IN MEDICAL BIOMATERIALS September 5–7 & 14-15, 2022



School of Life Sciences

B.S. Abdur Rahman Crescent Institute
of Science & Technology

in association with

HEFA Environ Pvt. Ltd.
HLRJ Biotech Pvt. Ltd.

&

Nano and Biomaterials Association

Instructor

Prof. Mukesh Doble,
Professor, Emeritus
Department of Biotechnology,
Indian Institute of Technology,
Madras, Chennai, Tamil Nadu, India

About Certificate Course

Biomaterial is any biocompatible material that is used for replacing, repairing, and augmenting damaged body tissues. The global biomaterials market is estimated to cross 175 Billion USD by 2022, In India the market size runs into several thousand crores, with a fast growth. Their applications range from Cardiovascular, Orthopaedic, Dental, Plastic Surgery, Wound Healing etc. Metals, polymers, ceramics and biopolymers and combinations of these are used as implants, prostheses, devices or drug delivery system Materials which are implanted in the body have to satisfy several conditions so that it can remain in the body for a long duration, perform its intended action without causing any adverse reaction to the host. Depending upon the duration, location and intended function the biomaterial has to be appropriately designed which is still a research challenge. This is a highly interdisciplinary area requiring support from engineers, biologists, chemists and clinicians The lectures cover some of the aspects related to the science and engineering of the design of Medical biomaterials.

The lectures (15 hours) will cover

1. Historical perspective
2. Types of biomaterials -Metal, polymers, Ceramics, biopolymers etc
3. Physico/chemical and biological properties of biomaterials
4. Biofilm/Biosorption/Biodegradation/ Biocorrosion
5. Analytical techniques/characterisation tools
6. Drug delivery
7. Sterilisation
8. Future perspective

Evaluation of the participants will be based on a MCQ paper for 20 marks.

About Instructor

Prof Mukesh Doble, completed his doctoral degree in Chemical Engineering from University of Aston, UK. Currently, he is working as a Professor in Department of Biotechnology, Indian Institute of Technology, Madras, Chennai, Tamil Nadu, India. He is a Distinguished Prof at Saveetha dental college and hospitals, Chennai. He is an expert in Biostatistics and Six Sigma, Bioreactors, Drug Design, Biomaterials and Biofilm, Scale up, Chemical process, Molecular modelling and Bioinformatics. He has more than 250 publications with 6000 above citations. He guided more than 10 Ph.D Scholars.

https://iitm.irins.org/profile/51005#personal_information_panel

About B.S. Abdur Rahman Crescent Institute of Science and Technology, India

B.S. Abdur Rahman Crescent Institute of Science and Technology is accredited with “A+” grade by NAAC, ranked 3rd among the Engineering Institutions in Tamilnadu in teaching, learning and resources by NIRF, MHRD. It has track record of 37 years of Excellence in offering Engineering, Science and Management programmes. Being one of the leading engineering institutions in India, it focuses on academic excellence, innovative research and entrepreneurship.

About the School of Life Sciences

School of Life Sciences is awarded as THE BEST SCHOOL in BSACIST, excelling in teaching, research and training programmes across the interdisciplinary areas of life sciences by nurturing student’s bioentrepreneurship. The school offers Undergraduate, Postgraduate and Doctoral programmes in Life Sciences.

