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SRM

INSTITUTE OF SCIENCE & TECHNOLOGY
Deemed to be University u/s 3 of UGC Act, 1956

FACULTY DEVELOPMENT PROGRAMME ON

SMART MATERIALS

● ○ ○ ○ ○ ● **FOR MEDICAL TECHNOLOGY** ○ ○ ○ ○ ○ ●

17th JANUARY TO 22nd JANUARY 2022
ONLINE MODE



ORGANISED BY:

*Department of Biomedical Engineering
School of Bio-Engineering
Faculty of Engineering and Technology
SRM Institute of Science and Technology*

ABOUT INSTITUTION AND DEPARTMENT OF BIO-MEDICAL ENGINEERING

SRM Institute of Science and Technology (formerly known as 'SRM University') is located in an extensive sylvan campus of 380 acres skirting the National Highways (NH145), in the outskirts of Chennai. SRMIST is one of the top ranking Universities and most premier engineering destinations in India, which was established in 1985 by the Founder Chancellor, Dr. T.R. Paarivendhar. Now it is functioning in campuses located at Kattankulathur, Ramapuram Part Vadapalani, Ramapuram in Chennai and one in Modi Nagar, Ghaziabad with over 52000 students and 3200 faculty members, offering wide range of undergraduate, postgraduate and doctoral programs in Engineering, Management, Medicine & Health Sciences, Agriculture, Law and Science & Humanities.

The Department was established in the year 2004 with active clinical/industry partnership in association with SRM Medical College Hospital and Research Institute, Kattankulathur. Since then, the department has been actively engaged in diversified research and teaching. Its main objective is to provide a knowledge-based, timely, cost effective and high quality service to clinicians in a professional and responsible manner, in order to improve and enhance patient care by supporting all aspects of care related technology. The department offers B.Tech, M.Tech, and Ph.D programmes in Biomedical Engineering. The students of our department periodically visit various departments of our medical institutions, and get a deep knowledge about the existing medical devices and instruments. About 250+ research papers and 300+ conference papers have been published in national and international levels. More than 32 patents have been filed and 24 patents published in national level.

ABOUT THE FDP

The Department of Biomedical Engineering, since its inception has been organising various technical events every year to impart knowledge to the students and teaching fraternity about the emerging technologies in health care. This year, the department has planned to organize a faculty development programme in virtual mode with a notion to provide an insight into smart materials. Smart materials offer a major role in the field of biomaterials covering various sensing and actuation applications in healthcare due to their responsivity to external stimuli such as stress, light, temperature, moisture or pH, and electric or magnetic fields. Smart materials are also suitable for harvesting biomechanical energies from human motions, environment or body heat, or shaping of biofuel powered devices. This will open up the horizon for nanoenergy, nanosystems that can themselves act as self-powered sensors or be utilized as power sources for other integrated transducers.

CONVENORS

- **Dr. T. Jayanthi**, Associate Professor, SRMIST
- **Dr. S. Gnanavel**, Assistant Professor, SRMIST
- **Dr. N Ashwin Kumar**, Assistant Professor, SRMIST

CO-ORDINATORS

- **Ms. V. Devaki**, Research Scholar, SRMIST
- **Ms. Emy Jessica Sonal Visvesvaran**, B.Tech, SRMIST
- **Ms. A. Victoria Winnarasi**, B.Tech, SRMIST
- **Ms. V. Shri Ranjani**, B.Tech, SRMIST

NOTABLE SPEAKERS



Dr. SRIDHAR . T. M

Assistant Professor,
Department of Analytical Chemistry,
University of Madras

TITLE: Smart Materials for Drug delivery
17.01.2022 10:00 am – 12:00 pm



Dr. MANASH . K. PAUL

Scientist, Principal Investigator, University of
California, Los Angeles (UCLA).

TITLE: Nano Medicine
17.01.2022 1:30 – 3:30 pm



Dr. PRIYATHA PREMNATH

Assistant Professor, Biomedical Engineering, College of
Engineering Applied Sciences, University of Wisconsin,
Milwaukee, USA

**TITLE: Enhancing fracture healing through regenerative
medicine**
18.01.2022 9:00 am – 11:30 pm



**Dr. GOWSIHAN
POOLOGASUNDARAMPILLAI**

Birmingham Fellow in Biomaterials and Bioimaging,
School of Dentistry, University of Birmingham, UK

TITLE: Insights into 3D bioprinting
18.01.2022 3:00 pm – 4:00 pm



Dr. K. ANAND

Department of Chemical Pathology,
School of Pathology, University of the Free State,
South Africa

**TITLE: Small Molecules vs Exosomes: Controlling Cell to Cell
Communication**
19.01.2022 10:00 am – 12:00 pm

NOTABLE SPEAKERS



Dr. ASIFKHAN SHANAVAS

Scientist, Institute of Nano Science and Technology
(INST), Mohali
Nanomedicine, Nanomaterials

TITLE: Delivering drug and heat to cancer
19.01.2022 1:30 pm – 3:30 pm



Dr. ARAVIND KUMAR RENGAN

Associate Professor, Department of Biomedical
Engineering, Indian Institute of Technology Hyderabad,
Hyderabad

TITLE: Application of Organo-inorganic hybrid nanosystems in Theranostics
20.01.2022 10:00 am – 12:00 pm



Mr. DENNIS CHRISTOPHER

Technical Lead, HCL technology, Chennai

TITLE: Medical device regulation in India
20.01.2022 1:30 pm – 3:30 pm



Dr. SAPTHAGIRIVASAN

Manager
Engineering Research and Development group,
Capgemini Technology service, Bangalore

**TITLE: Advanced drug delivery system in smart
materials**
21.01.2022 10:00 am – 12:00 pm



Mr. PRADEEP

CEO, Medcuore medical solution, Chennai
**TITLE: Novel biomaterials for tissue engineering
applications**
21.01.2022 1:30 pm – 3:30 pm

TARGET PARTICIPANTS

Postgraduate students, Research scholars and
Faculty members of engineering disciplines, Bio
medical engineering, Nano engineering, Medical
electronics, Bio - Technology.

REGISTRATION

Registration fees for all participants: Rs.250

Registration for the event can be made through
online payment mode in favour of "Biomedical SRM"

Account Name : Biomedical SRM

Account No. : 117001000633136

Name of the Bank : City Union Bank

IFSC Code : CIUB0000117

MICR No : 600054011

CLICK/ SCAN LINK BELOW FOR REGISTRATION

<https://forms.gle/bJLUpkvtLKysF2NG7>



*e-certificates will be provided to all registered
participants attending the entire event*

FOR FURTHER CLARIFICATIONS CONTACT

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