

NEWSLETTER

ACADEMIC YEAR 2023-24

BIOSCOPE

VOL. 5. ISSUE 2, JAN-JUNE 2023





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"Let us be the ones who innovate, create, and inspire change, for we are the architects of a better tomorrow." - Dr. APJ Abdul Kalam!

Dear Readers,
We are thrilled to invite you to embark on a journey of knowledge, imagination, and achievements through the pages of our magazine Bioscope 2023. Within these carefully crafted words and captivating visuals, you will find a tapestry of stories, insights, and perspectives that reflect the essence of our Biomedical Engineering Department at the SRM Institute of Science Technology, Kattankulathur.

We strive to ignite your curiosity and broaden your horizons with each issue. From the latest breakthroughs in biomedical, science & technology to the intricacies of workshops and events, we are dedicated to bringing you a diverse range of information that informs and inspires.

As we head into a new semester, we celebrate another time of learning and accomplishments, both curricular and extracurricular. We have successfully navigated through a year of fruitful learning thanks to the meticulous efforts of our students and faculty. Enjoy a fun-filled and joyous learning experience.

Congratulations to everyone for their achievements and development. Here's to uncovering new perspectives, igniting your imagination, and exploring the wonders of our world together.

Happy reading!

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Department

Our department stands as a beacon of excellence within the SRMIST, tirelessly working towards a common purpose and shaping a positive impact in the lives of students.

03

Publication, Patents and Funding

Publications refer to research papers, or any written work that is formally published to the public. Patents are legal protections granted to inventors for new and innovative inventions. Funding refers to financial support provided to research projects to achieve particular goals.

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Technical events

Encourages students, faculty and scholars to delve deeper into technology

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Student Awards, Internship and placement

Get a glimpse of our achievements in technical events, innovation competitions and successful implementation of industrial collaborative projects.

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Faculty Achievements

Faculty achievements are typically a reflection of their contributions to teaching, research, and service within their respective disciplines

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Gallery

Get a quick glance of activities during Jan - June 2023



OUR DEPARTMENT



NEW MEMBERS



»»»Dr.Nabarun Polley

Dr. Nabarun Polley completed his Ph.D. from S. N. Bose National Centre for Basic Sciences, Kolkatta, and was a senior scientist at the University of Potsdam before joining SRM. His research Interest : Biomedical Photonics, Biomedical Instrumentation, Plasmonic, Optical fiber sensing, Biosensors, Point of care diagnostic devices.

Dr.Rohit Gupta«««

Dr.Rohit Gupta completed his Ph.D. from Thapar Institute of Engineering and Technology, Patiala, Punjab, and has research interests in Assistive and Rehabilitative Systems, Biomechanics, Cost-effective medical device, AI-based medical system, Neuroprosthesis. He served as post doctoral fellow in the Indian Institute of Technology Delhi before joining SRMIST.



»»» Dr. Nijisha Shajil

Dr.Nijisha, Completed her Ph.D. from the College of Engineering (CEG) at Anna University. Her research interest includes Biomedical signal processing, Biomedical image processing, and Biomedical Instrumentation.

Dr.Amrutha Veluppal «««

Dr.Amrutha, Completed her Ph.D. from the Indian Institute of Technology Madras. Her research interest includes Medical image analysis, Biomedical signal processing, including linear and nonlinear signal analysis for neuromuscular fatigue detection and Computer-assisted diagnosis.

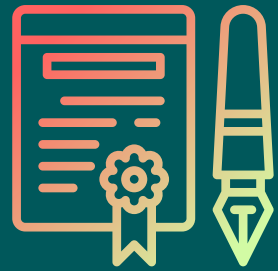


Welcome

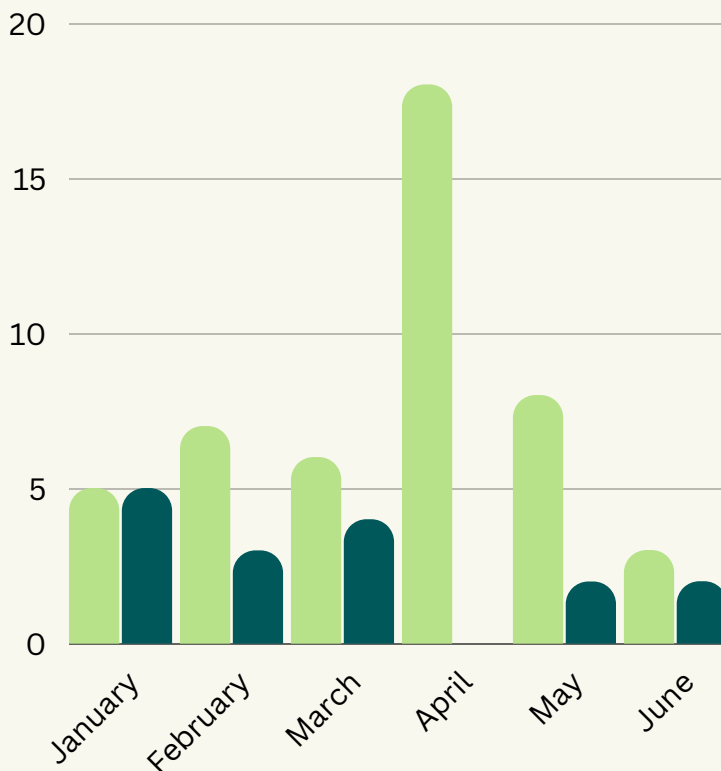
Welcome to Biomedical Engineering Department, SRMIST! We are thrilled to have you join our academic community and contribute your expertise and passion to our institution. As you embark on this exciting journey, we want to extend our warmest greetings and support.

PUBLICATIONS, PATENTS AND FUNDINGS

JAN -JUNE 2023



Statistics of Publications and Patents Jan - Jun 2023



Publications

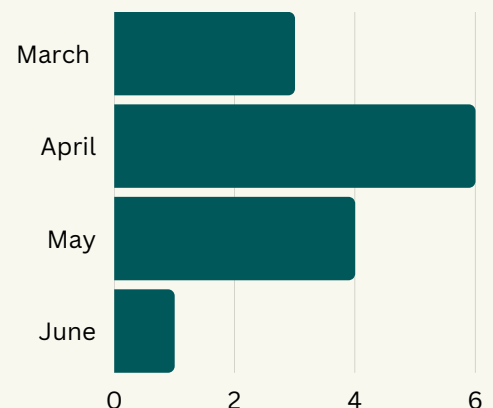
Patents

The publications and patents are showcase of immense depth of knowledge and expertise in the field of Biomedical engineering

EXTERNAL FUNDINGS [PROPOSAL SUBMITTED OR GRANTED]



Obtaining funding is a remarkable accomplishment that speaks volumes about your vision, dedication, and exceptional quality of work. The fact that your project has attracted the support and recognition it deserves is a testament to your hard work, perseverance, and the value it promises to deliver.



For Details

[https://drive.google.com/drive/folders/1I3w7z2EULjUa_Isra_Bf7jMOt5AZkntA?usp=drive link](https://drive.google.com/drive/folders/1I3w7z2EULjUa_Isra_Bf7jMOt5AZkntA?usp=drive_link)

A group of men are standing on a stage during the inauguration ceremony. They are dressed in formal attire, including shirts and trousers. The background is a dark red curtain. A man in a blue shirt is visible on the right side of the group.

NCBET23 brought together specialists and practitioners from hospitals, R&D institutes and academicians to provide the forum for exchange of ideas. It also provided a premier interdisciplinary platform for researchers, clinicians and educators to present and discuss the most recent innovations, trends and concerns as well as practical challenges encountered and solutions adopted in the fields of recent advances in Biomedical Engineering research and applications.

SRM Institute of Science and Technology

Department of Biomedical Engineering and
Department of Genetic Engineering
Jointly Celebrates

PROTECT YOUR IDEAS

WORLD INTELLECTUAL PROPERTY DAY
26th April 2023

Presenter: Dr. D. Ashok Kumar, Department of Biomedical Engineering
Coordinator: Dr. P. Senthil Kumar, Department of Genetic Engineering

Venue: BSOB, Seminar Hall,
BSOB Block, SRMIST
Time: 2 PM to 3 PM

SRM Institute of Science and Technology

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TECHNICAL EVENTS



Medical Imaging workshop

Medical imaging plays a crucial role in healthcare, allowing medical professionals to visualize the body's internal structures for diagnosis, treatment planning, and research. This workshop was tailored to enhance the knowledge level of the students. Organizing Committee: Dr.Varshini Karthik, Dr.A.K.Jayanthy, Dr. D. Ashok Kumar and Dr. N. Ashwin Kumar.



Databases are at the core of most modern applications and play a vital role. Skill development in database management is crucial for anyone involved in managing, organizing, and analyzing data, especially our non-teaching faculty. Organizing Committee: Dr.Varshini Karthik, Dr. A. Bhargavi Haripriya

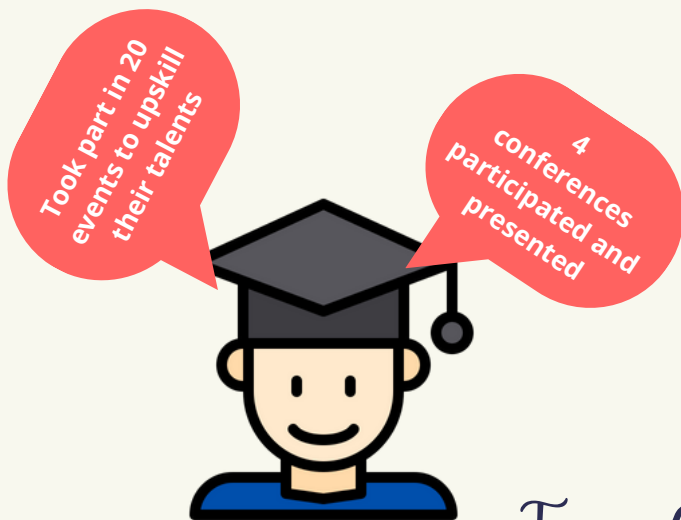


PRODUCT EXPO'23

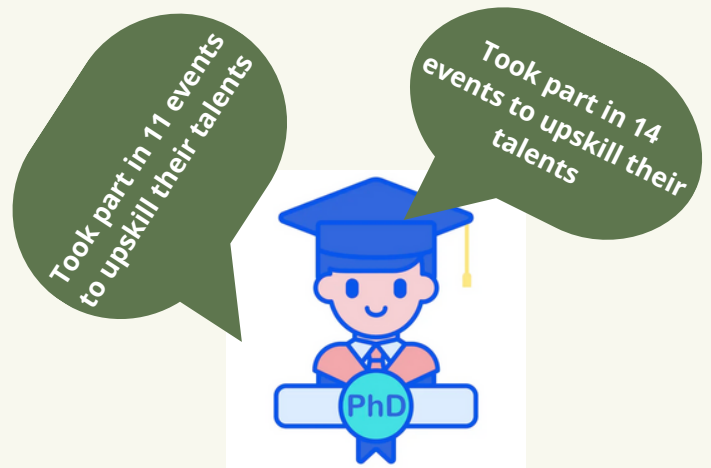
Product Expo'23 was a specialized event to showcase innovations. It was arranged by SRMIST Innovation, Incubation and Entrepreneurship Centre. Faculty, students and research scholars participated and highlighted their latest research findings. It facilitated students interested in entrepreneurship to attract potential investors and secure funding for their innovations.

TECHNICAL EVENTS OUR STUDENTS, SCHOLARS AND FACULTY INVOLVED

Student Participation



Scholar Participation



Faculty Participation





RESEARCH EVENTS

These annual events are held to showcase the world class research done at SRMIST. Our faculty, students and scholars took part in the event to meet and share ongoing research work and ideas, to promote discussion and to strengthen collaboration across the university.

DR. PAARIVENDHAR RESEARCH COLLOQUIUM

ALL THE SCHOLARS WERE ASKED TO
DISPLAY THEIR RESEARCH WORK AS
POSTER PRESENTATION. TEAM THAT
WON THE BEST POSTER AWARD:
SCHOLAR : MR.HARIRAJ
GUIDE : DR.S.GNANAVEL



RESEARCH DAY 2023

MS. RESHMA RUTH
PAULINE A R, II MTECH
WON SILVER MEDAL



RESEARCH DAY EVENT JUDGES



EXPERT LECTURE SERIES

These lectures are designed to provide in-depth insights, information, and expertise on current topics of interest by industry experts and proficient alumni



SRM INSTITUTION'S INNOVATION COUNCIL

Department of Biomedical Engineering,
School of Bioengineering,
SRMIST, Kattankulathur
presents

MOTIVATIONAL SESSION
BY A SUCCESSFUL ENTREPRENEUR



Date : 27th January 2023
Time : 11:00 am
Venue: Prof. G.N. Ramachandran Hall

SPEAKER :
DR.C. SHEELA SASIKUMAR
Managing Partner - SS Clinical Research

Dr. C. Sheela Sasikumar, Recognized Startup, Woman Entrepreneur Motivator, Topic: "Motivational Session by a Successful Entrepreneur", held on 27th January 2023 .

SRM INSTITUTION'S INNOVATION COUNCIL

DEPARTMENT OF BIOMEDICAL ENGINEERING
SCHOOL OF BIOENGINEERING
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
KATTANKULATHUR

Cordially invites you for

ORIENTATION SESSION ON
"Requirement Engineering and Medical device Regulations"

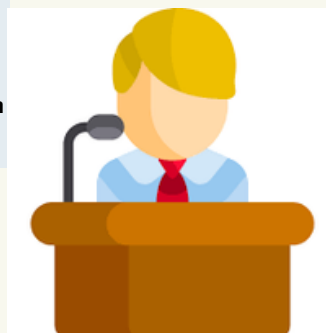


Mr. PRADEEP KOLANKARI
Head - Medical and
lifestyles, Engineering R&D,
Capgemini, India

ORGANIZING COMMITTEE
Dr. T. SURESH KANTH
Prof. & Head of the Dept. of Bio
Dr. A. K. JAYAKUTTY
Professor, SRM
Dr. D. ASHOK KUMAR
Associate Prof., SRM
Dr. ADITHYAN K. S.
Associate Prof., SRM

8104, SCHOOL OF BIOENGINEERING
30TH JANUARY 2023
10:30 AM

Mr. Pradeep Kolankari, Topic: Orientation session on "Requirement Engineering and Medical device Regulations", held on 30th January 2023



SRM INSTITUTION'S INNOVATION COUNCIL

Counselling cell - Biomedical Engineering
Department of Biomedical Engineering
School of Bioengineering
SRMIST, Kattankulathur

Topic: Building Resilience



Dr. Pavithra G.
Assistant Professor,
Dept of Clinical Psychology,
SRM Medical College Hospital &
Research Centre.

Date: 24th March 2023 (FRIDAY)
Time: 10:30AM - 12:00PM
Venue: B204, Bioengineering Block

Dr.G. Pavithra, Topic: "Building Resilience", held on 24th March 2023.

Capgemini SRM INSTITUTION'S INNOVATION COUNCIL

DEPARTMENT OF BIOMEDICAL ENGINEERING
SCHOOL OF BIOENGINEERING
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, KATTANKULATHUR

In association with
Capgemini, INDIA
Is organizing a
MEDICAL IMAGING WORKSHOP

Date : 6 - 10th February 2023
Venue : University Building, 13th floor, Placement Seminar Hall - 2

RESOURCE PERSONS - Capgemini (ENGINEERING R&D)

Mr. ADIL KURBAN
Vice President, Head of
Medical and IGT Services

Mr. PRADEEP KOLANKARI
Senior Director, Industrial,
Medical and IGT Services

Ms. GITA BABITHA
Chief Technical Officer,
Medical and IGT Services

Dr. NEERA RATHI
Manager, Medical and
IGT Services

Dr. SATHYANARAYAN V
Senior Manager, Medical
and IGT Services

SESSION DETAILS

- Introduction to Medical Imaging
- Medical Image Visualization
- Medical Image Segmentation Tools
- Segmentation Demonstration
- Real Time Clinical Application

ORGANIZING COMMITTEE
Dr. T. SURESH KANTH
Prof. & Head of the Dept. of Bio
Dr. A. K. JAYAKUTTY
Professor, SRM
Dr. D. ASHOK KUMAR
Associate Prof., SRM
Dr. ADITHYAN K. S.
Associate Prof., SRM

SRM INSTITUTION'S INNOVATION COUNCIL

Department of Biomedical Engineering
SRMIST, Kattankulathur

presents
Expert Lecture on
Process of Medical Device
Regulatory approval in USFDA and EMD



Mr. MADHAVA TIRUKOVELA
Regulatory Affairs Engineer, Vessal Prosthetics, Canada

ABOUT THE SPEAKER:

- Developed regulatory filing pathway for a Class I medical device in the United States and Canada.
- Provided regulatory gap analysis for the regulatory filing of their product with Health Canada and the FDA.
- Developed the maintenance strategy with an appropriate timeline for the medical device in United States.
- Refined the relevant IEC rules based on the product specifications for the maintenance pathway compliance with the ISO 13485:2016 standard and ISO 13485:2016.

Organized by Dr. T. Suresh Kant & Dr. Ashwin Kumar N

Date: 30th March 2023
Time: 10:00 to 12:00 AM
Venue: B204, Bioengineering Block

Mr. MADHAVA TIRUKOVELA, Topic: "Process of Medical Device Regulatory approval in USFDA and EMD", held on 30th March 2023

Experts from
Capgemini

FOCUS

These events are designed to provide exploration and hone specific skills



Dr. D. Kanchana coordinated our students' visit to the Healthcare Technology Incubation Centre (HTIC), IITM Research Park, and Golden Jubilee Biotech Park for Women, Siruseri, on 30th March 2023.



Dr. U. Snehaltha, Dr.T. Jayanthi, Dr.D. Vani Damodran and Dr. D. Kanancha participated in the hands-on training program on “**e-content development on teaching and learning platforms**”, organized by the Department of Networking and Communications, SRM Institute of Science and Technology, on 16th February 2023, 2023.



Dr. T. Jayanthi, Dr. Gnanavel. S, Dr. Muthu P, Dr. Ashwin Kumar. N and Dr. D. Kanchana completed the "Train the Trainers“, session as a part of **Design Thinking** FDP conducted by DIIE, SRMIST at Intellect Design Arena, Chennai during month of May and June, 2023.



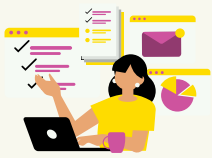
ALUMNI EVENTS

These events provide opportunities for alumni to reconnect, network, share experiences, and stay engaged with their alma mater



- **Medical devices and software innovations**
On 20th March 2023
- **An Impromptu visit and Interacted with our faculty** On 26th April 2023 : Mr. John Kiram, Clinical Engineering Tech, Northwell Health, Newyork, USA
- **THIRD ALUMNI REUNION** on 25th February 2023





AWARDS - STUDENTS



RAEEUCCI-2023

RECENT ADVANCES IN ELECTRICAL, ELECTRONICS, UBIQUITOUS COMMUNICATION AND COMPUTATIONAL INTELLIGENCE
(TECHNICALLY CO-SPONSORED BY THE IEEE), APRIL 19-21, 2023 (HYBRID MODE)



Ms. Priyanka P- presented a paper entitled: “Detection and analysis of fluorescent nanoparticles using an in-house build spectrofluorometer” and won best paper award

- **Ms. Delpha J (second place), Mr. Hari Raj K (Third Place)**- Awarded at Medcuore Tech Innovation Challenge at IIT Research Park, Chennai
- **Ms. Hema Brindha M**- Recognition of outstanding achievements and contributions to the Medcuore Tech Innovation Challenge at IIT Research Park, Chennai
- **Mr. Hershly Rathore** recognised for valuable contribution as an organiser during layer a 24-Hackathon, conducted at SRMIST Kattankulathur



RESEARCH DISSEMINATION

Pre-PhD presentation details

- **Scholar:** Mr. Qaysar Mohi Ud Din,
- **Research Supervisor:** Dr. A K Jayanthi
- **Title:** Early detection of Autism Spectrum Disorder (ASD) by feature extraction of EEG signals using Deep Learning Algorithms



PLACEMENTS



Mr. Nithishkumar S
Placed in Vintus Ed -
Tech Private limited.



Mr. Swarup Sonar,
Ms. Akshita Saraswat
placed in Genpact

INTERNSHIP

- **Ms. Sudharsini M** completed an internship at Baby Hospital, Trichy.
- **Ms. Raja Sankari, Mr. Dipesh Mamtani, Mr. Saksham Bansal, and Mr. Shreyansh Kashayap** completed a virtual internship as part of Samsung Prism in work-let “Auto detection of cystitis from US Data.”



ACHIEVEMENTS -FACULTY

Success is the sum of small efforts repeated day in and day out



Appreciated for 10+ years of continuous service on the occasion of International Women's Day Celebrations

Teaching Staff

1. Dr. Varshini Karthik
2. Dr. A. K. Jayanthi
3. Dr. U. Snekhalatha
4. Dr. T. Jayanthi
5. Dr. S. P. Angeline Kirubha
6. Dr. A. Bhargavi Haripriya
7. Dr. P. Lakshmi Prabha



Non-Teaching Staff

1. Mrs. C. Chitra
2. Mrs. A. D. Josephine Shaila



10+

Years of service in our department

TEACHING IS A
WORK OF HEART

PhD Graduation

Dr. P. Lakshmi Prabha
Guide : Dr. A. K. Jayanthi



AWARDS

THE LANCET Regional Health
Southeast Asia

Dr U Snekhalatha – Awarded certificate in recognition of the peer review contributed to Lancet Regional Health Southeast Asia.

Dr. S P Angeline Kirubha and Dr. Ashwin Kumar N won the best paper award organized at the 2nd International Conference on Recent Advances in Electrical, Electronics, ubiquitous Communication and Computational Intelligence (RAEEICCI-2023)



ACHIEVEMENTS

-Faculty

Received certificate of appreciation for the recognition of the Indian patent granted on the occasion of Product Expo'23

Dr A K Jayanthi

Dr U Snekhalatha

Dr T Jayanthi

Dr S Gnanavel

PATENTED

PATENTS

FACULTY MEMBERSHIPS

Dr. Kanchana D, Member of IAENG Society of Artificial Intelligence

Dr. Kanchana D, Member of IAENG Society of Imaging Engineering

Dr U Snekhalatha Renewal of IAENG Membership

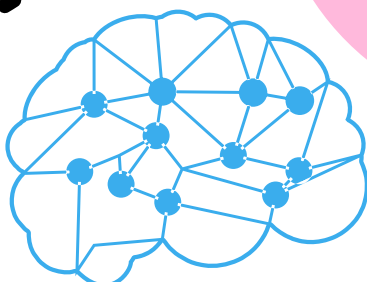
IAENG

The International Association of Engineers

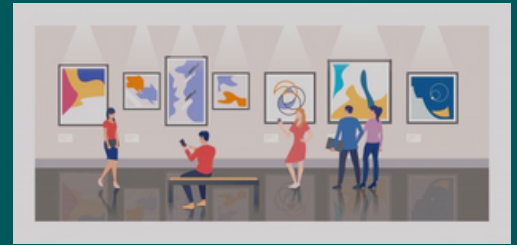
RESPONSIBILITIES AND CONTRIBUTIONS

Dr A Bhargavi Haripriya
Nominated as Assistant Management Representative (AMR) for the ISO 14001-2015 process at SRMIST, Kattankulathur

Dr A K Jayanthi, Dr.S.P Angeline Kirubha, Dr.P. Muthu and Dr T Jayanthi completed the 5 days Faculty Development Programme on "Artificial Intelligence - Phase II" conducted at SRMIST Kattankulathur



GALLERY



B.Tech Batch 2019-2023



**Farewell to Professor
Dr. A. K. Jayanthi**

