

Newsletter Department of Biomedical Engineering



A c a d e m i c y e a r 2 0 2 3 - 2 4



Vol 6 Issue 1



## EDITORIAL TEAM

**BIOMEDICAL ENGINEERING** 





Dr. Varshini Karthik
Chief Editor
Prof and Head

Dr. Jayanthi T. Faculty Editor Associate Professo



Dipanwita Saha Student Chief Editor III Yr, B.tech

Sowmya Sectional Editor II Yr, B.tech





V M Tejaswini Sectional Editor III Yr, B.tech

Harinishree Sundar Sectional Editor I Yr, B.tech



Nyla Bhargava Sectional Editor I Yr, B.tech

Sri Tejaswini Sectional Editor I Yr, B.tech



Dear Readers,

Join us on an exciting journey of knowledge, imagination, and accomplishments as we unveil the pages of Bioscope 2023. Within the carefully woven words and captivating visuals, you will discover a rich tapestry of stories, insights, and perspectives that encapsulate the spirit of our Biomedical Engineering Department at the SRM Institute of Science and Technology, Kattankulathur.

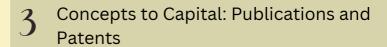
With each issue, we aim to spark your curiosity and broaden your horizons. From the latest breakthroughs in biomedical science and technology to the intricacies of workshops and events, we are committed to providing you with a diverse range of information that both informs and inspires.

As we step into a new semester, we celebrate a time of continuous learning and accomplishments—both curricular and extracurricular. The past year has been a journey of fruitful learning, thanks to the meticulous efforts of our dedicated students and faculty. Join us in embracing a fun-filled and joyous learning experience.

Congratulations to everyone for their achievements and development. Let's embark on this exciting adventure of uncovering new perspectives, igniting your imagination, and exploring the wonders of our world together. Renew your enthusiasm for knowledge with Bioscope 2023!

# TABLE OF CONTENTS





**5** Technical Odyssey

Beyond the Classroom

Online Courses Completed: Faculty Brainpower Alert!

11 Book Chapter

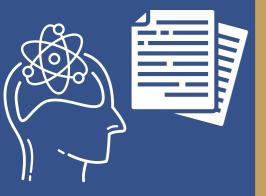
12 Scholarly Affairs: Departmental Functions and Alumni Addresses

Reach and Transform: Community Engagement Efforts

14 Innovation Spectrum

15 Doctoral Dispatch

1 ( A Glittering Aachievements







# CONCEPTS TO CAPITAL: PUBLICATIONS AND PATENTS

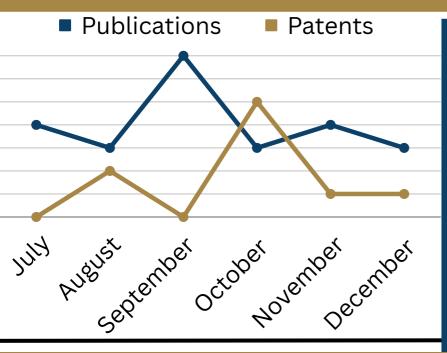
**July to December 2023** 







#### **Innovation figures**



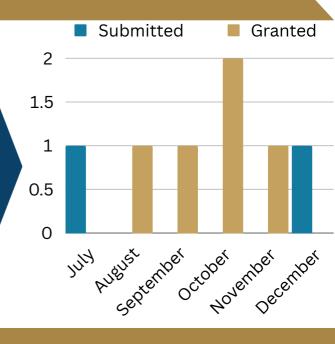
Successful publications and patented innovations can lead to increased visibility and recognition, making it easier for our department to secure funding from government agencies and industry partners

#### **EXTERNAL FUNDINGS (PROPOSALS SUBMITTED OR GRANTED)**



6 5

Securing funding is a notable achievement that reflects your visionary outlook, unwavering commitment, and outstanding work. The endorsement and acknowledgment your project has garnered underscore the diligence, persistence, and the promised value that you bring to the table.



## STUDENT STUDIO

Varsha S (RA2011013010001), B.Tech-BME IV year student, participated in two days workshop applications of "Healthcare embedded systems and IoT.

Paul Sunny (RA2011013010019), B.Tech-BME III year student, participated in two days workshop on "Healthcare applications of embedded systems and IoT"

Lata Samariya (RA2211013010047), B.Tech-BME Il year student, participated in two days workshop on "Healthcare applications embedded systems and IoT

Saranya Sunilkumar (Reg.No.2211013010027), B.Tech-BME II year, participated in two days Workshop on Medical data analysis using machine learning and deep learning techniques.

Chantana Mohanty (Reg. No. 2211013010046), B.Tech-BME II year, participated in two days Workshop on Medical data analysis using machine learning and deep learning techniques

#### Ms. Nithyakalyani,

participated and successfully completed online Professional Development Program on Research Writing.

#### **V M Tejaswini**

(RA2111013010033), B.Tech-BME Ш student, participated in the STTP on Drone development, organised by CINTAL student association, SRM IST, Kattankulathur, from 19th to 23rd September 2023

Ms. Chandana Mohanty (RA2211013010046), B.Tech-BME II year, participated in the One day awareness programme on Dyslexio Illuminated Shattering Stereotypes, Empowering Potential.

Madhumitha B (RA2111013010055), B.Tech-BME III year student, Volunteered and participated in two days workshop on "Medical data analysis using machine learning and deep learning techniques workshop

Dharani M (RA2311013010077), B.Tech-BME I year student, participated in workshop on "Data organised AARUUSH'2023 Science", by development in Python

**Andrabi Ahmad** Syed Najeeb of (RA2311013010059), **B.Tech-BME** year, participated in the workshop on Virtual Reality Development in Python.

**Abdul** Naseeya Begum **Naseer** (RA2311013010065), **B.Tech-BME** year, participated and Volunteered in AARUUSH 2023

Ms. Dharani M (RA2311013010077), B.Tech-BME I year, participated in the 'Python Data -Dynamo: Jupyter to GPT', **Flipkart** Workshop organised by Aaruush 2023

Ms. Keerthana H (RA2211013010003), B.Tech-BME II year, participated and successfully completed 6 days online students workshop on the theme "Universal Human" Values"

year Ms. Nithyakalyani, completed online course cum workshop of 32 hours on "Open source and Al-Mobile application development using android- based tools for research" & workshop on Deep learning techniques.

> Ms. Ashwitha V (RA2311013010032), B.Tech-BME I year, participated in the event Web3waves organised by dBug Labs on 6th October 2023. Ms. Saranya Sunilkumar (RA2211013010027), B.Tech-BME II year, participated in the One day awareness programme on Dyslexio Illuminated Shattering Stereotypes, Empowering Potential.

## TECHNICAL ODYSSEY

- **Dr. Kathirvelu D**: Participated in a six-day FDP on "BM8702 Radiology Equipments." & Engaged in an online FDP focusing on "BM3301 Sensors and Measurements."
- **Dr. Amrutha V**: Completed a Faculty Development Program on "Data Science Tools and Applications."
- **Dr. G. Anitha**: Participated in a six-day FDP on "BM8702 Radiology Equipments." & Joined an online FDP addressing "BM3301 Sensors and Measurements."
- **Dr. P. Muthu**: Successfully participated in a one-week National Level FDP on Cloud Infrastructure (AWS).
- Mrs. Oinam Robita Chanu: Successfully completed a one-week National Level FDP on Cloud Infrastructure (AWS).
- **Dr. P. Lakshmi Prabha and Dr. Nijisha Shaji**l: Engaged in an online FDP focused on "Modern Medical Instrumentation.
- **Dr. Nijisha Shajil,** actively participated in 5 days online workshop on SPSS in Research
- Dr. Nabarun Polley, Dr. Rohit Gupta, Dr. Nijisha Shajil, and Dr. AmruthaV participated in Faculty Refresher Assimilation Program.
- **Dr. Ashwin Kumar N,** Participated in the 8 days startup Boot Camp at iTNT Hub.

These achievements not only showcase the dedication of our faculty members but also contribute significantly to the enhancement of their expertise and the overall academic environment of our institution.

## BEYOND THE CLASSROOM

Dr. Ashwin Kumar N: Crafted an enlightening seminar on "Design thinking for startup - A novel approach to convert idea to a startup" at the vibrant Department of Biomedical Engineering, Rajalakshmi Engineering College, Chennai, Tamil Nadu, India, on 25th August 2023 & Painted strokes of wisdom in a guest lecture on "Design the thinking: Approach for Start-up Ideas" orchestrated bv Entrepreneurship the Development Cell at St. Peter's College of Engineering & Technology, Chennai, Tamil Nadu, India, during 10th October 2023

#### Dr. Rohit Gupta and Dr. Nijisha Shajil:

Harmonized minds with a melodious guest lecture on "Introduction to EEG recordings and EEG Analysis" at the Department of Data Science and Business System, SRM Institute of Science and Technology, Kattankulathur, on 31st August 2023.

Or. P. Muthu: Steered a voyage as a Resource Maestro in the Workshop on "Problem Solving and Ideation," orchestrated by the Directorate of Entrepreneurship & Innovation, SRM Institute of Science and Technology, Chengalpattu, Tamil Nadu, India, on 27th September 2023.

Dr. U. Snekhalatha: Unleashed the magic of intellect with a captivating guest lecture titled: "Artificial Intelligence in Medical Image Processing" at the scientific arena of the Department of Biomedical Engineering, Eswari Engineering College, Chennai, on 13th October 2023.

Dr. A. Bhargavi Haripriya: As the guiding force for "Presentatia," Dr. Bhargavi Haripriya led the Aarush Organizing team, infusing vibrancy at SRM Institute of Science and Technology, Chengalpattu, Tamil Nadu, India, from 21st to 24th September 2023.

Dr. U. Snekhalatha: A maestro of creativity, Dr. Snekhalatha took charge as the Faculty Incharge for "Digital Design-Brand Crafters" and "Vintage Vision" during Aarush, captivating the essence of innovation at SRM Institute of Science and Technology, Chengalpattu, Tamil Nadu, India, from 21st to 24th September 2023.

Dr. Ashwin Kumar N: Stepping beyond boundaries, played the role of a luminary as a Resource Person, delivering a captivating guest lecture in the FDP titled "Micro/Nanostructures for Cancer Theranostics" at Vellore Institute of Technology, Vellore, from 11th to 15th December 2023.

Let's applaud these maestros of knowledge for orchestrating these symphonies of enlightenment!

# FACULTY INDUSTRY IMMERSION PROGRAM

Dr. U.Snekhalatha rocked the 15-day FIIP program at Perfint Health care Pvt Ltd, from 19th June 2022 to 7th July 2023!



#### FACULTY FUN: UNLEASHING WEBINAR WONDERS!

**A. Bhargavi Haripriya** was on a roll with her academic game!

She took part in an epic online Taylor & Francis webinar on "Publish Scholarly Books, Chapters & Open Access in Biomedicines" on Fri, Sep 15, 2023,

&

Just a few weeks after, she was back at it, this time joining another webinar on "How to effectively promote your research through social media" on Oct 11, 2023. This academic superstar is on a mission to conquer the world of research!

#### ALL ABOARD! WORKSHOPS FOR THE UNSUNG HEROES – THE NON-TEACHING STAFF!



Mr. Bilal Ahamed J, Mrs. C. Chitra, Mrs. A.D. Josephine Shaila, Mr. Madankumar V, Mrs. Nagalakshmi G, Mrs. Vigneshwari J, participated in Skill development program on Database management and Web designing" for Non-Teaching Fraternity" organised by the Department of BME, SRM IST, Kattankulathur, held on 10th June 2023

#### PDP

Our team is on a mission to elevate their knowledge and skills to new heights, and they're making it happen!

**Dr. T. Jayanthi** achieved an epic triumph, scoring an impressive 90% on the SWAYAM course 'National Education Policy-2020'!

Mrs. Oinam Robita Chanu tackled the mysteries of Organic and Nano Electronics and emerged victorious from the six-day RAONE 23 Professional Development Program

**Dr. Amrutha V** explored the realm of Neurorehabilitation and Stroke Management and gained invaluable insights from a one-week Professional Development Program.

P. Muthu participated in a one-week National Level Faculty Development Program on Cloud Infrastructure (AWS) organized by the Department of CINTEL, SRM Institute of Science and Technology in collaboration with Brainovision Solutions India Private Limited and All India Council for Technical Education (AICTE) from August 21-25, 2023.

Mrs. Oinam Robita Chanu participated in a one-week National Level Faculty Development Program on Cloud Infrastructure (AWS) organized by JNTUK University College of Engineering Narasaraopet and Brainovision Solutions India Private Ltd. in collaboration with AICTE from August 21-25, 2023.

Mrs. Oinam Robita Chanu, participated in the six days Professional Development Program on "Recent Advancement in organic and Nano Electronics – RAONE 23" during 5th to 10th August 2023.



## mind-expanding gatherings AND BRAIN-BENDING EVENTS

Dr. Nijisha Shajil, presented Skill Development Program on "Tools for the development of MOOCs", organised by Department of Biomedical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu, Tamil Nadu, India during 30th August 2023.

Dr. A. Bhargavi Haripriya, Dr. P. Lakshmi Prabha, Dr. Ashwin Kumar N, Participated in "Half-day information session on the Fellowship opportunities in Europe for early career students/researchers" at SRM-Hospital Seminar Hall, Ground floor, on 29th September 2023.

Dr.A.Bhargavi Haripriya, participated in IEEE authorship and open access symposium: Tips and best practice to get published from IEEE editors, organised by IEEE advancing technology for humanity during 31st August 2023

#### UNIVERSAL HUMAN VALUE PROGRAMS

We're proud to highlight the dedication of our participants in advancing their understanding of Universal Human Values and Professional Ethics.

Dr. Varshini Karthik successfully completed the comprehensive course in this essential field.

Dr. P. Muthu devoted five days to an intensive program focused on UHV-II. Lakshmi Prabha P actively participated in a stimulating session titled "Inculcating Universal Human Values in Technical Education," conducted from May 29 to June 2, 2023.

Dr. Rohit Gupta has accomplished the program on "Inculcating Universal Human Values in Technical Education."

These achievements underscore our collective commitment to nurturing ethical values in both professional and technical domains.







Creativity





Wisdom

- 1. IEEE AIC 2023, Rajkiya Engineering College, Sonbhadra, India: Explored alternative oxygen saturation measurement sites by Ms. Devaki V & Dr. T. Jayanthi.
- 2. ICAPSM 2023, KPR Institute of Engineering & Technology, Coimbatore, India: Explored Kinect-based gender classification using gait analysis by Dr. A. Bhargavi Haripriya & Dr. G. Anitha.
- 3. FBSB-2023, PSG Institute of Advanced Studies, Coimbatore, India: Showcased diverse presentations on biomaterials and synthetic biology by Fabiola Jemmie Shilparani, Shivani Jayanath, Akil Tharik, Hari Raj.
- 4.·RIBE2023, Rajalakshmi Engineering College, Chennai, India: Febina J, Dr. Varshini Karthik investigated "Cement residues during prosthesis cementation and their role in Peri implant disease."
- 5. Tummala.Lakshmi Teja, Priyanka P, K.V. Leela, M Sameera Fathimal, A Jeya Prabha, Dr. S. P. Angeline Kirubha discussed "Diagnosis of SLE through ANA image pattern recognition and biomarkers."
- 6. Durga R, Malini S, A. Jeyaprabha, Sameera Fathimal M, S. P. Angeline Kirubha delved into "Fetal ECG separation from Maternal ECG and Analysis using Empirical Mode Decomposition Algorithm."
- 7.A. Jeyaprabha, Sameera Fathimal M, S. P. Angeline Kirubha presented on "Automatic Segmentation of AMD using Deep Learning Models."
- 8. Sameera Fathimal M, A. Jeyaprabha, S. P. Angeline Kirubha introduced "Near Infrared Based Non Invasive Blood Glucose Prediction System."
- 9. Jeyaprabha, Sameera Fathimal M, S. P. Angeline Kirubha explored "Ocular Fluid Dynamic effects on Magnesium Drug Delivery Implant Device for Smooth Pursuit Eye Movements using CFDA."
- 10. V. M. Rajasankari and Umapathy Snekhalatha presented a 'Hybrid network model for predicting retinopathy of prematurity.'
- 11. Kondo Gloria, Umapathy Snekhalatha, and Salvador Aneia showcased 'Early Parkinson's Disease detection through Brain MRI Analysis.'
- 12. Nithayakalyani Krishnan and Muthu contributed on 'Chronic venous insufficiency detection using infrared thermography and machine learning.'



**Where innovation meets** presentation, these trailblazing minds redefine possibility, one insightful talk at a time, shaping the future of knowledge dissemination with their brilliance!

#### **CONSULTANCY WORKS**

- Dr. Ashwin Kumar N collaborated Estancia IT Park, Chengalpattu, on infusion pump using droplet microfluidics." The consultancy fee Departmental Consultancy scheme, the remuneration was split as PI: 60%, Dept. of BME: 20%, and
- Dr. Vani Damodaran, Completed HCL Technologies Ltd (PO number: 9200078139), titled: "Spectroscopic characterization of Photometer Rs.2,46,620/- (Nov 2022 to April 2023). This work was undertaken under Category 1.

#### ONLINE COURSES COMPLETED: FACULTY **BRAINPOWER ALERT!**

Check out these brainy docs!

Dr. Nijisha Shajil took on the digital world with a UGC-approved refresher program on MOOCs by STRIDE, IGNOU.

Dr. Rohit Gupta showed off his coding chops, nailing a 72% score in the Python for Data Science course from IIT Madras via NPTEL.

Dr. T. Jayanthi aced her First-Aid & CPR-AED training at the Academy for Clinical Training



#### ONLINE COUSES COMPLETED: RESEARCH SCHOLAR

Ms. Delpha J, has successfully completed Introduction to embedded machine learning an online course authorized by Edge impulse and offered through coursera, during 20th July 2023

#### ONLINE COURSES COMPLETED: STUDENTS

Amidst their Biomedical Engineering journey, A cohort of twenty diligent students have excelled in various skill-building endeavours. Engaging with courses ranging from AWS Academy Graduate programs and MATLAB Onramp to specialized certifications in Cancer Biology and AutoCAD, these students showcased their commitment to continuous learning. From mastering cloud foundations and engineering software to delving into cancer biology and neurocomputing, their diverse pursuits reflect both dedication and enthusiasm.

- Sarthak Nayak (Reg.No.RA2111013010065)
- Bibek Ram (Reg.No.RA2211013010119)
- Arjun Ram (Reg.No.RA2011013010008)
- Paul Sunny (Reg.No.RA2011013010019)
- Sudharsini M (Reg.No.RA2011013010075)
- T Priya Dharsini (Reg.No.RA2011013010023)
- Harinishree Meenakshi sundar(Reg.No.RA2311060010005)
- Dharani Mahesh(Reg.No.RA2311013010077)
- Varsha S (Reg.No.RA2011013010001)
- Aditya Shigo (Reg.No.RA2011013010098)
- Vaishnavi Balasubramanian (Reg.No. RA2011013010037)
- Namasree Singha (Reg. No. RA2111013010047)
- Keerthana H (Reg.No.RA2211013010003)
- Suriya Kumar S (Reg.No.RA2211013010061)
- Nithin M (Reg.No.RA2011013010039)
- Ms. Sarayana S (Reg. No. RA2211013010027)





Massive

Open

## **Book Chapters**

M. Muthu Meenakshi, Gowri Annasamy, P. Kaavya, M. Hema Brindha, Yih Bing Chu,

N. Ashwin Kumar, "SERS Analysis for Single-Molecule Detection of Disease Biomarkers",

Single Biomolecule Detection and Analysis, CRC Press, 9781003409472, 2023 (Chapter

10), August 2023

Arun Bhupathi, M. Hema Brindha, Ganapathy Krishnamurthi, N. Ashwin Kumar, "Single Molecule Imaging Using State-of-the-Art Microscopy Techniques", Single Biomolecule Detection and Analysis, CRC Press, 9781003409472, 2023 (Chapter - 11), during August 2023



## Half-Year Snapshot July- December 2023.





## Scholarly Affairs: Departmental Functions and Alumni Addresses.





ENGINEERING AND
DIRECTORATE OF ALUMNI AFFAIRS

ALUMNI CONNECT

"CAREER PLANING! KNOW YOUR INTEREST"

Dr. Rathinam, Director of Alumni affairs,



**Medical Device Regulatory Affairs** 



Manager Regulatory Affairs Division Freyr Software Services Pvt Ltd, Chennai

13TH OCTOBER 2023, 8.30 AM - 9.30 AM VENUE: B102, BIOENGINEERING BLOCK, SRMIST

> DEPARTMENT OF COMPUTING TECHNOLOGY SCHOOL OF COMPUTING

DEPARTMENT OF BIOMEDICAL ENGINEERING

SCHOOL OF BIOENGINEERING
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, KTR

OPPORTUNITIES FOR JOINT RESEARCH AND **COLLABORATION WITH UNIVERSITAS AIRLANGGA** 

Department of Biomedical Engineering and **Directorate of Alumni Affairs ALUMNI CONNECT** 

**TOPIC: COINC TO HICHER STUDIES WITH WORK EXPERIENCE** 



**JAINEET ARORA** B.Tech-BME 2017-21 Batch **Validation Analyst Zifo RnD Solutions** Chennai, India

**Online** mode



10.00 am - 11.00 am

**Biomedical Engineering** 

Presents

#### **TekMed**ica

Fostering student's innovation to enhance practical skills for Industry 4.0 standard

Dr. Varshini Karthik

ectrophoresis

"EMPOWERING TOMORROW'S **INNOVATORS IN** 

ORGANISING COMMITTEE

Dr. Rathinam, Director of Alumni affairs, Dr. Varshini Karthik, HOD - BME, Dr. A. Bhargavi Haripriya, Asst Prof - BME (Alumni Coordinator)



INGE DHAMANTI, SKM, MKES, MPH, PHD

ASSOCIATE PROFESSOR DEPARTMENT OF HEALTH POLICY AN FACULTY OF PUBLIC HEALTH UNIVERSITAS AIRLANGGA,

COLLEGE OF ENGINEERING AND TECHNOLOGY



DEPARTMENT OF BIOMEDICAL ENGINEERING
Organizing
Two Days Workshop on HEALTHCARE APPLICATIONS OF EMBEDDED

SYSTEMS AND IOT and 4th August, 2023 ( 9am to 4 pm B204, School of Bioengineering

Convener
Dr. Varshini Kartik, Professor and Head
Department of BME Co-ordinators
Dr. S. P. Angeline Kirubha, Associate Professor
Department of BME

Dr. Amrutha Veluppal, Assistant Professor Department of BME

Sameera Fathimal M, Research Scholar Department of BME +91 9840709331

ecount Name: Biomedical SRM ecount No.: 117001000633136 ame of the Bank: City Union Pa





Head of the Department REGISTRATION Registration fee: NIL

Click below link for registration

Convenor



Certificates will be provided to all registered participants attending the entire Dr. T. R. Paarivendhar,

der Chancellor, SRMIST Dr. Ravi Pachamoothoo, -Chancellor (Admin.), SRMIST

Dr.P.Sathyanarayanan Pro-Chancellor (Acad.), SRMIST

Chairman, SRM Trichy & Ramapuram

Mr. S. Niranjan.

Co-Chairman, SRM Trichy & ram Campu

Dr. C. Muthamizchelvan, Vice Chancellor, SRMIST Dr. A. Ravikumar,

Pro VC (Medical), SRMIST Dr. S. Ponnusamy, Registrar, SRMIST

Faculty development programme

Modern Medical Instrumentation

4th to 8th December, 2023

In association with

Biomedical Engineering Society of India (BMESI)





## Reach and Transform: Community Engagement Efforts

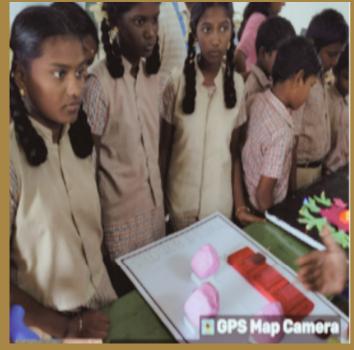
Outreach Programme Medical Eye Camp – 26th September 2023, Conducted by Dr.Angeline and Dr.Gnanavel in Orathur Village







Outreach Program on Human Anatomy and Physiology 22nd November 2023, conducted by Dr.Anitha and Dr.Bhargavi in Panchayat Union Middle School, Chettipuniyam Village









### Innovation Spectrum



#### From Patent Filing to Commercial Triumph

# Filed & Published

- A. Bhargavi Haripriya, "A system for diagnosing foot inflammation and a method thereof", Patent application no:201741032286, Status: filed on 12/09/2017, published on 15/06/2018, Granted on 17/08/2023
- Rajashankari, U.Snekhalatha,
   Rajalakshmi T. An Audiometer submitted for Patent application no:
   202041037849, Status: filed on
   02/09/2020, published on 11/09/2020.
   Granted no: 447421, dated 25/08/2023.
- Lakshmi Prabha Pattabhiraman, Saminathan Mahendiran, Lalith Kumar Selukka, Hariharan Rajendiran, Nithish Kumar Subbaiya, "A Smart Driver Monitoring And Safety System For A Vehicle And A Method Thereof", Patent application no:202341054875, Status: filed on 16/08/2023.
- Josephraj Febina, Varshini Karthik,
   Ashwin Kumar N, "A method of identifying and removing remnants of dental cement from the oral cavity",
   Patent application No:202341028986,
   Status: filed on 21/04/2023, Published on 26/05/2023

# Granted & Commercialized

- Anitha, Varshini Karthik, Sivanathan K, "An apparatus for detecting silent aspiration", Patent application No:201841042674, Status: filed on 13/11/2018, Published on 25/10/2019 and Granted on 21/10/2023
- Ramji Kalidoss, U. Snekhalatha, "An Instrument for Determination of Acetone in Exhaled Air", for Patent application no: 201841047738, Status: filed on 17/12/2018, published on 18/10/2019. Granted no: 461070, dated 20/10/2023.
- T. Jayanthi, "An Electronic Auscultation Device", Patent application no:201841037808, Status: filed on 05/10/2018, published on 10/04/2020, Granted on 10/10/2023
- **G. Anitha,** "A System for Interpreting Sign Language and A Method Thereof", Patent application no:201941047187, Status: filed on 19/11/2019, Published on 02/10/2020, Granted on 05/10/2023
- T. Jayanthi, successful commercialization of 3 patented technology with Aarca Research, marking a significant milestone in bringing innovation to market and providing valuable solutions to customers



## Doctoral dispatch



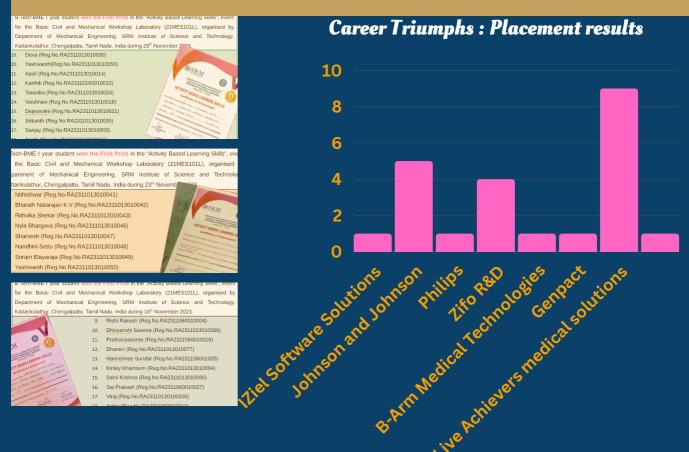
- Qaysar Mohi Ud Din (Reg. No. RA1913011011004) of the Biomedical Department has successfully defended his Ph.D. Public Viva-Voce (Oral) on September 25th, 2023, for his thesis entitled "Analysis of Autism Spectrum Disorder (ASD) by Feature Extraction of EEG Signals Using Deep Learning Algorithm." The defense took place at 11:00 am at Peter Drucker Hall, MBA Block, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India-603 203.
- Mrs. Keren Evangeline I (Reg. No. PA1913011013001), an external part-time research scholar, defended her Pre-Ph.D. Viva titled "Diagnosis and Prognosis of Breast Cancer from Histopathology Images Using Deep Learning and Machine Learning Techniques" on July 25th, 2023, at 10 am at Prof. G.N. Ramachandran Hall, SRMIST, KTR under the guidance of Dr. S.P. Angeline Kirubha, Dept. of Biomedical Engineering.
- Ahalya R K submitted her thesis named "Deep Learning and Quantum Computing Based Evaluation of Rheumatoid Arthritis Using Hand X-Ray and Thermal Images" under the supervision of Dr. U. Snekhalatha on November 22nd, 2023.
- Richa Rashmi submitted her thesis titled "Development of Body Composition Analyzer and Artificial Intelligence-Based Classification of Childhood Obesity" under the guidance of Dr. U. Snekhalatha on December 9th, 2023.

The Ph.D. experience is not just about acquiring knowledge; it's a transformative journey that hones one's ability to think independently, communicate effectively, and contribute meaningfully to society. Ph.D. holders become the stewards of knowledge, driving progress, fostering innovation, and inspiring the next generation of thinker

## A Glittering Achievement: Cataloging Notable Awards and Accolades



- Ms.Namasree Singha (RA2011013010047), B.Tech-BME III year student, Won 2nd in Intercollege competition Battle of Bands in JIPMER Medical College, Pondicherry, during September 2023.
- Dr. Nabarun Polley, won best poster presentation award in the conference 'PHOTONICS 2023, organised by IlSc, Bengaluru, India from 5th to 8th July 2023.
- Dr. D. Ashok Kumar, presented and won best paper for the work "Influence of BMI on knee and ankle movements in young healthy Indian adults", and Won best paper award in the International Conference on Clinical Diagnosis and Biomedical Devices, organised by the Dept of BME, Sri Shakthi Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India during 16th and 17th November 2023.
- Ms.Harinishree Meenakshi Sundar (RA2311060010005), B.Tech-BME l year student, participated and won First Prize in the "BUREAQUEST" (VISSIONATE), held on the occasion of World Standards Day 2023 organised by Bureau of Indian Standards, Chennai Branch Office, India on 6th October 2023.



## **GALLERY**









Kattankulathur, Tamil Nadu, India

GPS Map Camera













65

Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world. Science is the highest personification of the nation because that nation will remain the first which carries the furthest the works of thought and intelligence.

-Louis Pasteur

