



VOLUME : 01

## MEDFLOWER

ADHIYAMAAN COLLEGE OF ENGINEERING  
(AUTONOMOUS), HOSUR

DEPARTMENT OF BIOMEDICAL ENGINEERING

BIANNUAL NEWSLETTER 2019-2020



ISSUE 01



# NEWSLETTER

(For Internal Circulation Only)



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## PRINCIPAL'S MESSAGE

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I am delighted to announce that the Department of Biomedical Engineering is launching its First issues of the Bi Annual Newsletter for 2019-2020. The department has organized multiple seminars aimed at enriching students' knowledge in the field of technological advancements within Biomedical Engineering. This Newsletter will showcase the department's activities and accomplishments.

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## HOD'S MESSAGE

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I take great pleasure in warmly welcoming all of you to the Biomedical Engineering Department at Adhiyamaan Engineering College in Hosur, Tamil Nadu. Since 2003, the college has been offering a 4-year full-time B.E. program in Bio-Medical Engineering (BME). I am excited to announce that the Department of Biomedical Engineering is focused on advancing its progress and providing students with hands-on experience. This department is truly unique, acting like a prism that showcases various aspects of education and extracurricular activities, fostering growth and exposure.

We are thrilled to extend an invitation for you to join the Department of Biomedical Engineering as an undergraduate or research student, and we eagerly anticipate being a part of your achievements.



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## VISION

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To produce competent and creative Biomedical Engineers who anticipate change, communicate and work with others effectively in a globally connected society.

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## MISSION

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- To pursue excellence in Biomedical Engineering by integrating engineering and medicine through education, research and innovation.
  - To facilitate the students by introducing technologies for uplifting the society with global standards.
  - To nurture students' skill and leadership qualities by inculcating ethical values.
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## PEOs

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- I Our graduates will excel in healthcare sectors and/or higher education with the instilling profound knowledge in mathematical, scientific and engineering concepts.
- II Our graduates will be able to analyze healthcare challenges, design and development of diagnostic, therapeutic strategies with global standards, economically feasible for the welfare of society.
- III Our graduates will emerge with professionalism, ethical and social responsibilities, communication skills, team spirit and leadership as a holistic personality with life long learning attitude.
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## BOARD OF STUDIES

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The department conducted 22<sup>nd</sup> Board of Studies meeting on November 9<sup>th</sup> 2019.

### Members attended:

- Dr. T.S. Udhaya Suriya, Chairman, BOS/BME
- Dr. V.P. Krishnammal, Member, BOS/BME
- Dr. V. Veeramanikandan, Member, BOS/BME
- Prof. P. Ganesh Babu, Member, BOS/BME
- Prof. C. Sathish Kumar, Member, BOS/BME
- Dr. S. Rajkumar, Member, Academic Council Nominee
- Mr. Sivaraj, Member, Representative from Alumni
- Dr. S. Sumathi, HOD/ECE/ACE, Interdisciplinary Expert
- Dr. S. Sujatha, HOD/EIE/ACE, Interdisciplinary Expert



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## EVENTS ORGANISED

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### Zapdos

On 11<sup>th</sup> July 2019, The Biomedical Wing of IE(I) organized a series of Technical and non-Technical events to celebrate "ZAPDOS" for the students of the Department of Biomedical Engineering. The celebration comprised a variety of activities aimed at fostering both academic and extra-curricular growth among the students. The events were designed to promote teamwork, innovation, and knowledge sharing with the Biomedical Engineering community. Our Students presented papers on various topics related to Biomedical Engineering, showcasing their research and innovative ideas.

A quiz competition was organized to test students knowledge in Biomedical Engineering concepts, history, and current trends. Our Students created posters on relevant themes, demonstrating their creativity and ability to communicate complex ideas visually. Active participation from students across various academic years, fostering a sense of camaraderie and collaboration. Engaging discussions and interactions during technical sessions, providing valuable insights and networking opportunities. Recognition of outstanding performances through awards and certificates, motivating students to excel in their academic pursuits.



## **Biomedical Science Day**

The IE(I)-Biomedical Wing organized a series of Technical and Non-Technical events in celebration of “BIOMEDICAL SCIENCE DAY” for the students of Biomedical Engineering on 19<sup>th</sup> July 2019. The aim was to foster a deeper understanding and appreciation of the field of Biomedical Engineering while providing a platform for students to showcase their skills and knowledge.

The day commenced with an inaugural ceremony, followed by a lineup of engaging activities designed to cater to both technical and non-technical interests of the students. Our students presented research papers on various topics within the realm of biomedical engineering, showcasing their analytical and presentation skills. Visual representation of research projects and innovative ideas were displayed, allowing students to communicate complex concepts effectively.



## Workshop on Applications of LABVIEW in Biomedical Engineering



A five-day workshop on the Applications of LABVIEW in Biomedical Engineering is scheduled from August 5<sup>th</sup> to August 9<sup>th</sup> 2019, designed for final-year students. Dr. N. Bagyalakshmi, an Associate Professor in the Department of Electronics and Instrumentation Engineering at ACE, Hosur, will serve as the resource person for this event. The workshop is tailored for beginners, focusing on hands-on sessions conducted in teams to introduce students to LABVIEW basics and its associated tools.





**The modules covered in five days are given below.**

**DAY 1 - Heart rate variability analysis**

**DAY 2 - Genetic Algorithms for instrumentation control and Optimization**

**DAY 3 - Virtual instrumentation for human factors**

**DAY 4 - Eye Tracker System**

**DAY 5 - Wavelet methods in determining epileptic seizure activity in EEG signals**



## Seminar on Regulatory Compliance For Medical Device



Inaugurated the Seminar on "Regulatory Compliance for Medical Devices" organized by Department of Biomedical Engineering, in association with Biomedical Engineering Society of India on 27<sup>th</sup> August 2019, Adhiyamaan College of engineering (Autonomous), Dr. M. G. R. Nagar, Hosur, the Chief Guest Ms. Jeevitha, HR Manager, Panacea Medical Technologies Health Private limited Malur, emphasized the importance of Biomedical Field, Opportunities, Growth of Biomedical Field and Future Needs of Medical Equipments.





She thanked the organizers for gave the opportunity to present in the event and he felt proud to deliver the inaugural address and gave information about the Interventional Radiology performance and procedures. It is used in various minimally invasive procedures using medical imaging guidance such as X-ray fluoroscopy, Computed Tomography, Magnetic Resonance Imaging and Ultrasound. It performs both diagnostics and therapeutic procedures through very small incisions or body orifices. The main benefits of interventional radiology techniques are that they can reach the deep structure of the body through body orifice or tiny incision using small needles and wires. And gives advice to get the opportunity to utilize his engineering knowledge for the development of the society.





While continuing Ms. Dhivya T, Manager, QARA Department and Ms. S P Swathi, Senior QARA, Panacea Medical Technologies Health Private limited Malur, joined and handled the session on Radiological equipment's, like Ultrasound machine (to produce images from within the body), X-ray (uses to produce images of structures within the body) and contrast media for X ray (to provide a high contrast image of the details of the viscera an organ is a group of tissue with similar functions). Under study, Echocardiography machine (Sonography of the heart is done here to know its function and state), CT scan (Computer Axial tomography scan) / CAT scan (to visualize the interior of the body in slices and then gave brief note about Magnetic Resonance Imaging (MRI), Linear acceleration, Positron Emission Tomography (PET scan) and they show video for the equipment's with their operation.

Earlier, Dr. T. S. Udhaya Suriya, Head of the Department, Department of Biomedical Engineeirng, Adhiyamaan College of Engineering (Autonomous), Hosur, welcomed the gathering and the dignitaries on the stage.





At finally, Ms. Deepa Reddy, Senior Biomedical Engineer and Ms. Sherin, Senior Biomedical Engineer, Panacea Medical Technologies Health Private limited Malur, joined together and take over the session on Regulatory Standards for Medical Equipments. The most important medical device standards that concern Biocompatibility ISO 10993, Clinical Trials ISO 14155 and Risk management ISO 14971. And active medical devices are also subject to ISO/IFC 60601 and Medical devices including software are subject to IFC 62304. 100 students have participated in the Seminar. And got some knowledge about the Radiology, Radiological equipments and the regulatory standards on medical devices.

Mr. Ganesh Babu coordinator proposed the vote of thanks, thanking all the participants and the dignitaries present during the end of the session.



## World Heart Day



On September 27<sup>th</sup>, 2019, the Biomedical Wing of the Institution of Engineers (India) organized a series of Technical and Non-Technical events to celebrate **WORLD HEART DAY**. The aim was to raise awareness about cardiovascular health among students of the Department of Biomedical Engineering. The celebration commenced with an inauguration ceremony, where distinguished guest and faculty members emphasized the significance of cardiovascular health in today's society. Various activities were planned throughout the day to engage students and promote healthy lifestyle choices. Experts from the field delivered insightful talks on the prevention, diagnosis, and treatment of cardiovascular diseases and enlightening students about the latest advancements in the field. Students had the opportunity to present their research findings on topics related to cardiovascular health, fostering academic exchange and innovation.



# ACADEMIC TOPPERS

## I-Sem



Lydia M  
9.28 GPA



Saranya V  
9.28 GPA



Vemala M  
9.17 GPA



Mamatha M  
9.11 GPA

## III-Sem



Kaniha S  
9.59 GPA



Pooja C  
9.41 GPA



Isika Adak  
9.27 GPA

## V-Sem



Sandhiya S  
9.65 GPA



Prema N  
9.65 GPA



Shoniya Kavi S  
9.54 GPA



Vedhavalli S  
9.5 GPA

## VII-Sem



Nisha D  
9.88 GPA



Kavitha Vaishnav J  
9.62 GPA



Sreelakshmi K  
9.5 GPA



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# ACHIEVEMENTS

## HIGHER STUDIES

- Durga Lakshmi B has enrolled at IIM Udaipur.
- Gnana Guru Murugan has joined at Hochschule Furtwangen University in Germany.
- Indhuja M has joined thorough TANCNT at Anna University in Chennai.

## QUALIFYING EXAM

- Indhuja M successfully passed the TANCENT exam and enrolled in ANNA University to pursue her master's degree.

## STUDENTS PARTICIPATION

- Mohammed Fawaz participated in a two-day national-level workshop on LABVIEW at the Ramco Institute of Technology in Rajapalayam from September 6th to September 7th, 2019.
- Sushmita and Salini took part in a paper presentation held at Sriram Engineering College in Chennai on 20-09-2019 and secured first place for their presentation.
- Bala Kumar and Praveen Raj, our students, presented a paper at the National Level Technical Symposium held at Velallar College of Engineering in Erode on 21-09-2019 and secured second place.



# ***SALIENT FEATURES***

- Well-Equipped Laboratories with AICTE Funding.
- Experienced Faculties.
- Outcome Based Education (OBE) is Implemented.
- MoUs with renowned Industries and Hospitals.
- Practical Oriented Teaching and Learning .
- Training for Placement and Higher studies.
- Excellent record of Placement and Higher studies
- Industry attachment Program and Internship.
- Hospital Training has been carried out in Academics.
- Workshops/Seminars by Industry Experts.
- Financial support for Students Innovation.

## ***EDITORS :***

Dr. N. Bagyalakshmi, Associate Professor

Mr. P. Ganesh Babu, Assistant Professor

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