Dhanalakshmi Srinivasan Engineering College

Perambalur – 621 212.

Department of Biomedical Engineering

News Letter 2018 – 2019

1. About the Department

The Department was established in the year 2005. To foster research and education that benefits human health on novel technologies, devices and therapies, the field has developed its own knowledge base and principles those are the foundation for the academic courses designed by the Department of Biomedical Engineering. Biomedical Engineering and e-health are interdisciplinary sectors that are growing prodigiously and have a significant social and economic impact.

The Biomedical area represents at most dynamic and leading research field and areas of innovation. It has a huge existing and emerging industrial base.

The Bio Medical Engineering, one of the most fascinating fields in medical has a great future as it combines the knowledge of sophisticated technology with the biology of mankind in order to solve the physiological problems of human beings.

1.1. Vision of the Biomedical Engineering

Emergence of advanced learning, research and training to strengthen technologies in biomedical engineering for human welfare and Nation needs.

1.2. Mission of the Biomedical Engineering

The mission of the Biomedical Engineering Department is to bridge engineering, science and medicine.

M1. To engage with the specific to generic community for knowledge dissemination and career development.

M2. To update, analyze and impel the knowledge in the multi-disciplinary fields to strengthen technologies in biomedical engineering.

M3. To encourage the students to overcome the gap between engineering and medicine for the welfare of society.

M4. To provide students expertise both in engineering and technical fields related to competitive medical technology in research and continuing education.

1.3. Program Educational Objectives (PEOs)

PEO 1. The graduates of the program will have ability to strengthen technologies by combining the design and problem solving skills for enhancing health care products.

PEO 2. Graduates of the program will function as productive team member and leader to bridge the gap between engineering and biology.

PEO 3. Graduates will be outstanding professionals by enhancing their advanced learning techniques in the field of biomedical engineering to face the global challenges.

PEO 4. Nurture responsible engineers with ethical values to serve the society and to learn and excel in higher education.

1.4. Program Specific Outcomes (PSOs)

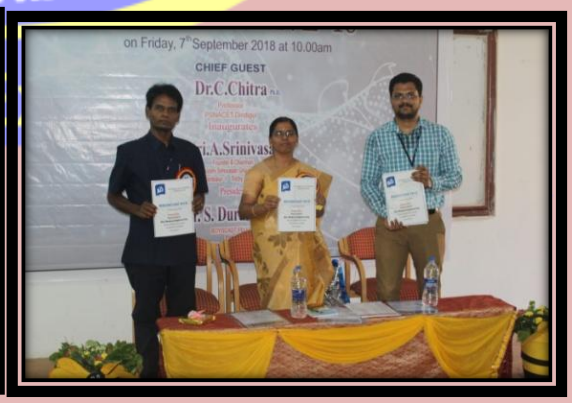
PSO 1. **Bio-Analysis**. Apply Mathematical Analysis for human illness, to problems, thereby to interface engineering and life science.

PSO 2. **Data Interpretation and Problem Solving.** Make measurements on and interpret data from physiological systems and decipher the problems associated with the interaction between living and nonliving materials and system.

Department Activities

1. NATIONAL LEVEL TECHNICAL SYMPOSIUM-BIOCONCLAVE'18

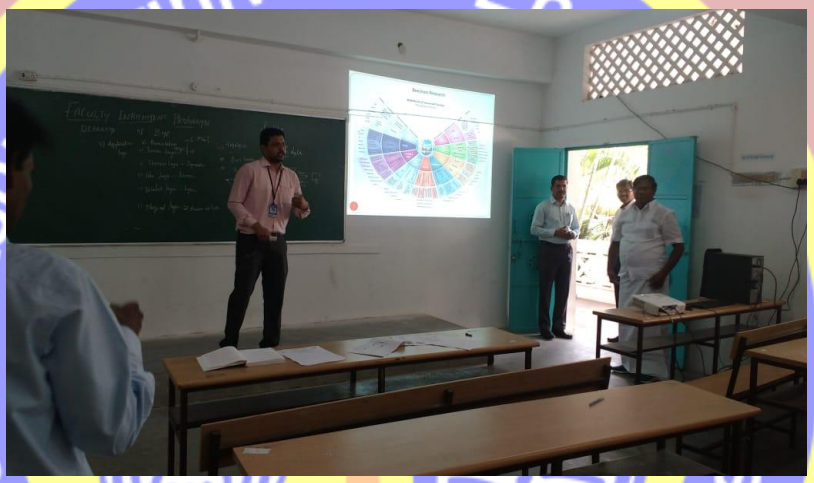
To provide a forum for the budding engineers, national symposium (BIOCONCLAVE'18) was organized by the biomedical departments on 7th September 2018.Students of various other engineering colleges are invited to participate in this symposium. The symposium was inaugurated in the presence of our chairman Shri.A.Srinivasan, Principal Dr.S.Durairaj, Vice Principal Dr.K.Velmurugan, Dean Academics Prof. J.Premalatha, nearly at 10.00 a.m in the department seminar hall. Our respected chairman sir, along with principal, in person honored our chief guest. The chief guest Dr.C.Chitra, Professor-PSNACET, delivered about her view about biomedical field and Blue Brain Development Technology. Organizing secretaries Prof.Hemalatha Karnan and Prof.Karthick Babu, coordinated the event. Students from various engineering colleges participated and present their papers in forenoon session. In the afternoon session technical events were conducted. Students project and modules were executed in "Project expo". The participants were awarded with certificates. The function was successfully ended with vote of thanks.

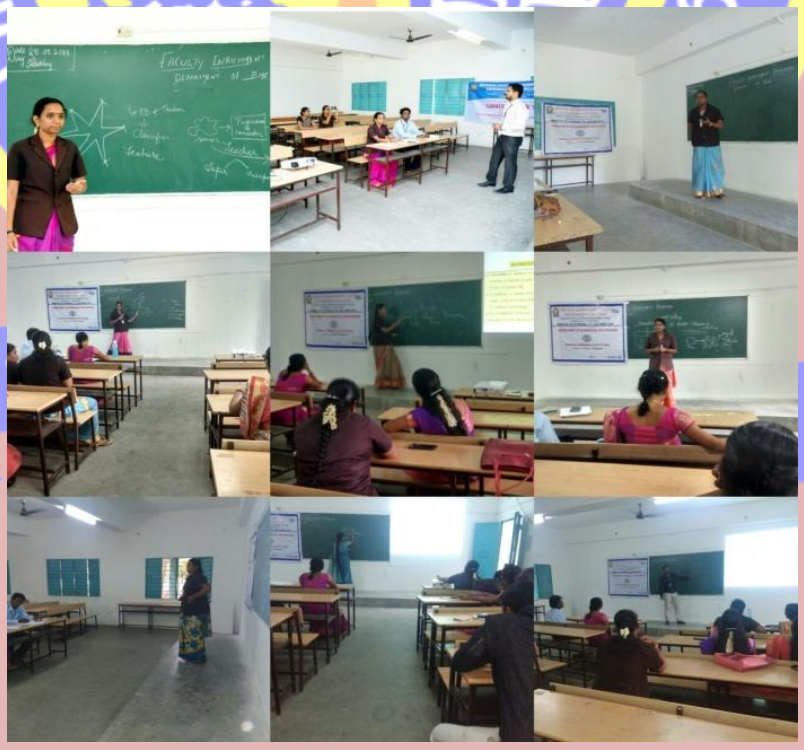


2. FACULTY ENRICHMENT PROGRAMME

The Faculty Enrichment Programme (FEP) aided the faculty members to construct a forum to exchange of innovational ideas and knowledge sharing. FEP is conducted once in a month for every faculty in a scheduled time. This semester we three consecutive FEPs were conducted within the department. The entire session was interactive and the overwhelming participation of the staff members was appreciated by the dignitaries. Faculties utilized this programme to share their knowledge in different areas, improved their teaching methodologies, shared about research and development methodologies.

On 28.07.18





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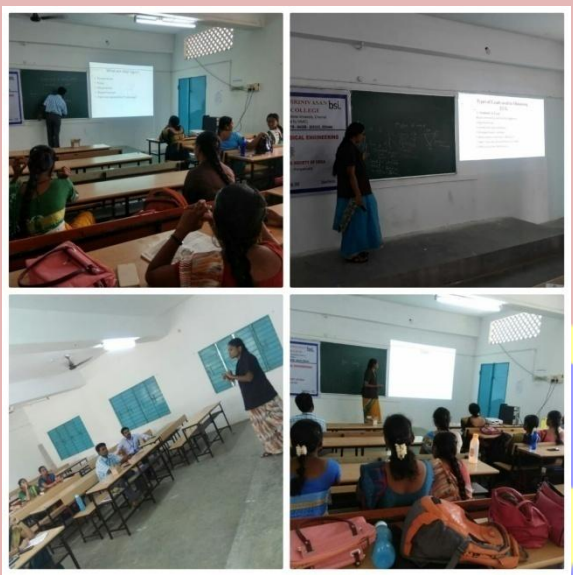

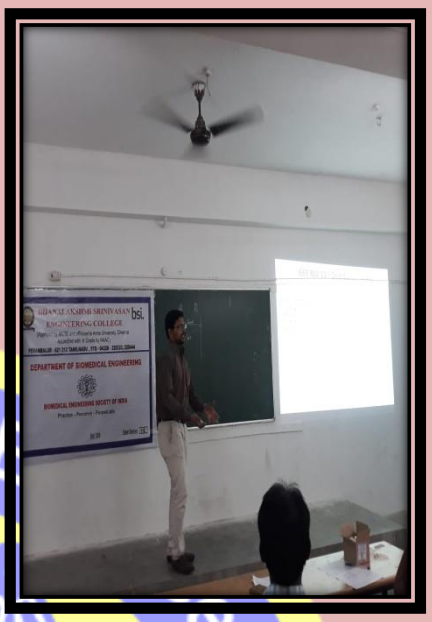

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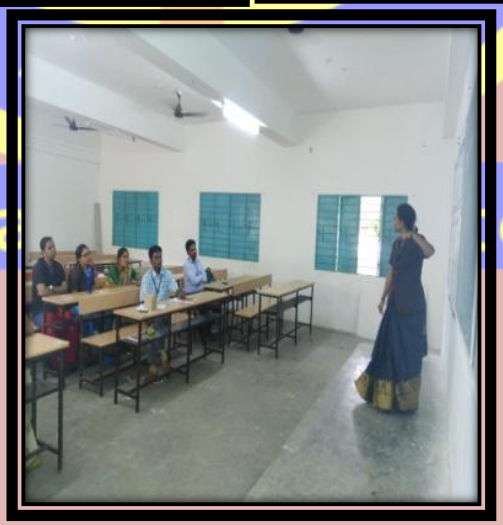


Professional Society

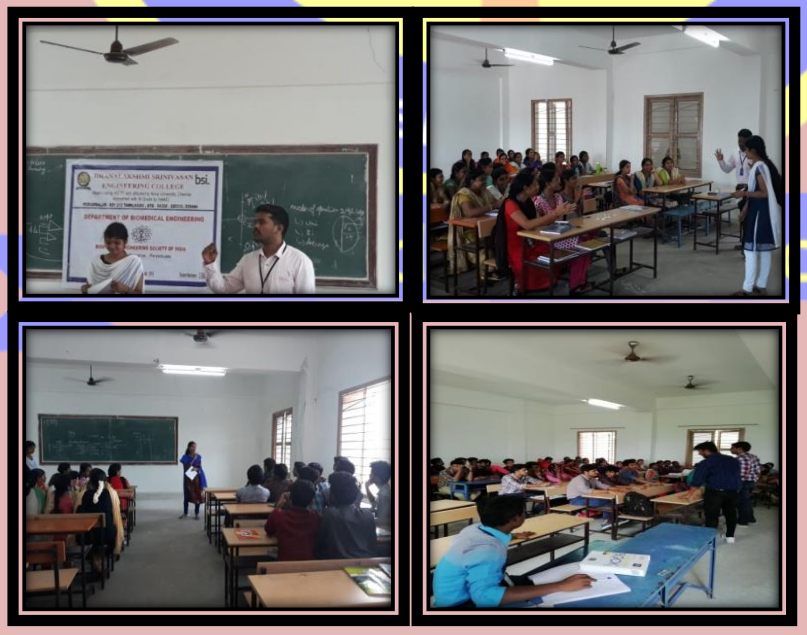
Our department is having two professional societies

- Biomedical Engineering Society of India (BMESI)
- Indian Science Congress Association (ISCA).

To enrich the technical knowledge of the students, various activities namely, technical quiz, `group discussion, research knowledge sharing, general seminars are being conducted.

Inauguration Function:


Student activities:



The students actively involved in performing the activities thereby utilized the purpose of professional society. They gain knowledge about research and publications, advancements in their core areas, project concepts and various research scholarships and funded schemes in

research areas. Also they could be aware about National and international conferences, seminars, workshops in and around in different colleges.

International Symposium

As a part of our Institutional Activities,*2018 IEEE 4th International Symposium on Robotics and Manufacturing Automation –IEEEROMA 2018* organised by IEEE Robotics and Automation Society-Malaysian chapter; Dhanalakshmi Srinivasan Engineering college, TN, Perambalur, India, USCI, Malaysia; Monash University,Malasiya,university,Teknologi Petronas, Malaysia. our department has faculties has published their papers in IEEEROMA 2018

Staff publications

- ***Prof.Hemalatha Karnan and Prof.K.Karthick Babu,*** "Validation and analysis of coronary artery for cardiovascular disorder using blood hammer model", IEEE 4th International Symposium on Robotics and Manufacturing Automation , Paper ID-40.
- ***Prof.B.Ashmitha***," ANFIS Based Energy Management System Design For Resendital Grid Connected Microgrid", IEEE 4th International Symposium on Robotics and Manufacturing Automation, Paper ID-41.
- ***Prof.L.VasanthaPriya***," Preparation & Characterization of Bixin Loaded Sodium Alginate,Poly-Vinyl alochol nanobots for Skin Burn, IEEE 4th International Symposium on Robotics and Manufacturing Automation , Paper ID-45.

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