

**MedBEAT**

# Dr. N.G.P INSTITUTE OF TECHNOLOGY

(Affiliated to Anna University, Chennai, Approved by AICTE, New Delhi, Accredited by NBA, NAAC & Recognized by UGC)

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## DEPARTMENT OF BIOMEDICAL ENGINEERING

Email: [biomedicaloffice@drngpit.ac.in](mailto:biomedicaloffice@drngpit.ac.in)



### VISION

To produce quality biomedical engineers with strong **technical knowledge** and excellence in **engineering design** for providing solutions to **healthcare problems**.

### MISSION

- MD 1** : Integrating engineering and life sciences for the development of **innovative biomedical products**.
- MD 2** : Imparting **quality education** through innovative Teaching - Learning methodologies.
- MD 3** : Collaborating with **healthcare industries** for education, training, research and development.
- MD 4** : Establishing **state-of-the-art facilities** to enhance the technical skills.
- MD 5** : Providing sustainable solutions for challenges in **global healthcare** with ethical, social and moral values.

### PEO

- PEO 1** : Have **successful career** in Biomedical Engineering and other relevant disciplines.
- PEO 2** : Design **devices, systems and processes** for improving healthcare industries.
- PEO 3** : Engage in **lifelong learning activities** to become a member of globalized engineering teams with ethical values and standards.

**Dr. Nalla G Palaniswami**  
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**Dr. Thavamani D Palaniswami**  
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**Dr. O. T. Buvaneshwaran**  
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**Dr. K. Porkumaran**  
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**Dr. C. Ram Kumar**  
Editorial Board Members

**Mr. S. Logesh Kumar**

**Ms. J. Jeslin Libisha**  
IV Year

**Ms.U.Shruthimol**  
III Year

**Ms.R.Sowmitha**  
II Year

## FACULTY STRENGTH

Description	Strength
<b>Professor</b>	<b>2</b>
<b>Assistant Professor</b>	<b>9</b>
<b>Visiting Faculty</b>	<b>1</b>
<b>Ph.D. Holders</b>	<b>3</b>
<b>Ph.D. Pursuing</b>	<b>8</b>

## STUDENTS STRENGTH

Description	Boys	Girls	Total
IV Year	19	40	59
III Year	20	40	60
II Year	26	28	54
I Year	23	32	55
<b>Total</b>	<b>88</b>	<b>140</b>	<b>228</b>

## INTERNATIONAL EVENTS



**Research Attachment Program at  
Universiti Teknologi Petronas, Malaysia**

## DEPARTMENT ACHIEVEMENTS

- Dr. S. Prabakar, Dr. M. A. Raja received a fund of Rs. 35,000 from CSIR in organizing 2 Days National Level Seminar on Recent Advances in Modeling of Joint Mechanics and Early Detection of Osteoarthritis on January 2019.
- Dr. M. A. Raja filed a patent [201941012134 A] on Isolation And Characterization Of Fluorescent Chemical from Banana Ash on 24/05/2019
- Dr. S. Prabakar, Dr. M. A. Raja, Ms. D. Hemapriya received a fund of Rs 40,000 from ICMR for organizing a 2 Days National Level Workshop on Recent Advances in Modeling of Joint Mechanics and Early Detection of Osteoarthritis in Jan 2019
- Dr. S. Prabakar received a fund of Rs. 7500 from TNSCST for the project Medibin- The Medical Dustbin on 18.02.2019
- Virtual Industry Tour to Philips Healthcare, Siemens Healthineers – Imaging Division, GE healthcare, Fresenius Medical Care was conducted on 21.02.2019
- Dr.S. Prabakar successfully completed NPTEL Online Certification on Patent Drafting for Beginners by IIT Madras
- Dr. C. Ram Kumar successfully completed NPTEL Online Certification on Patent Drafting for Beginners and Teaching and Learning in Engineering by IIT Madras
- Mr. John Amose successfully completed NPTEL Online Certification on Introduction to Machine Learning by IIT Madras

## STUDENT ACHIEVEMENTS

- Vignesh V R participated in Power Surge and secured 2<sup>nd</sup> Place during the National Level Technical Symposium “YUKTAHA 2k19” on 12<sup>th</sup> and 13<sup>th</sup> February 2019 at PSG Institute of Technology and Applied Research, Coimbatore.
- Dharani P, kiruthiga G P, Krithika J K, Paviya R, Preethika, M, Duwaraka J, Sudharshana, Durga Nandhini, Pradeep have successfully completed Research Attachment Program at Universiti Teknologi Petronas, Malaysia from 24.12.2018 to 23.03.2019.

## ACADEMIC ACHEIVEMENTS

### APR/MAY 2019 RESULT - TOPPER IV YEAR



Ms. Madhumitha  
GPA:9.1



Ms Manimegalai  
GPA:9.1



Ms keerthana  
GPA:9.1

### III YEAR



Ms. Dharshini R  
GPA:8.61



Ms. M Rohini  
GPA:8.39



Ms. R Niveditha  
GPA:8.31

### II YEAR



Mr. Manoj C S  
GPA:9.0



Ms. Johne Shalini  
GPA:8.54



Ms. Dhivya  
GPA:8.50

## STUDENTS PARTICIPATION

Description	II Year	III year	IV Year	Total
Paper Presentation	1	5	10	16
Project Design	-	-	36	36
Workshop	22	19	13	54
Conference	20	8	24	52
IPT	54	27	-	61
Internship	-	33	64	97

## ACTIVITIES ORGANIZED



### RECENT ADVANCEMENTS IN MODELLING OF JOINT MECHANICS AND EARLY DETECTION OF OSTEOARTHRITIS'

Resource Person:Mr. S. G. Sunil, Managing Director, Sonos Healthcare India Private Limited ( A dealer of Wirpo GE & Gen Works)  
Date: 25.02.2019 & 26.02.2019



### PACS and HEALTHCARE IT

Resource Person:Mr. J. Senthil kumar  
M/s SFO Technologies Pvt Ltd, Bangalore  
Date: 02.03.2019



### LATEST TREND IN EARLY DETECTION OF PRE-OSTEOARTHRITIS AND COMPUTATIONAL MODELLING OF JOINT MECHANICS

Resource Person:Dr.LeninBabu V Dept. of Orthopaedics, KMCH, Mr.Pushpanathan E Operation Room, Nursing supervisor, KMCH,Dr.Mallikarjunaswamy M S, Sri Jayachamarajendra College of Engineering, Mysore, J S S Science & Technology University, Dr.Padmapiya B, Associate Professor, PSG Institute of Technology, Dr.T.M.Sridhar, Assistant Professor, University of Madras , Dr.Thennavan A S, Dept. of Orthopaedics, KMCH  
Date: 04.08.2018



### INDUSTRIAL VISIT TO ZENITH MEDICARE SYSTEMS

Resource Person:Mr. Martin,  
Managing Director, V.M Meditech Pvt Ltd, Chennai  
Date:30.08.2018



### VIRTUAL TOUR

Philips Healthcare, Siemens Healthineers – Imaging Division, GE healthcare, Fresenius Medical Care  
Date:21.02.2019



### 3D PRINTING IN MEDICAL APPLICATIONS

Resource Person:Mr.T.U.Vishnu  
CEO, Founder M/s Machenn Innovations Bangalore  
Date:5.3.2019



### OPPURTUNITIES AND CHALLENGES IN RESEARCH FUNDING PROPOSALS'

Resource Person:Mr.S.Sundaramoorthy  
CEO, Sunshiv electronic solutions,  
Coimbatore  
Date:15.09.2018



## PARTICIPATION IN VARIOUS EVENTS BY STUDENT & FACULTY

- ✓ Dr. C. Ram Kumar attended a workshop for faculty members on dissemination of new initiatives – SIH, IIC, and ARIIA at SRM TRP Engineering College, Trichy on 09.01.2019
- ✓ D. Hemapriya delivered a Guest Lecture on Medical Physics at Dhaanish Ahmed Institute of Technology on 22.02.2019
- ✓ K. Chamundeswari attended a workshop on Application based Research on Nanotechnology at Department of Electronics & Communication Engineering, Dr. NGPIT on 11.02.2019
- ✓ Gowthami. S and John Amose attended an International Symposium on Surgical Innovations & Healthcare & Hackathon at Karunya Institute of Technology and Sciences from 18.02.2019 to 20.02.2019
- ✓ Dr. C. Ram Kumar published a paper on Gaussian Process at the National Conference On “Technological Innovations In Medicine & Its Applications” VELS Institute of Science, Technology & Advanced Studies in March 2019
- ✓ Dr. C. Ram Kumar published a paper on Standing Wheel Chair with Voice Recognition System at the National Conference On “Technological Innovations In Medicine & Its Applications” VELS Institute of Science, Technology & Advanced Studies in March 2019
- ✓ Dr. C. Ram Kumar published a paper on Design of Break the Glass Access Control for Medical Data in WSN at the National Conference On “Technological Innovations In Medicine & Its Applications” VELS Institute of Science, Technology & Advanced Studies in March 2019
- ✓ Project Expo -2019 was organized for all Final Year BME Students on 29.3.2019
- ✓ Pradeep G, Saravanan V attended Tamilnadu Gate Council for Science and Technology sponsored National level seminar on “Recent Trends in Biomedical Communication” on 19<sup>th</sup> January 2019 organized by M Kumarasamy College of Engineering.
- ✓ Preethi U, Sandhya S, Nithya Priya M, Divya S, Suresh Kumar M, Prakash S, Arun Kumar T, Nandhakumar G attended a three day national level workshop “Tissue Engineering and Biomedical Instrumentation” sponsored by Indian Council of Medical Research, New Delhi at Sri Sakthi Institute of Technology from 11<sup>th</sup> -13<sup>th</sup> February 2019.
- ✓ Karthika R S, Nishanthini P, Gobiga K, Preethi U, Krithika R, Reshma, Roshini, Keerthana Prashanthi D R attended an International Symposium on Surgical Innovations And Healthcare & Hackathon at Karunya Institute of Technology and Sciences held from 18<sup>th</sup> -20<sup>th</sup> February 2019.
- ✓ Pooja G presented a paper entitled “Standing Wheelchair using Voice Recognition System” in Technical Sessions of the National Conference on “Technological Innovations in Medicine and its Applications” held on 5<sup>th</sup> -6<sup>th</sup> March, 2019 at VELS Institute of Science, Technology & Advanced studies(VISTAS), Chennai.
- ✓ Shruthi Mole U presented a paper entitled “Wearable wireless Sensor Network on post-Operative Care using Gaussian Process” in Technical Sessions of the National Conference on “Technological Innovations in Medicine and its Applications” held on 5<sup>th</sup> -6<sup>th</sup> March, 2019 at VELS Institute of Science, Technology & Advanced studies(VISTAS), Chennai.
- ✓ Ajay R, Vinoth D presented a paper on “Control of Human Computer Interface using EOG Signal” in the National Conference on Advances in computing Technologies organized at Hindusthan Institute