



# NEWSLETTER

## HOD'S MESSAGE

Welcome and best wishes to all the faculty, students and staff members of the Biomedical Department who receive this Newsletter. It gives me great opportunity to present the 3rd issue of annual newsletter. This newsletter is the one of the way in which we can disseminate information on the life of department. This year has been full of various activities by the faculties and students in academic, co-curricular, extracurricular as well as research developments.

I would like to thank all my colleagues for their tireless efforts to help the department progress at steady pace.

With warm regards  
Dr. P. P. Bansod

## PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO.1 To grasp concepts of engineering mathematics and

apply them in correlated engineering domains to evaluate real world problems in health care.

PSO.2 Ability to understand and interpret concepts of medical electronics required in healthcare sector, and to communicate, analyses, develop the same to provide services to society.

PSO.3 The ability to grasp the research advancement and evolve with innovative ideas to contribute towards cost effective product development for providing access of health care services to masses.

## PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO.1 To prepare graduated with core knowledge for successful technical careers.

PEO.2 To develop future industry professionals with excellent communication skills.

PEO.3 To Develop professionals approach, ethical attitude, communication skills, team work and leadership quality and adapt technological advancement and innovation by engaging in continuous learning.

PEO.4 To develop skills to become an entrepreneur for promoting research and development of low cost healthcare technologies.

PEO.5 To encourage students for higher studies in technology and management and promote lifelong learning attitude.

## VISION

To develop human potential to its fullest extents for making significant contribution to human resource development envisaging dynamic needs of the society.

## MISSION

To bridge the engineering, science and healthcare sectors for indigenous development and to impart community services for mass healthcare through continous research.

## VISIT OF STUDENTS TO IIT-INDORE

Students of department got an excellent opportunity to visit IIIT, Indore. Students were taken to various laboratories like basic Electrical & Electronics lab, Biomedical lab, Antenna lab, RF lab, Sensor Technology lab etc. Students explored the research area of biomedical field and various opportunities available at IIT Indore.

IIT visit was done by III year with faculty member Ms. Gauri Gupta, Mrs. Avni Jain, Mr. Atul Narkhede.



## MOU

MOU has been signed among Bioline India and Charak Hospital Indore MP.

### EXPERT LECTURES

Professor P. P. Bansod delivered a lecture on Pacemaker on 1 June 2023. This lecture was attended by faculty members and students from IIT Indore, IIT Jammu, IET-DAVV Indore, IIITM Gwalior and SGSITS Indore.

IN The lecture he described about the functioning of pacemaker and how it can be fabricated using VLSI technology.

Dr. Chetan Singh Thakur, Assistant Professor IISC Bangalore, Alumni of E & I department interacted with second year students of the department on 12 April 2023 about the Biomedical Signal Processing and Neuromorphic Engineering and its use in VLSI.

### ENTERPRENEURSHIP



Mr. Utkarsh Jyotishi, a student of Third year Biomedical Engineering has successfully startup **InDhan Pay** payment portal especially designed for petrolium retail outlets of indian or overseas dealerships.

### RESEARCH PUBLICATION

- Vibha Bhatnagar, Prashant P. Bansod, Challenges and Solutions in Automated Tongue Diagnosis Techniques: A Review, Critical Reviews<sup>TM</sup> in Biomedical Engineering, , Vol.50(1), 2022 ISSN: 0278-940X/22.
  - Shashvat Bargale, Lavish Ranka, Bhavit Jain, Vibha Bhatnagar, Vinay Manurkar, Avni Jain, Anaemia Detection Using Smartphone Images, Proceedings of ICBBE 2022, November 10–13, 2022, Kyoto, Japan, ACM Digital Libraray, 2022.
  - Vinay Manurkar, A Face Mask Identification System based on the Internet of Things and Machine Learning for Detecting Covid-19, Neuro Quantology, 2022 ISSN: 1303-5150.
  - Vaishali Narendra Naik, R S Gamad, P P Bansod, Effect of despeckling filters on the segmentation of ultrasound common carotid artery images, Biomedical Journal, Vol.45, (4), 2022, ISSN:
  - Prashant Yadav, P. P. Bansod, D.K. Mishra, Ruplai Jarwal, Design of Protection Circuit for Biomedical Signals Using 180 nm Technology, Springer 2022.
  - Vineeta Vishwakarma, R S Gamad and P P Bansod, Determination of ENOB, SINAD and Precision in DNL of an of ADC using Histogram Test Technique, International Journal of Innovations into Engineering and Technology (IJJET) , Vol.2,(3), 2022 ISSN: 2582-6837.
- ### ACADEMIC ACHIEVEMENTS
- Madhav Parihar - GATE (2022-23) AIR - 2
  - Akanksha Sarothiya - GATE (2022-23) AIR -10
  - Bhargav Pakhare - GATE (2022-23) AIR - 4
  - Afshan Baig Mughal - GATE (2022-23) AIR - 44
  - Pranshu Paliwal - GATE (2022-23) AIR - 72
  - Keshav Mishra - GATE(2022-23) AIR - 42
  - Vidhi Singh - CAT (2022-23) - 92.90 Percentile
  - Himanshu Goel - CAT (2022) - 99.67 Percentile
  - Harshal Yadav - CEED 2023 AIR - 11
  - Renuka Dixit - University of Minnesota (MS)
  - Himanshu Goyal - IIM Udaipur (MBA)
  - Varun Chaturvedi - GRE
- Trapti Sharma, Anil Kumar Sahu, Himanshu Shekhar, Hemlata Shakya, Design of CNTFET-based Ternary Ring and Up-Down Counter Cells, IETE Journal of Research, June 2023, ISSN/eISSN: 0377 -0263 / 0974-780X.
  - Pinesh Arvindbhai Darjee, Nihar Ranjan Nayak, Sunny Ganavdiya, Neera Batra, Rajib Guhathakurta, Feature Extraction with Capsule Network for the Covid-19 Disease Prediction Through X-Ray Images, Matrials Today Proceedings, Vol.56, 2022 ISSN: 2214-7853.
  - Vibha Bhatnagar, Prashant P. Bansod, Double U-net: A Deep Convolution Neural Network for Tonge Body Segmentation for Disease Diagnosis, Proceeding of International Conference on Communication and Comptational Technologies, 2022 ISSN:2524-7573.
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## PLACEMENTS

- 70 percent of the final year eligible student of the department got their placement in various companies like L&T Infotech,

## INTERNSHIPS

Following Students of Final Year year got selected for Internship at various reputed Institutes Organization during Jan-May 2023.

- Akanksha Sarothia - IIT Gandhinagar
- Kratika Verma - IIT Bombay
- Kuldeep Raghuvanshi - IIT Delhi
- Yash Panchal - IIT Ropar
- Madhav Parihar - CASTNx
- Navani Swami - ACMEGRAD
- Prachi Tiwari - Olive IT Services Nagpur
- Pranshu Paliwal - M university
- Pulkit Methaniya - ASTHA Logistics
- Abhay Kumar Shrivastava - Udemy Course, Block Chain
- Alfez Qureshi - Barlours - Salon Startup Company
- Aman Mishra - Cloud Ready Skills
- Aman Urrehman Khan - G.V Industries
- Anshuman Singh Baghel - Udemy Course, Block Chain
- Bhargav Pakhare - Terra Blue XT
- Bhavesh Adlak - Grey B
- Bhumika Chak - Universal Informatics
- Brajesh Singh Chouhan - Greater Kailash Hospital
- Devendra Devda - Business Web Solutions
- Disha Chaurasiya - Futr Energy
- Divyanshi Goswami - Acmegrade
- Gokul Krishna - Soch Care
- Harsh Agrawal - Enlighten Brains
- Harshal Yadav - Techart Studios
- Hritvij Nagar - Dental Hospital, Dewas

- Keshav Mishra - Pinnacle IT Solutions
- Khushboo Dehariya - Olive IT Services, Nagpur
- Mitali Sanghavi - Course (Python+ML+Visualization)
- Nikita Sharangat - Select Brands International Pvt. Ltd.
- Nirmesh Rajput - IOT Ready
- Palakraj Panchal - Decent Medical
- Prateek Vyas - Softex Consultant
- Priyanshu Raghuvanshi - Free Code Camp
- Rishabh Gupta - Sonnen Techs
- Roshan Damke - Course (Digital Marketing)
- Saksham Jain - Select Brands International Pvt. Ltd.
- Samit Jain - Pragya Enterprises
- Shruti Kadam - Sharpner. Tech
- Sumit Karadiya - Business Web Solutions
- Siddharth Kumar Dehariya - Tutorcabin Private Limited
- Swarnim Bairagi - Pragya Enetrprises
- Umang Shrivastava - Quantify Analytics
- Vidhi Singh - The Invisible Paintbrush
- Sakshi Shirpurkar - Coursera - Clinical Trials Operations Specializations, Patient's Safety and Quality Improvement
- Aman S Nagpure - MEDINST

## INTERNSHIPS

Following Students of III year got selected for Internship at various reputed Institutes Organization during Jan-May 2023.

- Aabha Jaiswal - Guru Gobindsingh Govt. Hospital
- Aditi Tiwari - Aurbindo Hospital Indore (SAIMS)
- Ankit Pandagre - Biomedical Visualization, University of Glasgow
- Anmol Agrawal - CPP SECRETS
- Anushka Tiwari - Shree Ji Hospital, Ujjain
- Anushree Dhoulpuri - Baderia Metroprime Hospital Jabalpur
- Ashley Lamaniya - Industrial Training

- Bhakti - In-House Internship, BMED
- Cheena Choudhary - Hospital Training
- Devyani Gupta - Bombay Hospital, Indore
- Himanshu Sen - Bombay Hospital, Indore
- Joyal George - Bombay Hospital Indore
- Mona Gupta - Decent Medical Equipment
- Muqaddasa Khatoon - CHL Hospital
- Narayan Chouhan - In-House Internship, BMED
- Nikunj Saxena -IPCA Laboratories
- Pavitra Rai - Shalby Hospital
- Piyush Techchndani - Metro Hospital, Jabalpur
- Rashmi Singh Baghel - (MP Birla Hospital and Priyamvada Cancer Research Institute
- Rohit Jat - Shalby Hospital
- Sandeep Sharma - In - House Internship, BMED
- Sanidhya Jain - Shalby Hospital
- Sheetal Sharma - Hospital Training
- Siddhi Bhadrawale - Hospital Training
- Tanu Pal - Decent Medical Equipment System Pvt. Ltd
- Vanshika Jindal - IDEA LAB SGSITS
- Vibhor Sharma - Bombay Hospital, Indore
- Vishal Pawar - ZOI Health Tech Pvt Ltd.
- Vishesh Jain - Biomedical Visualization, University of Glasgow
- Yathartha Gupta - Digital Forensic Investigation (DFI)
- Yogangi Tiwari - Idea Lab SGSITS
- Divyanshu Sisodiya - Decent Medical Equipment System Pvt. Ltd.
- Mayur Patil - 1. Indo German Tool Room (MSME) Indore
- Siddharth Kumar Daheriya - Tutorcabin Private Limited
- Khushboo Daheriya - Olive IT Servive

## **FACULTY DEVELOPMENT PROGRAM (FDP)**

- Avni Jain - NITTT: Inductee Teacher Training (8 Module Course) July 2022.
- Vinay Manurkar - Biomedical Instrumentation: Innovation Design and Development (31/10/2022 to 04/11/2022).
- Vibha Bhatnagar - Biomedical Instrumentation: Innovation Design and Development (31/10/2022 to 04/11/2022).
- Maya Makwana - Biomedical Instrumentation: Innovation Design and Development (31/10/2022 to 04/11/2022).
- Dr. Hemlata Shakya - Advanced Approches in Modlling and Simulation for Cutting Edge Electronic System (12/06/2023 to 18/06/2023).
- Dr. Hemlata Shakya - Advancement in Next Generation Computing and Communication in the IOT age.
- Sunny Ganavdiya - Smart Pedagogy (22/05/2023 to 02/06/2023).

## **EXTRA-CURRICULAR ACTIVITIES**

- Sheetal Sharma, IV Year got Silver Medal in Gymnastics, SGSITS Indore and got selected for Gymnastics Nationals.
- Sheetal Sharma, IV Year got selected for Yoga States Tournament Gwalior MP.
- Anushka Jariya, III Year Winner in Gymnastics, SGSITS Indore and got selected for Gymnastics Nationals.
- Anushka Jariya, III Year got selected for Yoga States Tournament Gwalior MP.