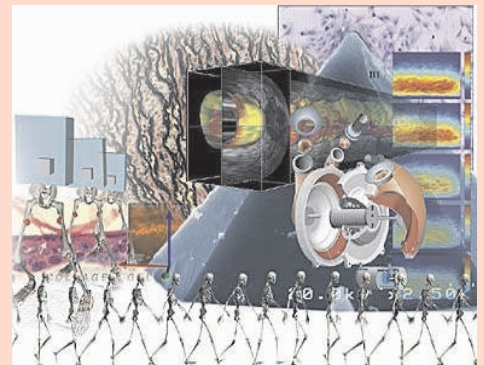


BIOMED NEWS 2020-2021

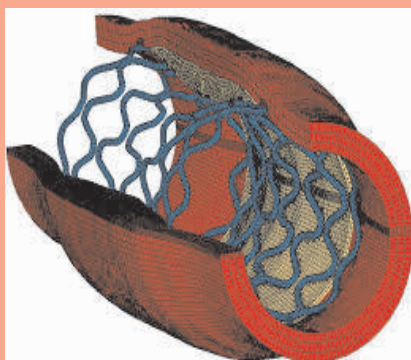


Volume-I
JULY TO DECEMBER -2020



Biomedical Engineering

JIS COLLEGE OF ENGINEERING, KALYANI
(AN AUTONOMOUS INSTITUTE)



EDITORS:
DR. KARABI GANGULY
MS. SWATI SIKDAR
STUDENT COORDINATOR:
MANJEER BHATTACHARYA



Vision:

The Vision of Biomedical Engineering Department is to pioneering excellence in Biomedical engineering education and research in undergraduate and post graduate level, nationally and internationally to provide society with world-class competitive professional in Biomedical Engineering.

Mission:

M1: To impart knowledge and skills necessary for professional development of graduates in Biomedical Engineering.

M2: To provide continuous up gradation of technical education in the field of medical sciences with strong academic progression.

M3: To propagate creativity, responsibility, commitment and leadership qualities and exhibit professional ethics and values in the mind of Biomedical Engineering graduates.

Programme Educational Objectives (PEOs):

PEO1: To prepare students for diverse career in engineering and science including human body systems that build career and pursue higher studies in Biomedical Engineering.

PEO2: To identify, analyze and solve the problems by applying principles of Biomedical engineering with novelty and updated knowledge in the development of product/process/technique related to healthcare to meet the societal demands.

PEO3: To develop skills necessary for communications in their professions and to impart value added continuing education for sustained growth beneficial for society.

PEO4: To apply the acquired practical knowledge for effective teaching, research, development and entrepreneurship in biomedical field.

PEO5: To provide opportunity for students to work as part of teams on multidisciplinary projects with the multifaceted aspects of using modern tools.

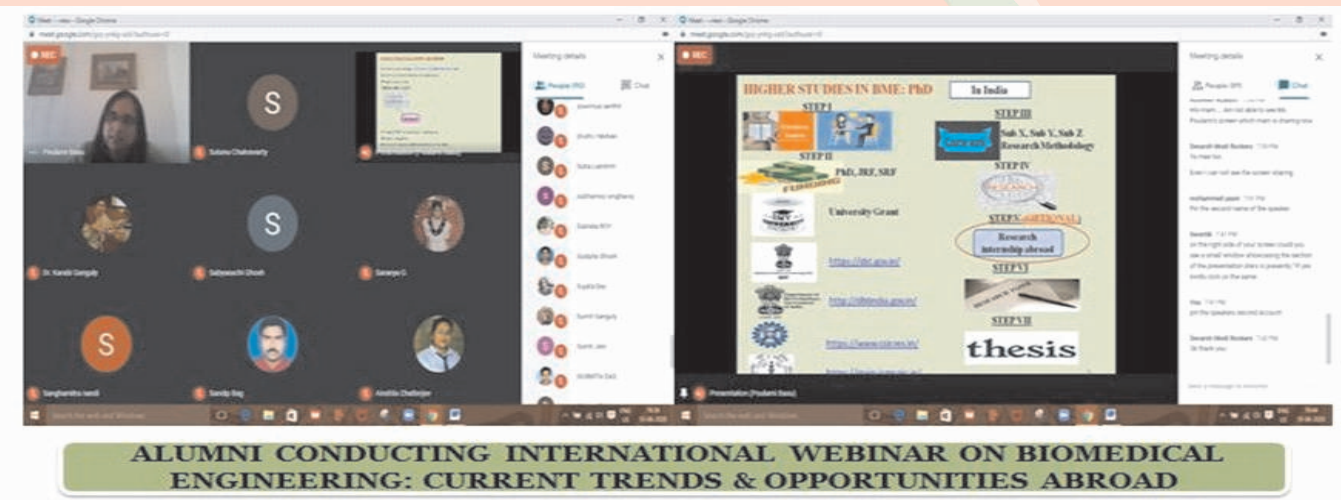
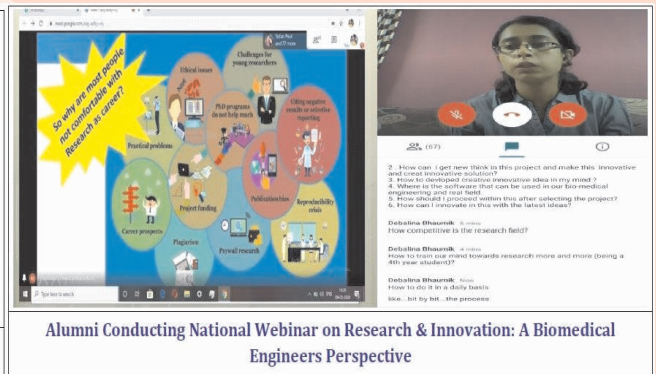
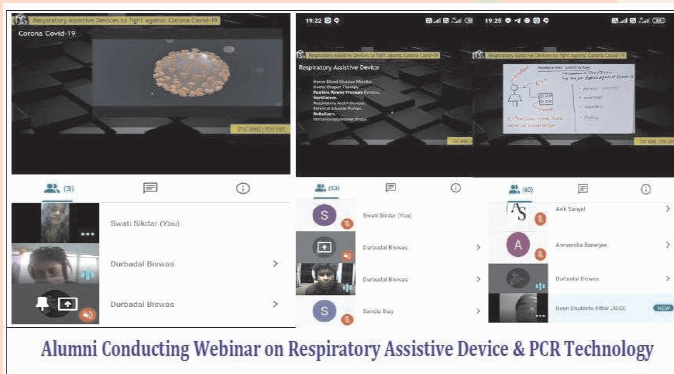
Program Specific Outcomes (PSOs):

PSO1: Identify, analyze and solve the real life problems by applying principles of Biomedical engineering with novelty.

PSO2: Design, develop and specify the mathematical model to understand the inter-relation among various Physiological systems.

PSO3: Investigate, implement and demonstrate various applications of the engineering and physiological subsystems in designing and developing human body systems.

ALUMNI CONNECT IN BME DEPARTMENT



PTM IN BME DEPARTMENT



Many positive reviews have come up from the parents, as they are very much contented with all kinds of online classes and other educative and interesting interactive learning session organized by the department through its final year teachers, alumni person and industry person. Few Parents shared their concern about the health of their wards due to continuous classes, which may cause stressful eyes. Some parents also responded in rendering their helping hand if asked by the department as well as the institution for any social work in this grave situation.

Faculty Achievement

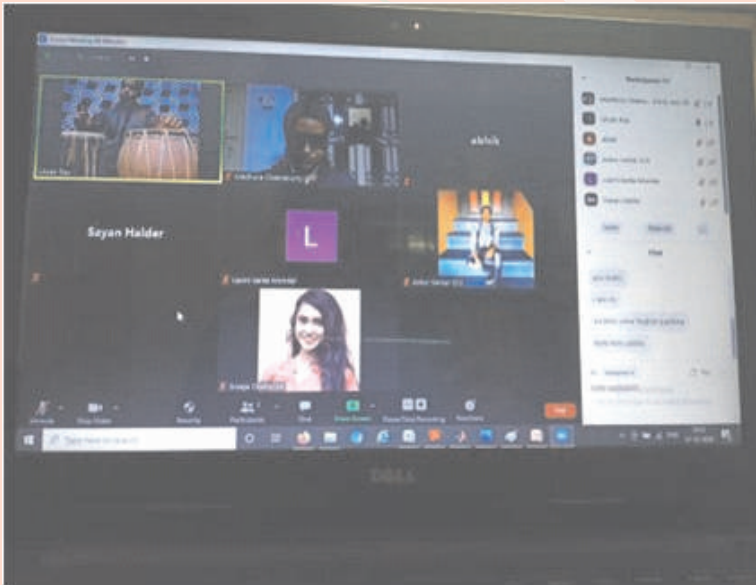
- **Dr. Dibyendu Mandal** - 2nd Position in a Quiz Competition organized by SBL Con 10.12.2020
- **Dr. Karabi Ganguly, Dr. Sandip Bag** - Received Granted Patent titled "Biodegradable Bone Paste: A Grafting Biomaterial From Waste Egg Shell" on 04.11.2020.
- **Dr. Dibyendu Mandal** – was Selected as Mentor for JIS Jyoti Virtual Camp during Sep-Nov 2020
- **Swati Sikdar** – was Manuscript Reviewer in Sensors International on Sep, 2020
- **Dr. Karabi Ganguly** – was Session Chair in IEEE AMPHE 2020 conducted by Adamas University, Kolkata on 25/09/2020 - 26/09/2020
- **Swati Sikdar** - Speaker in FDP under ATAL Academy on "Blended Learning and Flipped Classroom" during 24/08/2020 to 28/08/2020
- **Ms. Sayanti Guha, Dr. Sandip Bag** - Completed FDP on Artificial Intelligence and Machine Learning in Health care during 27.07.2020 to 31.07.2020

BME Faculty Achievement



Student Achievement

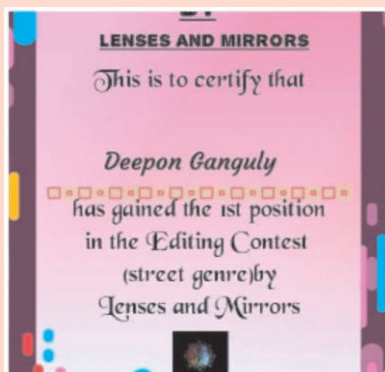
SL. NO.	NAME	ACHIEVEMENTS	ORGANIZER/ PROGRAMME	DATE
1	Swastik Barat, Arpan Banerjee, Himali Barman, Sujata Dey, Sriya Sona Lenka	Academic excellence award	JISCE	1st September 2020
2	Asmita Chakraborty	3 rd Position in National Level Dance Competition	Gourango Academy of Culture & Education	8 th August 2020
3	Asmita Chakraborty	2 nd position in State Level Dance Competition	Gourango Academy of Culture & Education	18 th August 2020
4	Sujoy Sarkar	National Level Online E-Quiz on One word substitutes in English	Balaji Institute of Technology & Science	28 th September 2020
5	Shubhanshu Sarkar	National Level Online E-Quiz on One word substitutes in English	Balaji Institute of Technology & Science	29 th September 2020
6	Debosmita Mondal	Second Position in rang De Rangoli	Art & Literature Club, JISCE	November 2020
7	Utsab Ray	Resourceful Asset in Internship	Engineers Connect	November 2020
8	Utsab Ray, Tufan Paul, Soumya Das	Patent Published. Title of Invention is Auto Electricity Meter Reading Using Microchip	IPR-India	December 2020
9	Swagata Roy	2 nd Position in WINGS OF IMAGINATION (Sketch on Spot Live) In Intra College Level Competition for JIS SPIRIT & JIS SAMMAN 2021	JISCE (Judges for all the event was external)	December 2020
10	Utsab Ray	1 st Position in TRINGSYMPHONY-In Intra College Level Competition for JIS SPIRIT & JIS SAMMAN 2021	JISCE (Judges for all the event was external)	December 2020
11	Mrinmoy Samaddar	2 nd Position in RECITATION -In Intra College Level Competition for JIS SPIRIT & JIS SAMMAN 2021	JISCE (Judges for all the event was external)	December 2020
12	Debarima Das, Jayita Saha, Asmita Chakraborty, Moumita Rudra Paul,	1 st position in Fashion Show –In Intra College Level Competition for JIS SPIRIT & JISSAMMAN 2021	JISCE (Judges for all the event was external)	December 2020
13	Debarima Das, Jayita Saha, Asmita Chakraborty,	1 st position in Feet Beat-In Intra College Level Competition for JIS SPIRIT & JIS SAMMAN2021	JISCE (Judges for all the event was external)	December 2020
14	Utsab Ray & Team	2 nd & 3 rd Position in RANGMANCH ZINDEGIKA- Drama Competition in Intra College Level Competition for JISSPIRIT & JIS SAMMAN 2021	JISCE (Judges for all the event was external)	December 2020



B.TECH BME Students in Extra Curricular Activities



B.TECH BME Students achievement in Extra Curricular Activities



B.TECH BME Student is the Winner in Editing Contest on Street Photography & Top 15 in Free Photography Contest



Faculty involvement in Conference/ Seminar/ Workshop organized at JISCE, Kalyani

- **Dr. Sandip Bag, Swati Sikdar**-organizing committee member in the International Conference ICANSASA held in December 2020
- **Dr. Karabi Ganguly, Swati Sikdar, Dr. Dibyendu Mandal, Dr. Sandip Bag**-organizing committee member, WEBINARON Cancer Prevention & Healthy Lifestyle held on 10.12.2020
- **Dr. Sandip Bag, Swati Sikdar** – organizing committee member in the International Conference IOCER COVID 19 held in October 2020
- **Dr. Dibyendu Mandal, AP-BME**, faculty mentor in JIS JYOTI from September – November 2020
- **Dr. Karabi Ganguly, Swati Sikdar, Dr. Dibyendu Mandal, Dr. Sandip Bag**- organizing committee member, WEBINARON Trends in Biomedical Technology: As neakpeek into the Industrial Practices held on 20.11.2020
- **Dr. Dibyendu Mandal, AP-BME**, completed Workshop on Impact of COVID-19 on Indian Economy on 13.11.2020
- **Dr. Karabi Ganguly, Swati Sikdar, Dr. Dibyendu Mandal, Dr. Sandip Bag**- organizing committee member, WEBINARON INTRODUCTION TO THE WORLD OF ENDOSCOPY held on 13.09.2020
- **Swati Sikdar, Speaker**, in AICTE sponsored ATAL FDP on Blended Learning and Flipped Class room titled “Exploring New Frontiers of Digital Transformations in Teaching- Learning” held on 24.08.2020 -28.08.2020

Publications by Faculty Members:

Journal/ Conference Papers:

- **S Sikdar, K Ganguly, S Guha, S Bag, S Sonar, D Bhaumik & A Mukherjee**. Human Brain Imbued Higher Brain Centre Activated Robot. *Published in the Proceedings of Industry Interactive Innovations in Science, Engineering & Technology (I3SET2K19)*, Available at SSRN3515899, 2020. <http://dx.doi.org/10.2139/ssrn.3515899>
- **S Sikdar, K Ganguly, S Guha, S Bag & H Barman**. Molecular Imaging Technology: A Promising Frontier of Interventional Radiology. *Published in the Proceedings of Industry Interactive Innovations in Science, Engineering & Technology (I3SET2K19)*, Available at SSRN3515891, 2020. <http://dx.doi.org/10.2139/ssrn.3515891>
- **S Guha, S Sikdar, K Ganguly, S Bag, S Barat & A Banerjee**. Necessitated Multi-Feature Approach to Assess and Analyze Stress Among Students Using Cardiac Signal as an Eminent Indicator. *Published in the Proceedings Proceedings of Industry Interactive Innovations in Science, Engineering & Technology (I3SET2K19)*, Available at SSRN3517179, 2020. <http://dx.doi.org/10.2139/ssrn.3517179>
- **S Sikdar, S Guha, K Ganguly, S Bag, S S Lenka & H Barman**. A Retrospective Study on the Shifting Model in Clinical Diagnostics Integrating Data Science With Medical Technology. *Published in the Proceedings of 2nd International Conference on Non-Conventional Energy: Nanotechnology & Nanomaterials for Energy & Environment (ICNNEE) 2019*. Available at SSRN3503284, 2020. <http://dx.doi.org/10.2139/ssrn.3503284>