

BIOMED

ISSUED: DECEMBER 2020

VISION: “Our vision is to nurture engineers who can comprehend the ethical, social, and economic implications of their work by imparting quality education through integration of engineering and medical sciences for the improvement of human health care.”

MISSION:

- To create a free and open learning environment that fosters the intellectual growth of students.
- To provide skill based technical education.
- To enable students to be sensitive towards the ethical issues of medical industry
- To prepare students for confronting medical challenges by applying engineering principles.

WEBINARS FOCUSED ON START UPS AND WOMEN ENTREPRENEURSHIP

Despite the economic contribution of women increasing considerably in the last decade, the female labour force participation has been recorded at only 32% of the entire population. In terms of employment, 52% of the workforce is self-employed as own-account workers or helpers, 30% as casual workers, while only around 18% have regular jobs. Within the 52% self-employed workforce, women constitute only a dismissal portion i.e., 13.78%. As a result, the potential of women entrepreneurship as a tool to achieve

socio-economic empowerment and equity remains under utilized.

However, through concerted efforts from NGOs, civil society organisations, government institutions and because of revolutionary reforms in financial institutions through Self Help Groups, women are emerging as resilient powerhouses that can further the Indian economy. It is pertinent to note that women entrepreneurship does not only advance a woman’s economic standing but also enables her children to gain access to better quality education, bet-

ter health and nutrition, clean water and sanitation and higher overall economic indicators that help break the cycle of poverty.

Department of biomedical engineering at GPGA understand the importance of women entrepreneurs in country’s growth and development, as to address this point, department recently organized two webinars on entrepreneurship and start ups. The webinar focused on the schemes government of India offers to women entrepreneurs and their start ups.



Department of Biomedical Engineering
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BIOMEDICAL INNOVATIONS: Closed-Loop Spinal Cord Stimulation for the Management of Chronic Back and Leg Pain

Spinal cord stimulation (SCS) with a closed-loop system that uses recorded evoked compound action potentials (ECAPs) is superior to a fixed-output, open-loop system for patients with chronic back and leg pain, according to study

results published in *Lancet Neurology*. While SCS has been a well-established treatment for chronic pain for more than 50 years, the results are suboptimal. The major challenge in SCS is the changing distance between the stimu-

lating electrodes and their spinal cord target, because while the spinal cord changes position within the cerebrospinal fluid with every movement, the electrode is fixed in the epidural space.



CO-CURRICULAR ACTIVITIES: WEBINARS ON START UPS AND EXTREPRENEURSHIPS

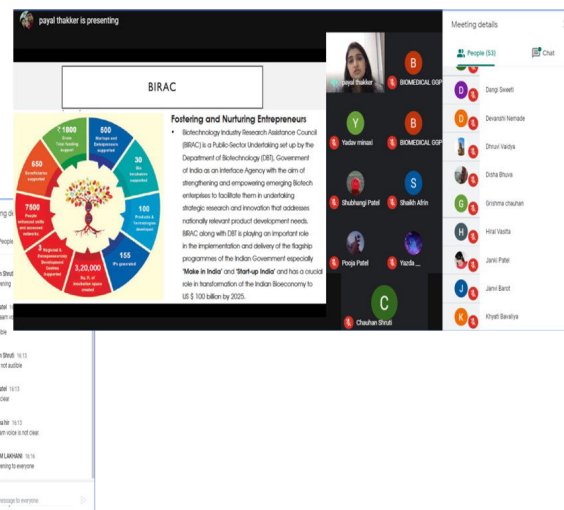
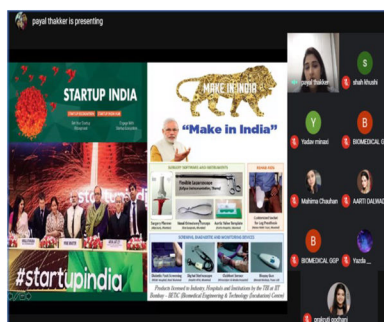
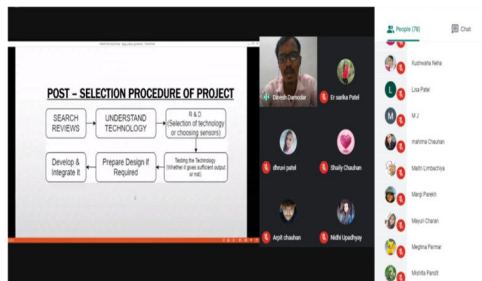
Webinar on Research, development and project management in Bio-medical start up, date: 17/10/2020

The aim of this webinar was to make students aware about the factors which affects the development of a prototype model of any new innovative technology and the factors that must be considered before a new start up venture. The webinar was delivered by Mr. Dinesh Damodar and Ms. Sarika Patel from lymbEdge healthcare.

The webinar focused primarily on the project development stages in case of new start up venture, the basic requirements to develop a prototype of a new innovation. Also the speakers gave very insight idea about other factors which affects the start ups and how to apply for the start ups. The speakers gave detailed knowledge about the basic things which are required to apply for a new start up. After their speech, they solved students' queries regarding problems faced during project development. Total 132 students from the institute as well as other colleges participated and benefitted from the event.

Webinar on Research, development and project management in Bio-medical start up, date: 17/10/2020

The aim of this webinar was to make students aware about the scope of entrepreneurship in Bio-medical Engg. Field and different areas of biomedical engg to start up a new venture into. The webinar basically gave insight to the field of biomedical engineering and the different areas which one can opt for their start up business. Also the speaker gave idea about different kinds of registrations of their project/start up in India. The speaker made the participants aware about the schemes government of India or the state governments are offering for new entrepreneurs especially women entrepreneurs. Our speaker then discussed the expected progress of the new start up for initial 5 years and the growth further from financial point of view. She also addressed participants' queries regarding the government regulations for SME sectors.



Student achievements

SR. NO.	SEMESTER	ENROLLMENT NO.	NAME OF STUDENT	SPI	CPI	CGP A	CLASS TOP 3 RANK
1	2	196140303039	PATEL ANJALIBEN NARENDRABHAI	8.87	8.80	0	1
2	2	196140303074	ZINZUWADIA YATRI DHIRENBHAI	8.73	8.75	0	2
3	2	196140303065	THAKUR DHWANISINGH GYANCHANDBHAI	8.73	8.05	0	2
4	2	196140303033	PANCHAL SHIVANGI JAYESHBHAI	8.73	8.48	0	2
5	2	196140303016	KAMADIYA KRUPALI RAJESHBHAI	8.60	8.1	0	3
6	4	186140303058	VARMA PAYAL GOVIND PRASAD	8.4	8.18	8.4	1
7	4	186140303026	MANSIBEN PATEL	8.03	8.13	8.18	2
8	4	186140303016	ENJAMURI AISHWARYA SRINIVASARAO	8.2	7.83	8.18	3
9	6	176140303032	PANCHAL RITU H.	9.6	8.93	9.28	1
10	6	176140303025	JOSHI MARGI H.	9.6	8.84	8.99	1
11	6	176140303015	DEVINA CHAUHAN	9.4	8.03	8.44	2
12	6	176140303005	BHAVSAR AAYUSHI SUNILKUMAR	9	8.11	8.39	3
13	6	176140303006	BHAVSAR ZEEL DILIPKUMAR	9	7.94	8.07	3

Faculty achievements

SR. NO.	Name of staff	Name of training	Organizing institute	Date		Mode of conduction
				From	To	
1	Mr. R.D.Motka	Comprehensive online intellectual property rights(IPR)	I-Hub	6/7/2020	14/09/2020	Online
2	Ms. J.H.Suthar	Comprehensive online intellectual property rights(IPR)	I-Hub	6/7/2020	14/09/2020	Online
3	Ms. A.R.Dalwadi	Comprehensive online intellectual property rights(IPR)	I-Hub	6/7/2020	14/09/2020	Online
4	Ms. M. M. Patel	Comprehensive online intellectual property rights(IPR)	I-Hub	6/7/2020	14/09/2020	Online
5	Ms. N.B.Modi	Comprehensive online intellectual property rights(IPR)	I-Hub	6/7/2020	14/09/2020	Online
6	Mr. R.D.Motka	UDAYAM (Unlimited Digital Advanced Yearlong Academic Method of Learning) E-Content Development	Knowledge Consortium of Gujarat, Education Dept., Gandhinagar	28/07/2020	18/08/2020	Online
7	Ms. J.H.Suthar	UDAYAM (Unlimited Digital Advanced Yearlong Academic Method of Learning) E-Content Development	Knowledge Consortium of Gujarat, Education Dept., Gandhinagar	28/07/2020	18/08/2020	Online

Faculty achievements

SR. NO.	Name of staff	Name of training	Organizing institute	Date		Mode of conduction
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8	Ms. A.R.Dalwadi	UDAYAM (Unlimited Digital Advanced Yearlong Academic Method of Learning) E-Content Development	Knowledge Consortium of Gujarat, Education Dept., 9Gandhinagar	28/07/2020	18/08/2020	Online
9	Ms. M. M. Patel	UDAYAM (Unlimited Digital Advanced Yearlong Academic Method of Learning) E-Content Development	10Knowledge Consortium of Gujarat, Education Dept., Gandhinagar	28/07/2020	18/08/2020	Online
10	Ms. N.B.Modi	UDAYAM (Unlimited Digital Advanced Yearlong Academic Method of Learning) E-Content Development	Knowledge Consortium of Gujarat, Education Dept., Gandhinagar	28/07/2020	18/08/2020	Online
11	Ms. M. M. Patel	Nuturing Innovation and startup ecosystem(NISE)	I-Hub	8/9/2020	23/10/2020	Online