

Affiliated to VTU, Belagavi,
Approved by AICTE, New Delhi,
Recognised by UGC with 2(f) & 12 (B)
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WELCOME THE CHAIRMAN AND MEMBERS OF GOVERNING COUNCIL

XXV GOVERNING COUNCIL 22nd June 2019

• Progress has been made in various activities since last Governing Council Meeting held on 23rd March 2019.

• The valuable suggestions and inputs provided during XXIV GC Meeting were considered carefully and implemented in the Institution for the overall development and growth.



Institutional level

- Organized National level Cultural fest "Swayam" on 12th 13th April, 2019.
- The Chief Guests of the Inaugural functions are Mr Vinay Rai, a well-known face on the silver screen and Dr Suma Sudhindra, a reputed Veena exponent.
- Over 1200 students participated from 50-colleges around the State competing to display and prove their excellence in extra-curricular activities.
- Organized 32nd Graduation Day on 18th May 2019
- The event was presided by Chief Guest Shri Justice Perody Vishwanatha Shetty Lokayukta, Karnataka State, GOK, Retired Judge, Hon'ble High Court of Karnataka.

Innovation Day

- Innovation Day was organized on National Science and Technology Day on 11th May 2019
- The Chief Guest for the innovation day was Mr Vasanthakumar Narayan (M/s Cyclotis).
- The Guest of Honour was **Dr. Biswajit Tripathy** (Senior Engineering manager, **General Motors**).
- Project exhibition competition is organized in the college campus.
- A total of 30-projects competed in the project exhibition.



Progress Highlights since last GC Meeting Innovation Day

There were 5-projects in Computer Cluster, 13- projects in Electrical cluster and 12-projects in Mechanical Cluster. The Prize Winners were:

CLUSTER	1 st Prize (Rs 6000 worth electronic Gadgets)	2 nd Prize (Rs 4000 worth electronic Gadgets)	3 rd Prize (Rs 3000 worth electronic Gadgets)
Computer	CIBO, The Smart Canteen app	An Automatic Lung Cancer Detection, Classification and Analysis System	-
Electrical	TEG Sink (Thermo Electric Generator based Heat Sink).		
Mechanical	Multi-Functional Ai Assisted Drone For Emergencies – eMAD	Efficient And Sustainable Fuel From Solid Waste (Plastics)	Bamboo Reinforced Mud Concrete



Progress Highlights since last GC Meeting Founder's Day celebration on 17.05.2019

92nd Birth Anniversary of Dr. M V JAYARAMAN, Founder and Mentor of MVJ Group of Institutions has been commemorated. The event was presided by Chief Guest Prof. Dr P. Balaram, Former Director IISc, Bangalore

Awards to Students

- ☐ Gold Medals were awarded to 11 VTU rank holders.
- ☐ 47-Silver medals were awarded to Department toppers of Engineering and polytechnic students.
- 19-Silver Medals were awarded to the students who got 100 % marks in the exams conducted by VTU.

Awards to Faculty

- ☐ 11-Gold Medals were awarded for securing 100% student results in their respective subjects
- □ Cash prizes and certificates were given to faculty for Book publication and for best paper publications in reputed journals with high impact factor.

Innovative Students' Projects

Bo. Co. Aid: Bone Conduction-Based Hearing Aid for Partial Hearing Loss

- Students have designed Bone Conduction-Based Hearing Aid for Partial Hearing Loss
- The Hearing aid is designed based on the vibration of the basilar membrane in response to a pressure difference on either side of the membrane.
- The propagated wave that characterizes this vibration is placed on the mastoid bone, or inadvertently when testing hearing of one ear by air conduction while disregarding transmission of the sound to the other side.
- The main use for the BoCo. AID would be to tackle the stigma of wearing ear implants.



Innovative Students' Projects Deccan Herald, date: 31/05/2019

A hearing aid that fights stigma via glasses

Reshma Ravishanker

BENGALURU, DHNS: In news that will come as music to the ears of those with partial hearing loss, two Bengaluru-based students have developed a hearing aid that can be worn like spectacles, thereby addressing a major issue with hearing aids: social stigma.

Nishanth Shastry and Rakshanda B Reddy, second-year Electronics and Communication students from MVJ College of Engineering, are the brains behind the fashionable device, BoCo.Aid, which doesn't need to be inserted

into the ear.

The device works on a bone conduction transfuser system, which is installed in the device.

In simple terms, a coil in the device gathers sound. Adjacent to it is a plate which vibrates and passes it onto the temporal bone, which sends it to the cochlea enabling a person to hear.

Speaking to DH, Shastry said since the device doesn't need insertion in the ear, it would help patients who have an issue with the auditory canal.

However, the limitation is that one would not be able to use it in case of senso-neural



The hearing aid developed by Nishanth and Rakshanda.

damage or damage to the cochlea.

"We worked in consultation with a few ENT specialists around Bengaluru. We have a prototype and hope

to approach the industry soon," Shastry said.

Shastry, who hails from Mangaluru, said he conceptualised the device even before he entered college.

Social stigma

One of the major concerns the students hope to address is stigma. "When someone has a problem with seeing and wears spectacles, it is not seen as an impairment. Yet, when someone cannot hear and wears an aid, there is a stigma associated with it," he said.

The device will be broader than conventional glasses at the rim in order to accommodate hardware. The battery operated device will function for about 12 hours and can be recharged.

The duo hope to make the device available for about Rs 10,000.



Innovative Students' Projects

Kawach: Smart Helmet

- Our students have designed KAWACH, a smart helmet designed with advanced features
- This helmet is a MIPS (Multi Directional Impact Protection System) technology implemented helmet.
- Detecting and alerting when an accident occurs and sending an alert along with the location of the accident to the emergency personnel to provide necessary help within the golden hour.
- The Bike will not start without wearing helmet.
- The bike will not start if the driver is drunk.



Innovative Students' Projects

The Times of India Date: 10.06.2019

Engg students design smart helmet, hearing aid

TIMES NEWS NETWORK

Bengaluru: Students at MVJ College of Engineering have developed two innovative devices; a smart helmet and a four more sensors and an additional hearing aid mounted on spectacles.

ned by four students — Saivenkat messages to contacts through GSM Patro, Megha S and Nikitha S from electronics and communication engineering (ECE) department and Suvra Pratim Roy from computer science (CSE) - developed Kawach after realising that India records a substantial increase in accidents and casualties on roads, construction and mining sites.

"We found that many accident ca-aims to fight social stigma. sualties were either those without helmets or those who didn't get help during the golden hour. Kawach aims to tackle both the problems," said Megha.

made of a sturdy, durable and lightweight material (polycarbonate), while its inner part is made of koroyd (lining material), which absorbs more energy than EPS (extended polystyrene). It's fixed with sensors connected to a helmet detection system in the vehicle via bluetooth. The vehicle do-

esn't start until the sensor detects the rider wearing a helmet.

Also, in order to detect an accident, the helmet is fixed with vibration sensor that can detect the Kawach is a smart helmet desig- accident impact and send emergency and GPS modules. While GSM help in sending messages, GPS sends the location. The helmet is estimated to cost Rs 6,000-10,000.

Designed to fight social stigma

The second project, developed by Nishanth Shastry and Rakshanda Reddy from the ECE department,

"Our device transfers sound directly into the inner ear by bone conduction phenomenon. To achieve this, the vibration transducer is placed on The helmet's outer hard shell is the temporal bone for optimum vibration transfer. All these components are housed on a spectacle frame for increased comfort. Unlike hearing aids in the market, this doesn't go into the ear. It is not apparent, thus avoiding the stigma of wearing an aid," Shashtry explained, adding that it may cost Rs 10,000-15,000.



Industrial Visit

Name of the Department/Club	Company Visited	Month and Year	Remarks
Aeronautical	Air Force Technical College	March 2019	To understand the flight testing modules.
Civil Engineering	BMRCL, Bangalore	April 2019	Tunnel Construction – Challenges in Bangalore Metro
Chemical Engineering	HP Green R&D Centre, Bangalore	March 2019	Advanced Chemical Equipment, Fuel quality and its performance
CSE CSIR – 4PI NAL		March 2019	To know the Super computing facilities.



Students Achievements

Department	Name of the Student	Achievement	Remarks
CSE	Ruchitha D J, Rohit Natesh	Runner up	National Student Startup Challenge 2019, Yi YuStart & SMART INDIA HACKTHON 2019
	Koshal Bothra	2 nd Prize	National level Inter Collegiate – Cultural & management festival at CMRIT Bangalore
	 Veeral, Vignesh 	1st Prize	CS-GO event held at REVA University
	• Prabhu	1st Prize	• ROBO & Line Follower at NIE, Mysore & Sea College BANGALORE
	 Smitha K , Shubham, Chethan N, Prabhu , Ms. Naren Rao 	NPTEL Certificate	Completed NPTEL courses
	 Ms. Naren Rao ,Riyaz, Mr. Atul, Sourav Chandra 	GATE Scholarship	4-students qualified GATE – 2019
Chemical	49-students passed	Spoken tutorial certificates from IIT Bombay	C Programming, C++ programming, Open Modellica, Introduction to Computers



Students Achievements

Department	Name of the Student	Achievement	Remarks
Chemical	• Teena Renita Dsouza, Diya Selin Paul, Shreya Shetty & Athira Pradeep		RV College of Engineering
	• Sumashree S, Dhanush Pendurthi, Bhavesh V Patel & Mriganka Nath		RV College of Engineering
	Nihal U Kunder, Praneeth B M, Satvik & Anand	1 st Prize in Poster Presentation	DSCE Bangalore
ECE	 Bharath V.P Namitha K S, Pritam Pawan D, Pavithra P, Pavan Kalyan H V, Maria Sharon, Mohit 	1 st Prize NPTEL certificate	 Line Seguid or, IMPETUS 19.0 at UVCE, and ROBOCORE'19 at SIT, Tumkur NPTEL Certificate Course



Students Achievements

Department	Name of the Student	Achievement	Remarks
Information Science & Engineering	 Divya V K One final year project titled " Electoral Voting System Using Block chain Technology" 	2 nd Prize in GETOCS v 1.0 3 rd round in BITES project	 Gopalan college of Engineering, Bangalore IIIT Bangalore.
Mechanical Engineering	33	Funded Student Project	KSCST Bangalore for project titled "Alternate fuel using municipal waste for engine test"



Faculty Achievements

Department	Name of the Faculty	Achievement
Computer Science and Engineering	Ms Vandhana	NPTEL certificate in Programming in Java NPTEL certificate in Machine Learning NPTEL certificate in Machine Learning NPTEL certificate in IOT NPTEL certificate in Joy of computing Python Filed provisional Patent on "Innovative method of implementing intelligent speed control system for avoiding accidents"
EEE	Mrs T Nandhini PriyaMrs Premalatha	NPTEL certificates in Advanced Power electronics and Drives NPTEL certificates in Control Engineering



Progress Highlights since last GC Meeting Faculty Publications

Department	Name of the Faculty	Publication
	• R Vijayakumar & SK Maharana,	Experimental & Numerical Characterisation of Graphene-based Polymer Matrix Composites Selected for an Unmanned Aerial Vehicle, IJRAR, Vol.6, Issue-1, March 2019.
Aeronautical	 Antony Samuel Prabu G, Vishnu Raj, Irfan Khan, and Amogh Balloh 	Ignition System on Solid Rocket Motor for 10000N Thrust using HTPB as an Fuel and Oxidizer, International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES), Vol.5, Issue 5, May 2019.
Physics	Dr. Krishnamoorthy V	"Numerical studies of thermo acoustic Prime mover on the application of renewable energy" Presented by at national conference on recent trends in electrical and electronic engineering by Department of EEE on 30 th April 2019
EEE	T NANDHINI PRIYA, S M JAANAKI, P.PREMALATHA,	"Comparison between solar powered SEPIC and Buck Boost converter fed DC drives" International Journal Of Science And Innovative Engineering & Technology ,May 2019 Issue Volume 1,ISBN 978-93-81288-18-4



Faculty Publications

Department	Name of the Faculty	Publication
	N. V. Shivakumar and N. Vetrivel	"Groundwater Quality Assessment for Drinking Purpose, Channasandra Region, Bangalore, Karnataka", International Journal of Basic and Applied Research, vol. 9, no.4, pp: 280-287, Apr.2019. (UGC Approved)
Civil	N. Vetrivel and N. V. Shivakumar	"Prediction of Soil Index Properties by Aritificial Neural Network in East Part of Bangalore City", International Journal of Basic and Applied Research, vol: 9, no.4, pp: 1028-1038, Apr. 2019. (UGC Approved)
	V. Lakshmi and N. V. Shivakumar,	"Modern Methods of Construction Techniques", Journal of Indian Building Congress, 2019 (Accepted for Publications).
		Analysis of Flexible Pavement with Steel Slag as Coarse Aggregate", ERCAM-2019, Conference Paper, 2019 (Accepted for Publications)



Faculty Publications

Department	Name of the Faculty	Publication
	• I. Mani Mozhi	 Published "An efficient approach for Defect Detection in Texture Analysis using Improved Support Vector Machine, in International Journal of Business Intelligence and Data Mining, Anna University Annexure I Journal May 2019,
CSE	Dr . Sindhanai selvan	 Published under the title of "Designing a Dynamic Topology For Cluster Head Selection in Mobile Adhoc Networks," Springer Journal of Mobile Edge Computing, 2019.
	Dr. Manju Bargavi	 published titled Efficient algorithm for Packet Transmission in Wireless Adhoc Network, International Journal of Innovative Technology and Exploring Engineering, Vol 8,Issue 7,May 2019.



Faculty Publications

Department	Name of the Faculty	Publication
ECE	 Dr.Ananthi S,Dr.Arun A,Prasanth S G Dr.Arun A Ms.Varsha H ,Ms Farha 	 Application and Interpretation based on signal Genesis" in the 5th National Conference on Design Innovations for 3Cs – Compute – Communicate- Control on 2 nd March 2019,organized by ECE Department MVJCE. Presented the paper Entitled "Investigation of speech codec with compression using Legendre polynomial" in the 5th National Conference on Design Innovations for 3Cs – Compute – Communicate- Control on 2 nd March 2019, organized by ECE Department MVJCE. presented the paper Entitled "Performance evaluation of
	Kouser	grid connected solar PV Plant" in the 5th National Conference on Design Innovations for 3Cs – Compute – Communicate- Control on 2 nd March 2019, organized by ECE Department MVJCE.



Faculty Publications

Department	Name of the Faculty	Publication
	Dr. Mannar Mannan	 Published a paper titled "Designing a Dynamic Topology (DHT) for Cluster Head Selection in Mobile Adhoc Network" in Springer Journal of Mobile Networks and Applications-in June 2019. Published a paper titled "Trust Based Distributed Group Key
	Ms. Sanchari Saha	Management Technique" in Scopus Indexed Journal -, International Journal of Recent Technology and Engineering, in May 2019, ISSN: 2277-3878.
ISE	Dr. Mannar Mannan,	 Published a paper titled "Privacy Concern Code Generation Using Crypto Neural Scheme "in International Journal Of Computer Science and Engineering(IJCSE) in May 2019.
	• Dr. Muzammil Hussain	• Published a paper title "Function of Technical Terms Used in DES Algorithm" in International Conference on "Innovations in Computing, Automation and Intelligent Information Systems" (ICAIIS-2019) in May 2019.
	Ms. Priya K	 Published a paper title "Google's Internet Balloons in Stratosphere for a Network in the Sky" in ICAIIS-2019 in May 2019.



Faculty Publications

Department	Name of the Faculty	Publication
Mechanical	Mr.Suhas.B	 Published a paper title "Regenerative breaking" in International Conference on "Advance research in mechanical engineering" (IC-ARME-2019) in April 2019.
	Dr.Venkatachalam	Published a paper title "Experimental investigation of Fire-resistant property of polyurea coating for explosive environment" in IC-ARME-2019 in April 2019.
Mathematics	C. Sateesha	Numerical solution for Fractional Integro differential equations using Haar wavelets, Int. J. Rea. Ana. Rev., 6(2),215-220, 2019.
	Nidhi Nirwani Vaishnaw,	• Mathematical Analysis of a Swine flu Model with incident rate ,Int. J. Rea. Ana. Rev., 6(2) ,176-180,2019.



FDP /Seminar/ Workshop attended by Faculty

Department	Name of the Faculty	Publication	
	Mr Antony Samuel Prabu G	Advanced Aerospace Materials` conducted by Society of Indian Aerospace Technologies Bangalore May 2019	
Mechanical	Dr Anand G	Short Term course on ICT Tools for Advanced manufacturing at NIT Warangal	
	Dr P Venkatachalam	One-day Seminar on "sourcing of aerospace materials" organized by Society of Indian Aerospace Technologies and Industries Bangalore.	
	Mrs Dakshayani T R	Attended the Workshop on "Sustainable Technology" and IPR on 28 th March 2019 at VTURC, and SVCE Bangalore	
Civil	Dr. Manu D S	Attended the Two Day workshop on "Deliberation of 3-8 th Semester 2018 Scheme, Syllabus" at BIT Bangalore (May 19)	
	 Mrs Nisha M, Mrs. Apoorva K and Mrs. Harilekshmi 	Attended workshop on "Model based system Identification and its application to Civil Engineering Structures" held on 30 th May 2019 at V T U Regional Office, Bengaluru.	



Club Activity

Club Activity	Department	Particulars
Chem-Era	Chemical Engineering	28 th march 2019
Astronomy club	Aeronautical Engineering	April 2019 at Gauribidanaur Radio Observatory located at Bommasettihalli
ROBO SOCCER through E – FORZA in collaboration with IEEE Student Chapter	Electronics and Communication Engineering	22 nd and 23 rd March 2019, A total 24-teams comprising of 90 students participated in the event.
Tesouro	Information Science	Technical Treasure Hunt based on coding and decoding 11 th April 2019
"MATLITE" club activity event entitled "FUN WITH MATHS"	Mathematics	Model making competition and exhibition of posters on 27/3/19
"CHEM-LIFE",	Chemistry	Model making competition on Electrochemical cell on 30 th April 2019.\



Progress Highlights since last GC Meeting Workshop/Conference Conducted

Department	Date	Particulars
Chemical Engineering	30 th April 2019	National Conference on "Recent Advances in Chemical engineering" RACE 2019
Computer Science & Information Science	30 th May 2019	2 nd International Conference on Innovations in Computing, Automation and Intelligent Information Systems (ICAIIS-2019)
Electronics & Communication Engineering	2 nd May, 2019.	3 rd International conference on Design innovation for 3Cs Compute- Communicate-Control (ICDI3C-19)
Electrical and Electronics Engineering	30th April 2019	National conference titled 'Recent trends in Electrical and Electronics Engineering 2019. 21-papers were accepted for publication in UGC approved journal "Asian Journal of Electrical Sciences
Mechanical	30th April 2019	1st International Conference on "Advance research in Mechanical engineering" (IC-ARME-2019)



Lecture/ Session

Department	Date	Particulars
Aeronautical Engineering	29 th & 30 th March 2019	Organized a Qudcopter Workshop by Happy Landing Pvt. India Ltd, Bangalore at college premises
Chemical Engineering	15 th April 2019 4 th May 2019	Organized a guest lecture on "Ancient Indian Lessons in Chemical Engineering" by Dr. Amol Mahulkar, Senior Intellectual Property & Intelligence Analyst, Airbus, Bangalore Organized a guest lecture organized on "Demonstration Experiments in Chemical Engineering" by Dr. Keasava Rao, Professor, Department of Chemical Engineering, IISc, Bangalore
Electrical and Electronics Engineering	23 rd march 2019 5 th April 2019	Organised a guest Lecture on "Power system stability" on for third and final year students. Mr. Praveen Gautham, Senior domain engineer, ABB, Bangalore delivered the lecture. Organised a guest lecture on "Electromagnetic interference" by Dr. Vijay H Bhosale Sc "F" DRDO (LRDE)



Lecture/ Session

Department	Date	Particulars	
Mechanical	30 th March 2019	Organized a lecture on "Smart Design Methods and Process in Aerospace and Automobile Industry" by Mr. Srinivasan Kirthy from IISc Bangalore	
Mathematics	24 th May 2019	Organized a Guest Lecture on Importance of Calculus in Engineering structures by Dr. V. Senthil Kumar, Principal Scientist, Computational Industrial Mechanics Programme, CSIR Fourth Paradigm Institute, NAL	
Chemistry	21 st march 2019	Organized a guest lecture on "Advances in superconducting Materials and fuel cells" for 2 nd Semester students. Dr. M. Shekar Kumar, Additional Director, CPRI,	



Project Proposals & Patents Filed

Dept.	Funding Agency	Title of the Project	PI	Cost in Rs. (Lakh)
	DST CHORD	"Real-time Face Detection and Recognition of human identity in Unconstrained Environments"	Dr. K.Sindhanaiselvan, Ms. S. Suganthi, Mr. M. Karthick	50.89
CS	CSIR	Two Days National level Seminar titled "Block Chain Technology for Digital India		1.55
	DST-SERB/ under CORE RESEARCH GRANT	"Efficient data transmission in Wireless Sensor Networks Using Energy Strengthen Algorithm for healthcare monitoring"	Senthilkumar	24.55
ME	MNRE	"Design development of compact linear Fresnel lens reflector based system for solar sintering of glass"		21.0

A total of 12 provisional patents are filed from MVJCE



Project Proposals

Dept.	Funding Agency	Title of the Project	PI	Cost in Rs. (Lakh)
	ISRO – RESPOND	had submitted a proposal titled "ECC Encrypted Secure Reversible Data Hiding"		8.29
ECE	ISRO – RESPOND	"Ionosphere Prediction & Gradient Estimation using GAGAN"	Ms Shehar Banu	10.488
	DST	"Development of a low cost, high throughput using a Novel technique for Agricultural motors"		21.00



Funds Received

Dept.	Funding Agency	Title of the Project	Cost in Rs. (Lakh)
ECE	AICTE	To conduct 2-Week FDP program on "Graphical Programming and Real Time System Design (8 th July to 19 th July 2019)	1.92



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Thank You

