



MAPAN

THE MEASURE OF PROGRESS

Issue 16, December 2020

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From HOD's Desk – Dr. Anagha Panditrao

Hope all are in good health and taking all the necessary precautions in this COVID19 situation. I am happy to pen down the HoD column for the sixteenth issue of our department newsletter – MAPAN. The year is marked by graduation of the first autonomy batch. In March, in spite of the sudden halt to the regular classes and schedule, I am very happy to share with you all that the schedule was successfully implemented in online mode. It was the trust of the students in the execution system and the hard work and patience of the department faculty that all the activities pipelined – lectures, theory exams, project oral

exams and various project competitions; final year farewell could be executed with satisfaction. The 'work from home' way of operating was new to all and I can surely say that we all have adapted to it quite well. I applaud the students who participated in various workshops, webinars and competitions and extend my congratulations to the winners. I appreciate the efforts taken by my faculty for conducting workshops, guest sessions and webinars. It surely motivates the students and sets a good example of – never be let down in whatever situation. My best wishes to all.

PICTURE TOUR OF YEAR 2019–2020



A Moments
Lasts for a
Second but
Memories
Last Forever!!



Workshops & Seminars



'Product Development' by Dr. Atul Joshi, 'PLC Programming Workshop (Basics of Allen Bradley RXLogix 1400 PLC)' by Prof. Manisha Naravane, 'DCS Delta V Workshop for AISSMS Students' by Dr. Vikas Hajare and Prof. Manisha Naravane, 'Fundamentals of PLC Programming using CODESYS3.5 IEC 61131-3' by Mr. Sabramani Rajasekaran and Dr. Swati Madhe and 'Two Days Workshop on Basics of JAVA Programming' by Mr. Charuchandra Pandit and Prof. Pratima Kulkarni. These hands-on workshops were arranged for S.Y B. Tech, T. Y. B.Tech and Final Year B.Tech students in the last academic year.

Dr. Nivedita Daimiwal served as an expert for FDP on 'Feature Extraction for Computer Aided Interpretation of Data for Real Time Signal/Images' arranged by Sathyabama University, Chennai. Dr. Revati Shriram served as an expert for FDP under TEQIP III on 'Signal, Image & Video Processing a Practical Approach' arranged by Government College of Engineering, Karad.

Dr. Anagha Panditrai, Dr. Dipali Ramsadi, Dr. Swati Madhe participated in 'Hands on Workshop on Connection from Machine to Cloud' organized by BR Industrial Automation.

Dr. Vikas Hajare, Dr. Anagha Panditrao, Dr. Diplai Ramdasi, Dr. Vaishali Upadhye, Prof. H.T. Patil, Prof. Pratima

Kulkarni, Prof. Amruta Bahulikar, participated in STTP on 'IoT and Its Applications in Industry' organised by RAIT & Design Tech.

Prof. Manisha Narvane participated in AICTE Organised FDPs on 'Internet of Things', 'Data Sciences', 'Data Science using R', 'Data Analytics using Python', 'R Programming' and 'Technical Teachers Training'.

Prof. Y. G Adhav, Dr. Revati Shriram & Dr. Nivedita Daimiwal participated in 4th Winter School on 'Neural Networks and Its Applications', arranged by COEP, Pune.

Prof. H. T. Patil, Prof. Amruta Bahulikar, Prof. Pratima Kulkarni, Dr. Dipali Ramdasi participated in STTP on 'MATLAB Based Teaching Learning in Mathematics Science and Engineering' organized by

RAIT & Design Tech.

Prof, Y. G. Adhav, Dr.Nivedita Daimiwal & Dr. Revati Shriram participated in FDP on 'AUTOMATUS 2020-Make Automation Yours'.

Dr. Nivedita Daimiwal participated in FDP/STTP on 'Machine Learning Deep Learning Techniques for Computer Aided Interpretation', 'Experiments on Click using Virtual Labs', Next Generation Intelligence', 'Healthcare Clinical Research'.

Dr. Revati Shriram participated in FDP/STTP on 'Outcome Based Education-A Step Towards excellence', 'Machine Learning Deep Learning Applications in Engineering & Science', 'Yoga and Mental Health', 'Technical Teacher's Training', 'Effective Use of ICT Tools in Online Teaching'.

Department Toppers of Year 2019 – 2020



**Ms. SL Hasitha
Bachimanchi**
(8.93/10)



Ms. Mitali Singh
(8.70/10)



Ms. Aarya Dethe
(8.66/10)

Ms. Shanjivani Barge
(8.98/10)



Ms. Ketaki Joshi
(8.71/10)



CONGRATULATIONS!!
&
Best Wishes for Future Endeavours ...



Best Outgoing Student

Best Outgoing Student of the Year 2019-2020 is **MS. AARYA DETHE**. She joined Robocon Team in the F.Y.B.Tech & continued as a team member for Robocon 2017 and Robocon 2018 competitions. She became the Captain of Robocon 2019. Under her captaincy team rank raised to 17th. Good decision-making power, inspiring others, good emotional intelligence are some of her qualities. She has also participated in other college events. In Go 3D Innovation competition, she has won the first prize.

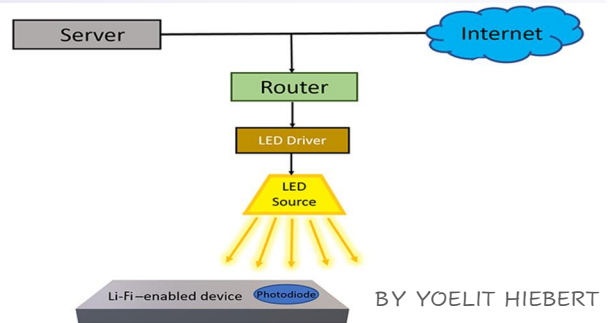
Arya has represented college for ITO Mastermind 2019 – Annual Engineering Quiz Competition. Monitor the servicing cycle for a CNC machine, Controller of an Electroplating plant, Project on Architectural Façade, LPG and CO detector and alarm system with IOT are some of the projects she has worked on. Arya was the CR of her class for two years and was well appreciated by students and teachers. She has completed internship in Pako Technologies. As a part of Final year project, she has worked on the data acquisition of the Baja Car of Team Zenith. She is currently placed at Wabtec Corporation (a GE company). We wish Arya a Very Best for her Future Endeavors!!



"Enjoy whatever you do! ...Do only the things you enjoy and Make all the Things you do enjoyable!"

Li - Wi: An Attractive Alternative to Wi - Fi

Li-Fi uses light to transmit data, specifically light in the visible spectrum rather than Wi-Fi's radio waves. This technology is theoretically capable of transmitting data at much higher speeds & is also less prone to interference. LED light sources are ideal for Li-Fi communication because of their ability to cycle at very rapid rates with no damaging effects. This has almost no bandwidth limitations. The visible light spectrum is several orders of magnitude wider than the radio frequency spectrum, so while the alarm has been sounded about Wi-Fi reaching capacity, there are virtually no such limitations for Li-Fi. Widespread adoption of this technology will help solve the current bandwidth limitations of Wi-Fi and because of this, will become a basic component of 5G implementations. Li-Fi has enhanced security so Li-Fi is especially attractive alternative for applications where Wi-Fi



signals are easily disrupted (such as nuclear power plants) or where there's a need for rapid & secure transfer of large data files. It's also thought that if Li-Fi does manage to take off it will be considerably cheaper than Wi-Fi. Li-Fi has been in use for the last several years in niche applications.



Industrial Visits and Educational Tours



Industrial visits enhances the practical knowledge of students in the field of Instrumentation. T.Y.B.Tech students visited Sugar Factory at Phaltan. During the visit students got to see various unit operations carried out in a sugar factory. These operations were carried out to convert the raw product sugarcane to final product sugar. Final Year B.Tech students visited Privi Chemical. This educational tour enhanced their experience to understand their curriculum better by getting exposure to practical applicability of theoretical concepts.

Natarajan Education Society (NES) Project Award

Natarajan Education Society (NES) has established a National Award Program that is administered through an innovation identification mission that spans academic institutions across the country and identify the best ideas/student projects that have scalability & commercial potential. The criteria for selection was: **1. Innovation & originality of the concept or approach Idea. 2. Significant problem of society that may find a solution. 3. A new domain with international potential that will be explored.**

The purpose of this award is to motivate students to develop innovative solutions that serve real needs and exploit significant opportunities that can generate employment and wealth for the nation.

For the Innovation Awards-2020, total 900 teams had participated from various academic institutes all over India. Judging panel consisted of Industrial leaders across various verticals. Based on the innovation, feasibility and socio-economic benefit, top 3 winners were selected. The **First Prize, 50,000 INR, Trophy and Certificate** was won by a team of Final Year Students Ms. Shalmali Kadu, Ms. Medha Moorching, Ms. Saniya Mandavkar and Ms. Sayali Padmawar. The project titled “**Water Pollution Analysis using Machine Learning**” was guided by Prof. Pratima Kulkarni and Dr. Dhananjay Bodas (from Agharkar Research Institute).

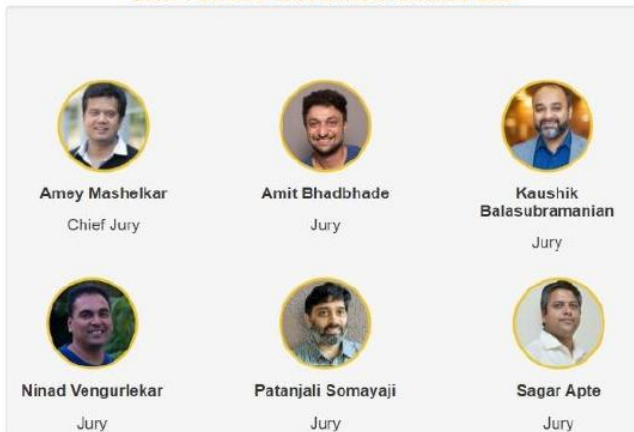








NES INNOVATION AWARDS

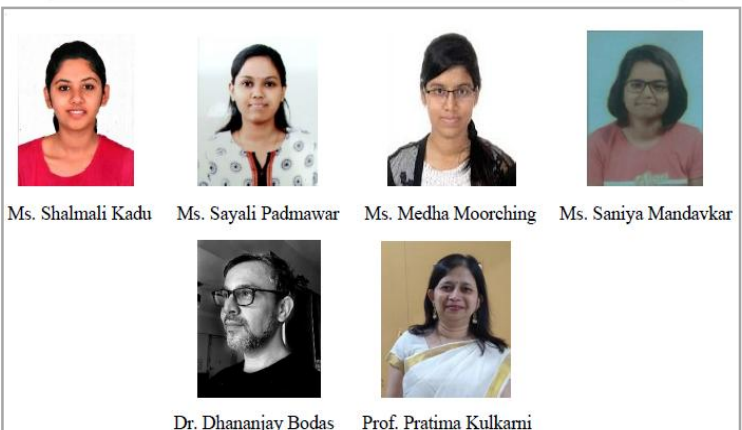
Winner at Position 1
INR. 50000, Certificate and Trophy







- Project Name : *Water Pollution Analysis Using Machine Learning*
- College Name : *MKSSSS Cummins College Of Engineering For Women, Pune*
- Project Guides : *Dr. Dhananjay Bodas, Prof. Pratima Kulkarni*
- Project Participants : *Shalmali Kadu, Saniya Mandavkar Medha Moorching Sayali Padmawar ,*

JURY FOR NES INNOVATION AWARDS-2020



 Amey Mashelkar Chief Jury	 Amit Bhadbhade Jury	 Kaushik Balasubramanian Jury
 Ninad Vengurlekar Jury	 Patanjali Somayaji Jury	 Sagar Apte Jury



 Ms. Shalmali Kadu	 Ms. Sayali Padmawar	 Ms. Medha Moorching	 Ms. Saniya Mandavkar
 Dr. Dhananjay Bodas	 Prof. Pratima Kulkarni		

Patent Filed & Published



INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

PATENTS PUBLISHED

Dr. Revati Shriram & Dr. Nivedita Damiwal, ‘System for Estimating Brain Aging and Method Thereof’.

Congratulations!

PATENTS FILED

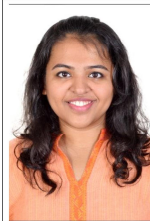
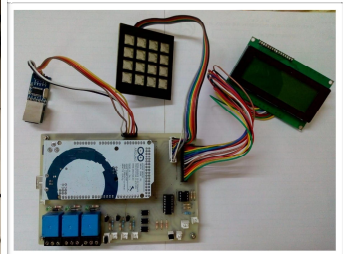
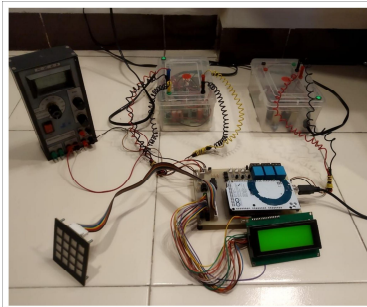
Ms. Akshada Jadhav, Ms. Sanchali Jadhav, Ms. Priyanka Inde, Ms. Ankita Chaudhari, Ms. Akansha Deshpande, Ms. Apurva Zingade, Prof. Pratima Kulkarni & Dr. Dhananjay Bodas, ‘Astute Footwear Device with Integrated Sensors’.

Forbes Marshall Project Award

Forbes Marshall Project Award is Annually declared to a Best Final Year B. Tech Project. This year FM Award is bagged by a Project '[Automation of MLR Control of Jet Dyeing Machine](#)', by [Ms. Prajakta Joshi](#), [Ms. Sayali Nigudkar](#) & [Ms. Devika Deshmukh](#), guidance for the project was extended by [Dr. Atul Joshi](#).

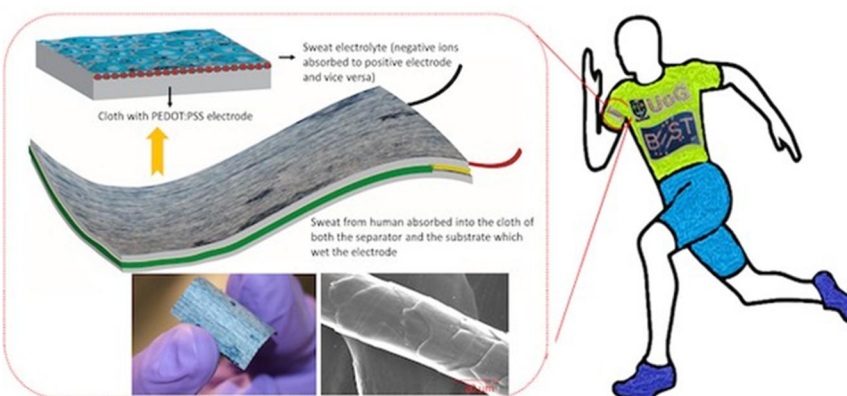
The project is to automate the MLR (material to liquor ratio) control process of a Jet Dyeing Machine. Semi Automation is a process that is performed by the combined activities of human and machine with both man and machine steps. Semi-automated manufacturing processes are typically arranged by a controller which sends messages to the worker at the time in which he should perform an action. Controllers in the semi-automated processes directly control machinery and send signals to machinery distributed within the process. MLR is the Material to Liquor Ratio. It is the weight volume relationship between the cloth to be dyed and the total volume of the dye bath, which is normally abbreviated as MLR and sometimes written as M:L ratio. M:L ratio of 1: 10 means that a dye bath volume of 10 litres is required to dye 1kg of cloth.

In the project, focus is on 'U tube jet dyeing machine' which is the most modern machine used for dyeing of polyester using dispersed dye. Salient feature of this system is the Alarm/Hooter provision. System as a whole will deem itself as a utility product which is handy, cheap and easy to use. There will be an emergency shutdown button which will cut power supply to the entire system force shutting all active operations. As the device may be flushed to the wall, all its operations can be controlled and operated from one face.



Hearty Congratulations!

Sweat Powered Smart Watches



Engineers at the [University of Glasgow](#) have developed a new type of flexible supercapacitor, which stores energy, replacing the electrolytes found in conventional batteries with sweat. It can be fully charged with as little as 20 microliters of fluid and is robust enough to survive 4,000 cycles of the types of flexes & bends it might encounter in use. The device works by coating polyester cellulose cloth in a thin layer of a polymer, which acts as the supercapacitor's electrode. As the cloth absorbs its wearer's sweat, the

positive & negative ions in the sweat interact with the polymer's surface, creating an electrochemical reaction which generates energy. Conventional batteries are cheaper and more plentiful than ever before but they are often built using unsustainable materials which are harmful to the environment," says Professor Ravinder Dahiya, head of the Bendable Electronics and Sensing Technologies (BEST) group, based at the [University of Glasgow's James Watt School of Engineering](#). That makes them challenging to dispose of safely and potentially harmful in wearable devices, where a broken battery could spill toxic fluids on to skin. What they've been able to do for the first time is show that human sweat provides a real opportunity to do away with those toxic materials entirely, with excellent charging and discharging performance.

Exceed 2020 Campus Challenge

Final Year B.Tech (Instrumentation & Control) students *Ms. Aarya Dethe*, *Ms. Shruti Dharmadhikari* and *Ms. Harshada Paralkar* were the winner of a national level competition “*Wabtec EXCEED 2020 Campus Challenge*”, organized by Wabtec Corporation (previously GE Transportation) held on 23rd and 24th Jan 2020 at JFWTC Bangalore. They received a trophy and a cash prize of 50,000/-. Among 171 teams that had participated in this challenge, 25 teams were selected on the basis of an abstract they submitted. The 25 teams were asked to submit a detailed report on the problem statement, based on which 9 teams were selected. These 9 teams attended a two-day conference at JFWTC, Bangalore.

Wabtec Corporation



Hearty Congratulations to all the Winners!!

Doctorate

Prof. Atul Joshi has completed his Doctorate from Swami Ramanand Teertha Marathwada University. His Doctoral Thesis Topic was “*Analysis and Design of Instrumentation System for Induced Acoustic Emission Testing for Engineering Components*”

Congratulations on your  **Doctorate**

Electrospin a Face Mask that Traps 99% of COVID 19

Due to the COVID pandemic, N95 masks are hard to find, and wearers often complain that they are hot, moist, and uncomfortable to wear. To counter that, a group of researchers at *Utah's Brigham Young University (BYU)* has electrospun a nanofiber fabric that can be layered within a cloth face mask to block up to 99% of particles, such as those that carry the COVID-19 virus. The BYU researchers, partnering with the Nanos Foundation, are using a homogenized polymer solution combined with a solvent, a soda bottle, and a simple bicycle pump. Director of the Nanos Foundation, Will Vahle,

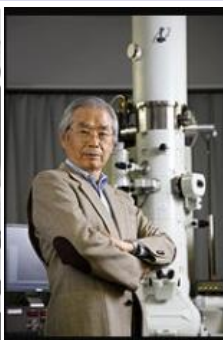
old KSL-TV that, "Our nanofiber membranes are six times easier to breathe through than existing N95 masks, making them cooler, drier, and more comfortable". A member of the BYU research team, Katie Varela, also told KSL that, "When they [virus particles] come close to your mask, they will be statically attracted to the mask and will not be able to go through it, and so it prevents you from inhaling viruses". Rather than patenting their discovery, the BYU group plans to make their nanofiber mesh process open-source, meaning that anyone can use the group's design to create their own mask filters, and they are free to improve upon the process.



Solar Roadways

Solar Roadways is exactly what you're thinking after reading the name. These are solar panels that can be used to pave roads, driveways, sidewalks, or any surface meant for walking. Solar wafers protected under thick layers of shatter-proof Gorilla Glass can be used to generate electricity from any surface. These modules come in hexagonal panels which makes replacement super easy. Additionally, Solar Roadways panels can be programmed electronically to show specific markings on the road. The panels can generate enough heat to melt the snow and thus ensure easy walking or driving over them during winters. All of this while saving the Earth and Earth-dwellers from succumbing to the damage caused by greenhouse gases.

Publications by Students & Faculty



Research can be undertaken in any kind of environment, as long as you have the interest. I believe that true education means fostering the ability to be interested in something.

(Sumio Iijima)

Dipali Ramdasi & Rohini Mudhalwadkar, “*Detection of Nitrobenzene using Quartz Crystal Microbalance with a Parametric Modelling Approach*”, Science & Technology, ISSN 0128-7680, April 2019.

Nivedita Daimiwal & Revati Shriram, “*Power Spectral Density Analysis of Time Series of Pixel of Functional Magnetic Resonance Image for Different Motor Activity*”, Biomedical and Pharmacology Journal, ISSN 0974-6242, September 2019.

Revati Shriram & Nivedita Daimiwal, “*Quantitative Analysis of Brain and Heart Signals using DWT*”, International Journal of Recent Technology and Engineering, ISSN 2277-3878.

Dipali Ramdasi & Rohini Mudhalwadkar, “*Qualitative Detection of Nitro-Aromatic Explosives using Super-*

vised Learning Access”, International Journal of Innovative Technology and Exploring Engineering, ISSN 2278-3075.

Neenu George, Jinu James, Shrinidhi Kulkarni, Sneha Parsewar, Revati Shriram, “*Detection of Parkinson's Disease through Speech and Smell Signatures*”, ICACET 2020, Coimbatore, India, April 2020.

Shrinidhi Kulkarni, Neenu George, Jinu James, Sneha Parsewar & Revati Shriram, “*Detection of Parkinson's Disease through Smell Signatures*”, ICCSP 2020, Chennai, India, April 2020.

Revati Shriram, “*Coherence Analysis of Physiological Signals*” (Book), ISBN 978-6202528481, LAP Lambert Academic Publisher, 2020.

Placement & Internships for year 2019 – 2020



Aditya Birla Group—Ms. Sweety Bannagare, Ms. Aditi Surnis, Ms. Pallavi Munot
Air Products—Ms. Janhavi Datye, Ms. Chetana Kachhava, Ms. Vrushali Sutar
Emerson—Ms. Hasita Bachimanchi, Ms. Pooja Shinde, Ms. Manasi Dengale, Ms. Tejasvini Jagtap
Boing—Ms. Ketaki Joshi
Johnson Control India—Ms. Ankita Abhang
Simense—Ms. Sayali Nirgudkar, Ms. Anchal Panda
Honeywell—Ms. Sanivani Barge, Ms. Mitali Singh, Ms. Madhura Pimpale, Ms. Sanchali Jadhav, Ms. Sharshada Paralkar, Ms. Deepali Jogdand, Ms. Purva Bhoir, Ms. Saniya Mandavkar, Ms. Medha Moorching, Ms. Shweta Gore, Ms. Devika Deshmukh, Ms. Ankita Chaudhari, Ms. Priyanka Katekar, Ms. Shruti Dharmadhikari, Ms. Shalmali Kadu, Ms. Ruchita Marathe, Ms. Sansi Gore, Ms. Shwetali Wadekar, Ms. Shivani Dete, Ms. Vrushali Kyatanakeri, Ms. Rahila Mujawar, Ms. Shrutika Todkar
Rockwell Automation—Ms. Sanchita Pawar, Ms. Aishwarya Kadam

Thermax—Ms. Prajakta Joshi, Ms. Archa Rane
Worley Parsons—Ms. Jagruti Ghorpade, Ms. Sayali Padmawar, Ms. Seema Jakapure, Ms. Supriya Gavli
Neuman Esser—Ms. Pooja Sabban, Ms. Nikita Phase
Wabtec—Ms. Aarya Dethe
Ifm Engineering—Ms. Kalyani Markandeya
Accenture—Ms. Shivani Chaphekar, Ms. Prity Ugale, Ms. Akdhada Jadhav

SUMMER INTERNSHIP

AVRN Labs—Ms. Disha Bhagwat
ISA-RAIT—Ms. Priyanka Bakare, Ms. Snehal Chavan, Ms. Akansha Gadekar, Ms. Shamika Ghodke, Ms. Pratisha Yeola
VCET ISA—Ms. Kshitija Karale
ENOVATE SKILLS NITTR—Ms. Mansi Bobe, Ms. Sameeksha Bhalerao
Sai Krishna Foods—Ms. Snehal Marutwar
Bi-Embedly Technology—Ms. Urwashi Taki
Automate Engineering—Ms. Snehal Babladkar, Ms. Chaitali Kahate, Ms. Pooja Kale

“Make in India”- Opportunity & Responsibility of a Student

The “Make-in India” initiatives of Government of India has given scope for creating state-of-the-art technology with modern high-speed communication and integrated Communication devices. The government has framed some polices for the development in various fields such as: 1. Engineering and design of PCB 2. PCB assembling, including sub-assemblies 3. Functional testing 4. Maintenance services such as warranty and maintenance of electronics spares 5. Electronics product and component design 6. Promote Eco-park in each State for processing of e-waste in environment friendly manner 7. Facilitate warehouse of components and raw materials to reduce the lead time and make them available just in time for electronics and communication manufacturing, IC design units and including start-ups

8. Source, stockpile and promote exploration and mining or acquiring mines of rare earth metals.

To achieve this, steps taken are to organize various national level competitions and challenges to encourage students to innovate and develop technologies in India. These also include solutions for societal issues. 'Aatmanirbhar Bharat App Innovation Challenge' is introduced to facilitate the techies, students and start-up community to create world-class Made in India Apps. This has led to organization of some hackathons where students can present their ideas and develop a prototype. Also, encouragement is given in terms of prizes and awards. This is a great opportunity for every student to showcase their skills and also contribute for the development of our country.

Kedar Tumne Project Award



Pathirakha Project Award

“Kedar Tumne” is a college level Project Competition. “Pathirakha” is a Department Level Project Competition for the projects related to Biomedical field. This Year both these awards were bagged by the Project Titled “SMART SHOE”. Ms. Akshada Jadhav, Ms. Sanchali Jadhav, Ms. Priyanka Inde and Ms. Ankita Chaudhari developed the prototype under the guidance of Prof. Pratima Kulkarni. Dr. Dhananjay Bodas of Agharkar Research Institute served as an external guide for the award winning project.

OBJECTIVE was to design the Smart Shoe using suitable sensors, controller and suitable control strategy. Design is also aimed into making the Smart shoe cost effective. The project will be focused on selecting different parameters that gives more functionality and flexibility to monitor and analyse health issues. Development of integral health monitoring device is an active research area. Adaptability makes this device a good application in avoiding any serious health issues related to the lower body. **SALIENT FEATURES** of Prototype are: The shoe is light in weight. It helps to avoid injuries. GPS will provide information regarding the location, distance travelled, speed time. It can be embedded to a mobile app or watch. The embedded sensors are used to measure pressure, speed and distance. The footwear can be used not only by athletes but fitness enthusiasts. **BENEFITS:** The uniqueness of the product lies in accurate measurement of posture while running or carrying out any exercise. This is done by measurement of pressure at 3/5 locations on the foot. Moreover, the device gives the data about the heart beat which is relevant while carrying out any strenuous activity. The device also uses an accelerometer which will help recording trip/fall during carrying out any activity.

“Smart Shoe”

Hearty Congratulations to the winning team!



Inspiring Indian Women Engineers



RITU KRIDHAL

Senior Scientist in Indian Space Research Organization with a key role as the Project Manager and Deputy Operations Director in the Mars Orbiter Mission, which created history of being the first mission to reach Mars in its first attempt.. She did her graduation in Physics from Lucknow University and then M.Tech in Aerospace Engineering from Indian Institute of Science in Bangalore. She has received many awards for her work and is also known as the 'Rocket Woman of India'.

KIRTI SHARMA

An Artificial Intelligence expert, a leading global voice on ethical technology. She built her first robot at the age of 15 & has been building innovative AI technologies to solve global issues, from productivity to inequality to domestic abuse, ever since. Kriti was recently named in the Forbes 30 Under 30 list & was included in the Recode 100 List of Key Influencers in Tech in 2017. She also invented Pegg, the world's first accounting chatbot for entrepreneurs startups and enterprises.



SUDHA MURTHY

Is an Indian Engineer, philanthropist, teacher and writer who graduated in Electrical Engineering from B.V.B College of Engineering & Technology and completed her Masters in Indian Institute of Science. She is a chairperson of the Infosys foundation and is also a part of Public Health care initiatives of the Gates Foundation. She became popular as the first female Engineer selected at TATA Engineering and Locomotive Company which is India's Largest auto

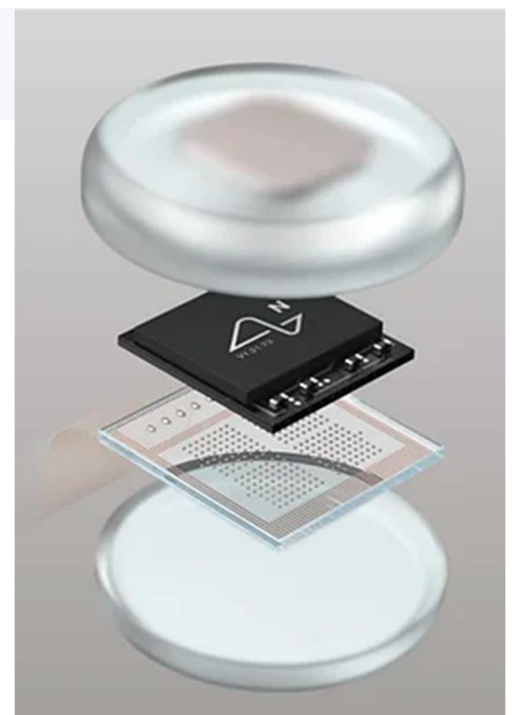
TESSY THOMAS

Known as the Missile Woman of India, Tessy Thomas. She has a B. Tech from Thrissur Engg College, Calicut. She started her career in the DRDO under Dr. APJ Abdul Kalam's leadership & guidance. She also has an M.Tech in Guided Missile from the Institute of Armament Technology, Pune (now known as the DIAT). Tessy was associate project director of the 3,000 km range Agni-III, Agni IV, Agni V missile project.



Neuralink

Neuralink is a neurotechnology company that is building a tool to link human brains with computers without the need for a physical connection. The company formed by Elon Musk in 2016 and has been working in developing this technology. Neuralink is a device that will be surgically implanted into your brain and with it, you'll be able to communicate with machines and even control them. It will also help study the electrical signals in the brain and arrive at solutions that can help cure various medical problems. Neuralink a chipset called **N1 chipset** will be installed in the skull which is 8mm in diameter and has multiple wires housing electrodes and insulation for the wires. These wires will be surgically placed inside your brain using a robot. As per the company, the wire is as thick as the neurons in your brain and thinner than a strand of hair at 100 micrometres. Max Hodak, the president of Neuralink, says that you can place more than one device to target different sections of your brain. The brain sends information to different parts of your body using neurons. These neurons in your brain connect with each other to form a large network and communicate using chemical signals called neurotransmitters. This reaction generates an electric field and you can record these reactions by placing electrodes nearby. These electrodes can then understand the electrical signal in your brain and translate them into an algorithm that a machine can read. This way Neuralink will be able to read what you are thinking and find a way for you to talk to machines without even opening your mouth. The goal of the N1 chip is to record and stimulate electrical spikes



inside your brain. You'll also be able to learn different skills using a dedicated app. Right now, the company has said that you will be able to control basic devices like your smartphone, computer and maybe even type using thoughts.

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Ms. Anushka George

Ms. Dipika Deogadkar

Ms. Anjali Sharma

Alumnae Corner

Dept of Instrumentation and Control is thankful to our alumnae for their support through out the last year. In the last year our department alumnae have helped us in many ways viz by conducting guest lectures and sharing their experiences about time management, self discipline and for generous support towards the Bhaubij Nidhi.

Department Alumni, *Mrs. Madhavi Lahiri* (Former Ms. Madhavi Tol) has received 'Udhyogini Gaurav Award' on the occasion of International Women's Day. *Congratulations Ms. Madhavi!!*

Ms. Smeeta Dimber has received 'Indian Power Women 2020 Award' on the occasion of International Women's Day. *Congratulations Ms. Smeetaa!!*

We are always grateful towards the generous and whole hearted support extended by our department alumni in various way. We kindly request you to all to share your achievements and we will be glad to showcase them always! THANK YOU!!

*Congratulations on your Achievements
&
Thank you for your support!*

