Sample of Innovative Projects

**Power Generation by Road Hump**

Dr. B.R. Ravikanthe Gowda, IPS DIGP and Joint Police Commissioner (Traffic), Bangalore City. He did his B.E at P.E.S College of Engineering, Mandya, M.Tech at N.I.E, Mysore and D.Lit from Kannada University, Hampi. He was born on 4th August 1967. He hails from Besagara Halli village of Maddur Taluk, Mandya district. His father’s name is Dr. Besagara Halli Rammanna and he was famous doctor and Kannada writer. His mother’s name is Smt. Rajamma. Dr. B.R Ravikanthe Gowda has been awarded with Chief Minister Gold Medal Award twice in the year 2002 and 2007. He was at Director General (BPR & D) National level commendation role in 2019. He has served all over Karnataka and presently he is serving as DIGP and Joint Police Commissioner (Traffic), Bangalore City. We are happy and proud to mention that he is alumni of our college (1985 –1989). He is very prompt, sincere, dedicated and most disciplined officer.

**Wireless Charging of Electric Vehicles**

Students of ISTE Student Chapter participated at the 16th State Level Student Convention held at KSTT Bengaluru, they bagged prizes at various events. Sunad of 8th Semester has bagged 1st Place in “Code Correction” and Yeshwanth L M of 7th Semester secured 1st Place in “Paper Presentation”.

**Revolution in traveling with Integrated Road safety system**

Our Commanders

Sri. K.S Vijayanandan, Chairman, PET®, Mandya, elected as Secretary of Karnataka State Union of Aided Engineering Colleges.

Dr. H V Ravindra, Principal, PES, Mandya, PET®, Mandya, elected as Treasurer of Karnataka State Union of Aided Engineering Colleges.

Dr. K M Jagadeesha Professor & HOD Department of Automobile Engineering, PESCE, Mandya, nominated as Executive Council Member of Visvesvaraya Technological University, Belagavi.

**BEST STUDENT AWARD**

Mr. Harshith Mohan of VIII Semester of Electrical & Electronics Engineering Department has bagged the “BEST STUDENT OF THE CHAPTER” award for the year 2019-20 at the ISTE State Convention held at KSTT, Bangalore. He was also awarded with the “Best Service Award” for the year 2017-18 and “Best Student Award” by the college for the year 2018-19.

“Be happy. Its one way of being wise.”

- Colette

**P.E.S College of Engineering Don of Decade**

Retained Rolling Shield for Mandya district branch by Indian Red Cross Society for consistently 10 years for highest units of blood collected. The Rolling Shield was received by Chapter Chairman Dr. B S Shishirmukar along office bearers Dr. Veena M N, Prof. Sowmya Shree K M and Prof. Shankare Gowda along with the students.

**BEST STUDENT AWARD**

Mr. Harshith Mohan of VIII Semester of Electrical & Electronics Engineering Department has bagged the “BEST STUDENT OF THE CHAPTER” award for the year 2019-20 at the ISTE State Convention held at KSTT, Bangalore. He was also awarded with the “Best Service Award” for the year 2017-18 and “Best Student Award” by the college for the year 2018-19.

“Be happy. Its one way of being wise.”

- Colette
Chairs of the College

Feathers to the Cap of PESCE

Dr. Padma M C, Professor & Head, Computer Science and Engineering, PESCE, Mandya awarded Rajyothsava Prasasti -2020 for Technical Education.

Dr. Girish R, Professor & Placement Officer, Computer Science & Engineering, awarded the best teacher from Mandya District Karnataka Sainath Parashar Kendra.

Dr. H Ramachandra, Professor & Head, Department of Chemistry, PESCE, Mandya awarded as Best Teacher from Mandya District Karnataka Sainath Parashar Kendra.

Chief Editor’s Column

The editorial board is glad to release the current issue of “EUREKA”. This ISTE newsletter provides a perfect platform to highlight the social activities and literary segment of the PESCE family. It is a snapshot of various activities undertaken for the contribution to the society by the faculty members and students working behind the scene, over time round the clock, planning things from the smallest. The newsletter also presents the articles, achievements of students, alumni and faculty members alike. The editorial board welcomes the comments and suggestions to improve the quality of newsletter. The present issue of newsletter should inspire all of us to come out of this pandemic and start a new beginning enlightened with hope, confidence and faith among us in the road ahead......

EUREKA Editorial Committee - 2020

Editors: Prof. Pooja Nagpal
Co-Editor: Prof. Sowmya, B.P
Student Editors: Shashank B M, Vaishnavi M

Chairman - ISTE Karnataka Section

Warm Greetings from Indian Society for Technical Education (ISTE) Karnataka Section! I would like to express my deep congratulations to H. V. Ravindra, Dr. B. S. Shivakumara, ISTE Coordinator, and their team of P.E.S College of Engineering, Mandya for their efforts in bringing out the wonderful newsletter EUREKA which covers all the activities done under various professional societies specifically with respect to ISTE.

The various events organized by the Institute under the umbrella of ISTE are more appreciable by both the State level and National level ISTE. We wish all the very best to the editorial team of ISTE, the Management and Principal of P.E.S. College of Engineering, Mandya for bringing out the newsletter every year.

Wish you all great success!
The adventurous Manali-leh-Khardungla Expedition 2018.

The adventurous Manali-leh-Khardungla highway being the dream destination for many, known as the “silky route” for cyclists and bikers, for them it needs great courage, will power, and the urge not to quit. During this 490km plus the 80kms of the mighty “Khardungla” Worlds Highest all-Weather Motorable Road, you are into test every second facing the challenges like cycling in the high altitudes with the risk of AMS (Acute Mountain Sickness) which may lead to death if not acclimatized properly, freezing temperatures, uncertain weather, rains, hail, snow storms, breathlessness and long stretches of winding roads. Rare animals such as Yak, Marmot, Wild Ass, Double humped camel and Red fox can be sighted. This is a life changing experience as it teaches you patience, to compete with your own limits, staying at tents where sleeping bags are your beds and your backpack is your pillow and your tent mates are your family and be one simple human satisfied with the basic needs which would be your luxury during the expeditions and one important thing I learned is the human body can go as far as your mind will let it.

We the group of 81 gladiators dared to conquer all the difficulties and reach our destination. Covering the distance in 10 though days passing through the Rohtang La, Baralacha La, Nakee La, Lachung La, Tanglang La going up to 18,380ft at Khardungla. Each of these passes is unique in its own way: Baralacha La - one of the most loopy, Nakee La and Lachung La are twin brothers standing high next to each other, Rohtang Pass is the most unpredictable and moody of them, one of the toughest to cross the “Tanglanga” and the stunning view of 22 curves on top of the Gata Loops and The Mighty Khardungla waits like an old man for his children to come and give everyone their own stories to tell, Staying at an average of 13,000ft - 14,000ft everywhere there is hardly any civilization, crossing “furious Nala’s” stream and bridges, Deadly down hills, zero tarmac roads and the beautiful sights throughout can make anyone a king of this own world inspite all the pains.

The full part of the whole trip was getting stuck at the hairstoms at more plains, snowstorm at khardungla where you are rescued by a stranger and playing cricket at 14,000ft on NH31! And realise that you become your own superhero in this journey, pushing yourself harder than you ever thought you could, you discover that your legs, lungs and mind itself are the greatest superpower you could possess.

Suhruut MV Jamadagni 7th semester EC Department
Under the guidance of Dr. C. D. Guruprakash, Professor, PESCE, Mandya.

Under the guidance of Dr. B V Narsimham, Industries in Mysore District - Karnataka.

Dr. Mahendra Babu K J, Assistant Professor, Department of Mechanical Engineering, has been awarded PhD from Visvesvaraya Technological University, Belagavi in the month October 2019. The topic of the research is "Development of an Algorithm for Early Detection of Plus Disease in Retinopathy of Prematurity". Under the guidance of Dr. H V Sheshadri, Professor, Department of Electronics & Communication, Engineering, PESCE, Mandya.

Under the guidance of Dr. H.V. Ravindra, Professor, Department of Mechanical Engineering, PESCE, Mandya.

Dr. Dinesh Prabhu, Associate Professor, Department of Automobile Engineering, has been awarded PhD from Anna university, Chennai, Tamilnadu, in the month January 2020. The topic of the research is "Experiments and Numerical Investigation on Fluid Flow Performance of Multi Hole Orifice". Under the guidance of Dr. Gangadhara Gowda, Professor, Department of Mechanical Engineering, PESCE, Mandya.

Dr. Sanjay H M, Associate Professor, Department of Information Science and Engineering, has been awarded PhD from Siddhartha Academy of Higher Education Deemed to be University, Tumkur, in the month of October 2019. The topic of the research is "Algorithmic Aspects of Security Auditing among Multiagents to Acquire Trust Access Control in Hybrid Cloud". Under the guidance of Dr. C. D. Guruprakash, Department of Computer Science and Engineering, SITST, Tumkur.

Dr. Gurupavvan H R, Assistant Professor, Department of Mechanical Engineering, has been awarded PhD from Visvesvaraya Technological University, Belagavi in the month December 2019. The topic of the research is "Comparative Study of Machining Performances in Wedm of Composite Materials using Machine Vision System". Under the guidance of Dr. H V Ravindra, Professor, Department of Mechanical Engineering, PESCE, Mandya.

Dr. Rudresh Addamani, Associate Professor, Department of Mechanical Engineering, has been awarded PhD from, Visvesvaraya Technological University, Belagavi in the month January 2020. The topic of the research is "Optimization of Process Parameters and Monitoring the Status and Breakage of Weld using Multisensory Approaches for Pulsed Gas Metal Arc Welding (P-GMAW)". Under the guidance of Dr. H.V. Ravindra, Professor, Department of Mechanical Engineering, PESCE, Mandya.

Dr. N. Jagadeesh, Associate Professor, Department of Automobile Engineering, has been awarded PhD from Anna university, Chennai, Tamilnadu, in the month January 2020. The topic of the research is "Investigations on Aluminium Nano-Hybrid Composite Piston Rings for Diesel Engines". Under the guidance of Dr. A.P.Senthil Kumar, Professor, Dept. of Automobile Engineering, Anna University, Chennai, Tamil Nadu.

Dr. A.P.Senthil Kumar, Professor, Department of Automobile Engineering, Anna University, Chennai, Tamil Nadu.

Dr. B. Dinesh Prabhu, Associate Professor, Department of Automobile Engineering, has been awarded PhD from Visvesvaraya Technological University, Belagavi in the month July 2020. The topic of the research is "Investigations on Tribological Properties of Particulate Filled Polymeric Composite". Under the guidance of Dr. J. Venkatesh, Professor, Department of Automobile Engineering, PESCE, Mandya.

Dr. B. M. Thammanna, Associate Professor, Department of Physics, has been awarded PhD from Karpagam Academy of Higher Education, Coimbatore, in the month of September 2020. The topic of the research is "Synthesis, Structural Characterization and Luminescence Studies of MgTiO3." under the guidance of Dr. Senthil Kumar, Associate Professor, Department of Physics, Karpagam Academy of Higher Education, Coimbatore.

Dr. Revanesh M, Assistant Professor, Department of Electronics & Communication Engineering, has been awarded PhD from Visvesvaraya Technological University, Belagavi in the month October 2020. The topic of the research is "Some Novel Algorithms To Enhance Security In WSN ". Under the guidance of Dr. V. Sridhar, Professor (Emeritus), Dept. of Electronics & Communication, Engineering, NMIT, Bangalore.

Dr. Raghu S, Assistant Professor, Department of Industrial Production & Engineering, has been awarded PhD from Visvesvaraya Technological University, Belagavi in the month December 2019. The topic of the research is "Synthesis of Aluminum Based Composites and Effect of Forging on Mechanical Behavior, Fracture and Wear". Under the guidance of Dr. H. M. Nanjunda Swamy, Professor & Head, Department of Industrial Production & Engineering, PESCE, Mandya.
Artificial Intelligence and Data Science Approach to avoid COVID-19

Wash your hands, do not touch your eyes and nose, wear a mask, maintain distance from everyone; tedious we do not when this comes to an end. Artificial Intelligence uses the technology of powerful algorithms which then processes the data, thus identifying patterns. Here some of the applications of Artificial Intelligence (AI) avoid Covid-19. Data Science can give accurate pictures of Coronavirus outcomes. BluDot AI Company of Canada developed AI smart glasses; security guards wear this to scan the temperature of hundreds of people in less time without making contact. This same technology is implemented to surveillance CCTV used in public transportation like bus, train, etc. Another application AI chest screening that can highlight lung abnormalities in chest X-ray scan and avoids Covid-19 risk faster than human radiologists. AI implemented drones and robots are used for contactless delivery, to spray disinfectants in public areas, checking symptoms and dispensing hand sanitizer foam and gel, to serve food and medicine to patients. Robot dog called “Spot” helps doctors to access patients in the US. In India, one of the AI applications for contact tracing is the “Aarogya Setu App”. The app works based on an active Bluetooth connection and GPS. Gives information when you have been in close contact with a Covid-19 positive person. Maintains data security, uses data analysis to inform if you have been near a hotspot. Indian Institute of Science (IISc), Bangalore and IIT’s developed applications such as “GoCoronaGo” and “Sampark-o-meter” have also been developed for contact tracing. Telangana state implemented AI cameras for identifying people who are mask violators. In Chattisgarh, AI proved a success by online training of the medics for controlling Covid-19. In Kerala, robots are used in hospitals, office buildings, etc. Data science plays a vital role in collecting and maintaining data. Medical professors and others get accurate up-to-date information about Coronavirus from trusted bodies like the US centers for disease control and prevention and the world health organization. From this we can get a statistic number of confirmed cases, recoveries, etc.

We are Leaders!
(Innovation distinguishes between a leader and a followers-Steve Jobs)

Winners of Technical Projects Competition-2020

(Sponsored by TEQIP Phase -3)

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India’s fight against the COVID-19 outbreak from just a single case in the country to more than 88.74 lakh (17/11/2020), as on today has been unique one. India started its journey from “Janata Curfew” to total lockdown and till date we are slowly lifting the lockdown in phased manner. Everywhere around us has changed, work from home is the new norm, online shopping is trending, so how come imparting knowledge be left behind. The technology adoption has become easy for smooth progress towards imparting knowledge of the faculty along with accessing and learning by students in the education sector. The teaching has gone online along with student’s assessments too. In the preceding times of COVID – 19 it was a challenge for faculty members to take classes from the remote places of their home, but they took this like a challenge and stole this opportunity to go for virtual learning and teaching. Faculties are using various platforms like Google classrooms, Google Meet, Zoom, LMS Professor, Skype meet up, YouTube and so on, not only to conduct their classes for students, but also to arrange guest sessions, FDPs, MDPs, webinars, students mentoring, club activities and various other competitions for faculty and students alike. Faculties feel there is no much difference between online and offline sessions as they can share PPTs, play videos and use board and marker as regular classrooms. Faculty experiences has influenced faculty engagement and commitment Student engagement is always considered as challenge in the past, present or in future, whether its offline or online. At the outset of online modes, faculties had lots of dissonance towards student’s engagement during a lockdown. But this slowly disappeared once they started taking sessions online; to their surprise they saw the attendance going up to almost 100% in ongoing classes, while engaging them virtually. Various initiatives apart from online classes’ students got accesses to free Swayam courses, Coursera, E-Library and E-Books, etc. have been shared with students to enhance their knowledge through digital platform and keep them engaged digitally. Does the educationalist, policymakers take this innovation at the budding stage and start implementing strategic changes in phased manner for using technological advancement for faculty and student engagement.

Prof. Sowmya BP
Assistant Professor
Department of MCA, PESCE, Mandya.
Not Nero, but Hero

Cleanliness is Holiness

Cuckoo’s Couple

Receiving the 1st Prize for “Coding Correction” Competition at ISTE State Student Convention

Singing competition

Swachcha Bharath Abhiyaan

Singing Competition

Honouring of ISTE Volunteers

Inaugurating the Celebrations of ISTE Day

Quiz Competition

Receiving the 1st Prize for “Paper Presentation” at ISTE State Student Convention

Commanding of Coding

Preaching of Proper Programs

Hunting of Brains

We are always no. 1

I & U Can delink the Spreading of VIRUS

Inauguration of Quiz on COVID-19

Felicitating the Prize winners of Hackmania Competition

Inauguration of Innovative Projects Presentation Program

Innovative Projects Presentation Program of MCA Department

“We opportunities don’t happen. You create them.”
-Chris Grosser

“What you do today can improve all your tomorrows.”
-Ralph Marston