



Dr. Ambedkar Institute of Technology

(An Autonomous Institution Aided by Govt. of Karnataka)

Affiliated to Visvesvaraya Technological University Belgaum

Mallathalli Bangalore 56

NEWS LETTER

Jan-Dec. 2020



Our Vision

To create Dynamic, Resourceful, Adept and Innovative Technical professionals to meet global challenges

HONOURABLE FOUNDER SECRETARY

Late Shri M H Jayaprakash Narayan

Founder Secretary

Panchajanya Vidya Peetha Welfare Trust (R)



Dr. Ambedkar Institute of Technology was established in the year 1980 by Late Sri M.H. Jayaprakash Narayan, Ex-MLA, Ex-Syndicate / Senate Member of Bangalore University and Founder Managing Trustee of PVP Welfare Trust and Secretary of Dr. Ambedkar Institute of Technology, was a visionary and an educationist. He was a strong follower of the principles of Bharatha Ratna Dr. B.R. Ambedkar, he came from a very humble background. He fought relentlessly for the upliftment of the downtrodden. He believed that education is the main path for the emancipation of the oppressed classes and started a number of educational institutions to cater to all levels of education in Bengaluru.

Visionaries of Panchajanya Vidya Peetha Welfare Trust



Sri S. Mariswamy. IPS
Chairman, PVPWT
Director General of Police (Rtd.) GoK



Dr. M Mahadeva Ph D
Managing Trustee/ Secretary, PVPWT
Former Faculty, ISEC
Ex-Chairman, KPSC GoK



Sri S Shivamallu B E, FIE
Treasurer, PVPWT
Director KPTCL (Rtd.), GoK



Sri P L Nanjundaswamy B E , M S (USA)
Trustee, PVPWT
Secretary, Irrigation Dept. (Rtd.), GoK



Sri A R Krishnamurthy
B A, PG Dip. in Journalism.
Trustee, PVPWT
Ex- MLA/Ex- Chairman Dr. BRADC (Cabinet Rank) GoK



Dr. B N Umesh M Tech. PhD
Trustee, PVPWT



From the Principal's Desk

Greetings to all the readers!

The whole world is embracing the year 2021 with hopes and with renewed strength as never before. Let the ray of hope shine on everyone's life. The family of Dr. AIT did brave the pandemic and sailed through the ordeal with less hiccups. The faculty and students took well with the online classes & virtual labs through various online platforms. The high class ICT infrastructure in place in the institute, the teaching & the fair evaluation procedure could meet up with the academic vigour and the standard. The online activities such as e-conferences, webinars and the AICTE sponsored faculty development programmes went unabated in the institute. This Newsletter stands testimony to that. The institute does also focus on placement training and GATE coaching, to establish a secure future for our students.

Best Wishes and a Very Happy New Year to All !

Warm Regards

Dr. C Nanjundaswamy

Our Mission

- * To offer state of the art undergraduate, postgraduate and doctoral programs in the fields of Engineering, Technology and Management.
- * To generate new knowledge by engaging faculty and students in research, development and innovation.

Founder's Day Dec. 21

Honourable trustees , chairman Sri. S Mariswamy, secretary Dr. M Mahadeva, treasurer Sri S Shivamallu, Sri AR Krishnamurthy and Sri Dr. B N Umesh joined by Principal Dr. C Nanjundaswamy, Deans and all the faculty members paid their respect to the founder Sri. MH Jayaprakash Narayan at the sacred samadhi of JPN



Induction activities



Induction Programme II for I Year students (2019-20 batch) during 27.01.2020 to 01.02.2020

Induction Program for First Year Students

21/12/20 to 28/12/20

Principal Dr. C Nanjundaswamy, welcomed the first year students and addressed them about the college and the facilities. Dr. Siddarju Dean (Academic), gave a clear picture about the academic autonomous, CBCS and the regulations of the institute. Dean (Exams)- Dr. G Rajendra explained about the examination system in place in the institute. The students were provided with all the required information about the institute, the autonomous system and the examinations through the above sessions.

The students were also given points to ponder over on:

- ◆ Benefits of the memberships of Professional Societies- Dr. Shanthi K J HOD, ML
- ◆ Language Proficiency in UG Education- Dr. T R Shashipriya HOD, HSS
- ◆ Creative practices- in UG Education – Dr. Yamuna Devi- HOD, ETE
- ◆ Professional Ethics – Somalatha B Faculty, HSS
- ◆ Outcome Based Education – Dr. Meenakshi N- HOD, EIE
- ◆ On Human Values & Professional Ethics – Dr. Nandini Prasad-Professor, ISE
- ◆ Importance of Computer Programming in Technical Education – Dr. Harish G- Faculty CSE
- ◆ Apart from these students were familiarized with all UG and PG departments, Library, Yoga-Importance of Health, Sports & Games-Importance, words of an Alumnus from Medical Electronics Chaitanya Mohan , about the institution, Cultural activities and the Startup and Entrepreneur Cell.

The contribution of the all the chosen professors and faculty of all UG and PG departments of the institution to the induction program was praise worthy and commendable.

Students were also acquainted with the whole college virtually through the videos presented to them on the various blocks that housed all the departments.

A language proficiency test was conducted to test their English Knowledge and many scored well. Student's talent was also exhibited online with their sketches, arts like dance, singing etc. to recognize their talent.

Reported by the Induction Programme Co-ordinator Dr. Shashipriya, HOD, Humanities Department

PUBLICATIONS

Dr. Mary Cherian, **Efficient Utilization Of Resources Of Virtual Machines Through Monitoring The Cloud Data Center** Lecture Notes in Electrical Engineering, vol 637. Springer, Singapore, March 2020.

Dr. Mary Cherian, **The Challenges In Virtual Machine Live Migration And Resource Management** International Journal of Engineering Research & Technology (IJERT), Vol. 8, Issue 11, August 2020, ISSN: 2278-0181

Dr. Mary Cherian, **Driver Drowsiness Detection Facial Images And Heart Monitoring System Based On ECG Signal** Journal of Emerging Technologies and Innovative Research (JETIR), volume 7, Issue 8, August 2020, ISSN 2349-5162.

Dr. Mary Cherian, **Lung And Pancreatic Tumor Characterization In The Deep Learning Era**, Wutan Huatan Jisuan Jishu, Volume 16, Issue 11 (XI), November 2020

Dr. Gowrishankar S, Deep Learning Based Approach For Skin Burn Detection With Multi-Level Classification, Springer Sponsored Fourth International Conference on Computing and Network Communications (CoCoNet'20), Vellore Institute of Technology, Chennai, India, October 14-17, 2020

Dr. Smitha Shekar, Iot Based Heart And Face Function Monitoring For Heart Disease Prediction System With Doctors Prescriptions, International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.7, Issue 8, page no.1074-1078, August-2020

Dr. Harish G, IoT Based Heart And Face Function Monitoring For Heart Disease Prediction System With Doctors Prescriptions, International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN: 2349-5162, Vol.7, Issue 8, page no.1074-1078, August-2020.

Dr. Harish G , Dr. Smitha Shekar ,A Prediction Model For Crop Cultivation And Fertilizers Requirement For Improved Yield, Vol-7, Issue 4, Oct 2020, IJRAR,

Mrs. Veena Potdar, Designing Multi-Model Alerts For Drowsy Driver Using Machine Learning And Image Processing International Research Journal of Engineering and Technology-IRJET, www.irjet.net, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Journal Volume7, Issue 8, August 2020.

Mrs. VINUTHA.H, A New Ensemble Of Texture Descriptors Based On Local Appearance-Based Methods For Face Anti-Spoofing System, Journal Of Critical Reviews , 07-06-2020

Dr.Nandini N, Detection Of Levels Of Blood Sugar Using Simple IoT Based Breath Analysis, IJCSNS International Journal of Computer Science and Network Security, VOL.20 No.8, August 2020

- ♦ Ms. Asharani K P, **Realtime Eye Tracking For Password Authentication**, Volume 09, Issue 10 (October 2020), IJERTV9IS100109, ISSN (Online) : 2278-0181.
- ♦ Ms. Asha K N A **Comprehensive Survey On Web Recommendations Systems With Special Focus On Filtering Techniques And Usage Of Machine Learning** ICCVBIC 2019. Advances in Intelligent Systems and Computing, Springer, Cham, vol. 1108. Print ISBN978-3-030-37217-0, January 2020
- ♦ Mr. Ravikumar J, **Machine Learning Model For Clinical Named Entity Recognition**, International Journal of Electrical and Computer Engineering (IJECE) Vol. 11, No. 2, April 2021, pp.1689~1696 ISSN: 2088-8708, DOI: 10.11591
- ♦ Mr. Ravikumar J, **A Framework For Named Entity Recognition Of Clinical Data**, Indonesian Journal of Electrical Engineering and Computer Science Vol. 18, No. 2, May 2020, pp. 946~952, ISSN: 2502-4752,
- ♦ Mr. Revanasiddappa, **Real Time Early Detection Of Weed Plants In Pulse Crop Field Using Drone With IoT**, International Journal of Agricultural Technology, , Association of Agricultural Technology in Southeast Asia (AATSEA), Sep-2020
- ♦ Mrs. Mamatha S K, **Graph Cut Based Brain Network Structure And Brain MRI Segmentation Techniques**, Vol 8, Issue 6 , IJRET, March 2020

Lecturers/Talk Delivered outside

Dr.Gowrishankar.S : webinar “Introduction to NumPy, Pandas and Matplotlib”, at Department of Electronics and Communication Engineering, Dayanand Sagar College of Engineering, Bengaluru – 78, Karnataka, India, 10th December, 2020.

Dr.Nandini. N delivered a Technical Talk on “IoT Application” at Government Polytechnic, Chinthamani, Chikkaballapur District, Karnataka on Feb 2020

Dr.Nandini. N delivered a Technical Talk on “IoT Application” at Noorul University, Kumarakoil, Tamilnadu on 28th Feb 2020.

WEBINARS ORGANISED

1. **Cyber Security**” by Mr. Nagaraja A S, Founder-Director, IT Secure Systems, Bengaluru on 11-06-2020.
2. **“Sensors and Deep Learning Applications for Safe Navigation in unstructured Traffic Environment Using AI”** by Mr. Arvind C S, Senior reserach officer, A * star Signal and Image processing, Laboratory of Molecular Imaging, Singapore on 12-06-2020.
3. **“Remote Sensing for Environmental Studies”** by Dr. Ganesh Raj, RRSc - ISRO, Bengaluru on 13-06-2020.
4. **“Patents to Boost Innovation”** by Ms. Bindu Sharma, Founder and CEO, Origin IP Solutions LLP on 18-06-2020.
5. **“Future of digitalization and AI in industry” which was presented by Mr.Steven Balding, Head of Digitali-
zation for Siemens Ganesa Hull, UK , Deep learning engineer, Optalysis, Reasearch Assistant from the Univer-
sity of Hull, UK on 19-06-2020.**
6. **“Advanced Embedded Design and IoT Applications”** by Mr. Jeevaprasath A and Mr. Kushal Lesarkar in rep-
resentative of Edgate Technologies Pvt.Ltd dated from 10-03-2020 to 13-03-2020.
7. **“Computer Networking through Qualnet Simulator – A Practical Approach”** by Mr. Rajesh Bhandary and
Mr. Rohan Mohan Jadagouda representative of Nihon Communications on 07-03-2020.
8. **“How to think like an Entrepreneur?”** by Mr. Shan Ibrahim, Deployment Engineer, HP on 01-02-2020.
9. **“Dissecting Attitude”** by Ms. Bindu, Global Head, HP on 12-02-2020.
10. **“Geo-Spatial and Applications”** by Dr. UnniKrishanan, ISRO on 15-02-2020.
11. **“Technical Paper Writing”** by Mr. Dattatreya S Vellal, CSI-Industry Expert on 07-03- 2020.
12. **“Object Detection using YOLO”** by Mr. Bharath Kumar Karanam, Chief Technology Officer, ML Labs Pvt
Ltd., Bengaluru on 06-07-2020.
13. **“Artificial Intelligence - Opportunities and Challenges”** by Mr. Saurabh Tiwari, Principal Engineer, AI Prod-
ucts Group, Intel Corporation on 03-07-2020.
14. **“Space Technologies & Applications”** by Smt. Subhalakshmi Krishnamoorthy, Deputy Director, ISRO, Ben-
galuru on 08-07-2020.
15. **“See inside “C”-The Unexplored Features in academics”** by Dr. Vishwa Kiran S, Corporate Trainer,
B.M.S.I.T & M, Bengaluru on 13-07-2020.
16. **“Blockchain and it’s Applications”** by Dr. Narendran Rajagopalan, Professor & Head, Dept. of CSE, NIT
Puducherry on 14-07-2020.
17. **“How to get Patent? – Regulation by IPR Department”** by Prof. Narasimha Murthy P Managing Director,
Master Minds on 25-07-2020.
18. **“Agile using Jira/TFS and Continuous Software Deployment (CI/CD)”** by Mr. Satish Kumar K . V, Sr. Advi-
sor Program Management, Dell Technologies on 10-10-2020.
19. **“GRE Tests & Insight to Overseas Education”** by Mrs. Vijayalakshmi, Academic Manager, TIME, Bengaluru
on 17-10-2020.

20. **“Basics of Wireless Communication and it’s Evolution”** by Mr. Niranjana . M, Sr. Development Engineer, FUJITSU Network communications, Richardson, Texas on 28-11-2020..
21. **“Introduction to NoSQL Database & Mongo DB”** by Mr. Ganeshayya Shidaganti, and Ms. Aparna . R, Dept. of CSE, M . S . Ramaiah Institute of Technology, Bengaluru on 24-11-2020
22. **“Hands on session on Data Management and Background Task Execution in Android”** by Mr. Ragavendra C . R, Technical Architect, Robert Bosch Engineering and Business solutions Limited, Bengaluru on 27-11-2020.
23. **“How to Crack TOP Rated Placements, Higher Education & Technical Profile Building”** by Mr. Hemanth, Career Labs on 08-12-2020.

Industry visit

Industrial Visit to National Institute of Oceanography, T Dona Paula, Goa 13/03/2020 to 15/03/2020.

NIO is one among the top research organisation, with a vast campus at Dona Paula, Goa. NIO is an autonomous research organization in India to undertake scientific research and studies of special oceanographic features of the Northern Indian Ocean. The major outcomes from this visit include, learning about their current research, Technology that is being used for Marine studies, various methods that have been adapted for collection of different types of ocean data, processing and analytical methods applied.



Student Achievements

Websites: Corona virus Covid-19 tracker <https://covid19india19.netlify.app/> developed by Deepak Singh

Projects

Ms. Brunda R N, Ms. Hemalatha N K, Ms. Prakruthi G S, Ms. Ananya K worked on a the project “RUBBISHOW – Garbage Area Estimation & Detection using Augmented Reality & Deep Learning” under the guidance of Dr. SN Omkar, in AFS Lab at IISc, Bengaluru from 06/01/2020 to 22/06/2020

NPTL Certificates: Students are obtaining NPTL certificates in subjects of their interest

PATENTS (Status: Published)

1. **Trespasser's Detection System for Agriculture fields using Artificial Intelligence & Methods there of** by Ms. Vinutha H Assistant Professor:
2. **Machine Learning Based Intelligent Automatic**

Water Tank Cleaning Robot For Home

Ms. Tejeswini K Assistant Professor

- 3 **Air Quality Monitoring and Controlling Deice using IoT** Mr. Ravikumar J Assistant Professor

Consultancy

Work entitled “Digital Marketing ” during the period 01, Oct. 2020 to 30, Nov. 2020,

By Ms. Tejeswini K Assistant Professor

Niranthara

Niranthara is a Computer Literacy Program for rural students initiated by the department , under which school students were trained for basic computer knowledge. This program is designed mainly to provide the computer knowledge, both hardware and software, which can be a Computer Literacy Program at Rural School.

The CSE team visited Govt. High School, Hebbakodi, Thumbenahalli, Ramanagar District to give an exposure on computer literacy to 75 students on 17th Feb, 2020. The Head Master Mr. Narayana and staff of the school gave a warm welcome to all the team members

of “Niranthara”. Dr. Siddaraju, HOD , addressed the gathering and gave a motivating speech to the students. Ms. Asha K N took a class on basics of computers, its working and the parts of computer. On 18th Feb, 2020, sessions were delivered on basics of MS Excel and MS PowerPoint with the hands on experience. The students were also introduced to the concepts of IoT by Prof. Siddaraju. The team members were Ms. Asha Rani K P, Ms. Lavanya Santhosh, Mr. Chikkamuniyaappa and Mr. Sathish



Technical Club Inauguration 8/10/2020

Teamwork makes the Dreamwork. This is the objective of introduction of technical clubs in CSE department. Organised by coordinator of CSE, CSI and student coordinators of CSI under the leadership of the HOD CSE, Dr. Siddaraju.

The CSE clubs consisting of Coding Club, Data Science and Machine Learning Club, Web development Club and App development Club were inaugurated in the presence of our respected Principal Dr.C. Najundaswamy, HOD Dr. Siddaraju, speaker Dr. Sriram K Vasudevan, guest of honour Surendra Prasad Babu, distinguished trustees, honourable chairman Mariswamy, IPS, honourable Secretary Dr. M Mahadeva, our treasures Sri Shivamallu, our distinguished founder trustee P L Nanjundaswamy, Sri A R Krishnamurthy, Dr B Umesh and the alumni.

Keynote speaker, Dr. Shriram K.V. expressed his delight in attending many online sessions which he wouldn't do in normal circumstances. He continued to express his thoughts by mentioning that innovations need not be complex and expensive. Whereas, it could be anything simple and efficient that can help people with day to day activities. He encouraged all students to understand the importance of finding the solutions and not just coding. He spoke on how to innovate. He also mentioned that innovations don't happen overnight and happen after pondering over a topic for a long enough time and through a lot of perseverance.



The Coding Club

Technologies may be obsolete in matter of days, but knowledge remains forever. The main objective of learning Algorithms and Data Structures is that even though languages shall change, the logic of the program remains same. Algorithms and Data Structures help us to optimize our solutions and make them stay effective for huge large calculations and for quick results. It is this reason that makes Algorithms and Data structures a topic that interviews and coding competitions love to question.

Student Coordinator (Head)
Sambit Sanyal

Student Coordinator (Vice)
Supritha M Bhatt

78 STUDENTS REGISTERED

ALUMNI MENTORS



SHARATH KUMAR RAKSHITH



Web Development Club

Websites can target the biggest and broadest audience, unlike the restrictions to a platform that constrain native applications. In five major areas of audience reach, design, development, cost, and upkeep, web development solutions offer a more flexible and effective solution over native applications. The web is still growing and web developers are a scarce resource that have good chances on the job market. Beginning web development is relatively easy - you only need your web browser and an editor. Hence, Web Development will not only increase your credibility as a software developer, but also offers a quick and easy way of getting your own project up and away or building your portfolio, both of which are heavily sought out by recruiters.

Student Coordinator (Head)
Vineet Kalghatgi

Student Coordinator (Vice)
Suvij Surya BV

98 STUDENTS REGISTERED

ALUMNI MENTORS



ANSHUMAN SANGAMESH LAVANYA



App Development Club

In an age where handheld smartphones have become more prevalent and viral apps like tik-tok have taken the market by storm, it is quite essential to learn to develop an application where most companies are Mobile first and the demand is rising. The need for developers who can build apps for both platforms is in huge demand.

Student Coordinator (Head)
Nishin Kumar B

Student Coordinator (Vice)
Rahul K B

142 STUDENTS REGISTERED

ALUMNI MENTORS



KARTHIC RAO RAGHAVENDRA

Reporter: Ms. Lavanya Santhosh

Department of Civil Engineering

Workshop Organised

Temporary Structures on

Feb. 2020 Organised by Dr. MN Hegde



Survey Camp Sri Subramanya Ghati Doddabalapur taluk, Bangalore December 25th 2019 to January 2020.



Publications

- ♦ Shreyas K, Sphoorthy SM **Study on Engineering Properties of Concrete Using PET Coated with Bagasse Fibres** (IJLTEMAS) Vol 9, Issue 5, May 2020
- ♦ S.B Ankesh Venugopal, Sumanth S, Vinod kumar, Abhishek **Experimental Study on Concrete Blocks From Recycled Aggregates** IRJET- Vol 7, Issue 8/Aug 2020.
- ♦ Ankesh S.B Bharat G.K, Bibek Malla, Chetan Gowda G.D, Devaraja H.V, Deeshita **Study on Compressive Strength of Concrete by using Fly Ash and NanoSilica** IRJET- Vol 7, Issue 7/July 2020.
- ♦ Megha V, Arpitha M , Chaya.M Naik, Mukesh, **Experimental study on effect of Concure WB a curing compound on Nano Concrete** IRJET- Vol. 7, Issue 7 /July2020.
- ♦ S Vijaya Rohan G.Raikar, B Shivakumarswamy, Dr.S.Vijaya), M.K. Darshan **Seismic Analysis of Framed R.C Structure with Base Isolation Technique using E-Tabs** (IJTSRD) Volume 4 Issue 5, July-August 2020
- ♦ Pooja V S.Vijaya, B Shivakumarswamy, Kavya H.K **Dynamic Analysis of Steel Structure with Bracings and Dampers under Wind and Earthquake Loads** (IJTSRD) Volume 4 Issue 6, Sept- Oct 2020
- ♦ Pavithra S.E , S.Vijaya , Kavya H.K **Dynamic Analysis of Hybrid Tall Tube Structural System** NOVYI MIR Research Journal Vol 5. Issue 12, 2020
- ♦ Rajesh Chandra.C, Aravinda D , Sharat Kumar S.N, Supritha R.M, **Design and Fabrication of Automatic Hand Brake** GIS Science Journal Vol 7 Issue 12, 2020
- ♦ Goutham HM, Hemanth Kumar S , Akash S, Karan Mahabal Shetti , Supritha R.M, **Rain Water Harvesting- A Case Study in Dr.AIT Campus** IRJET Vol. 7 Issue 9/Sept 2020
- ♦ Danish Akhtar, M.R Suresh, Naveen Kumar M , **Design of Tall Structures under Low SBC** IJTSRD- Vol 4 Issue 6, Sept-Oct 2020.
- ♦ Ritu, B Shivakumarswamy , S.Vijaya , Mary Bhagya Jyothi , **Performance Based Analysis of RC Framed Structure with and Without Dampers for Different Seismic Zones** IJTSRD- Vol. 4 Issue 6, Sept-Oct 2020

WEBINAR ORGANISED

PROJECT MANAGEMENT & TIMES AHEAD on 22-06-2020, speaker: Sri.Girish H.R C.E.O Girish Ventures B'lore.

CLIMATIC RESILIENCE & CARBON FOOT PRINT MITIGATION on 29.07.2020

INNOVATIVE BUILDING MATERIALS" on 06-08-2020, Speaker: Dr. R Nagendra, Senior Director STEDRANT Techno Clinic Pvt. Ltd, B'lore.

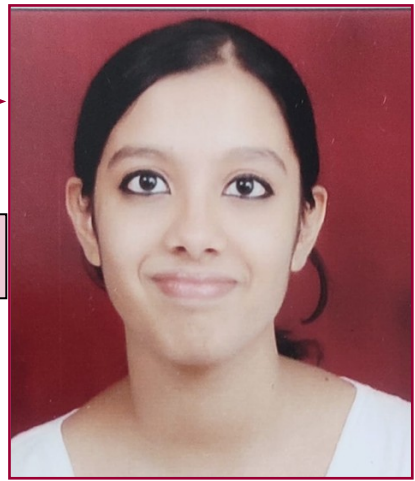
TOTAL QUALITY MANAGEMENT on 29-09-2020- Speaker : Sri Guru Prasad H.C Associate professor, Civil Department, CMRIT B'lore.

ADVANCED BIOLOGICAL WASTE WATER TREATMENT TECHNOLOGIES on 21.09.2020

IMPORTANCE OF FORMWORK & SCAFFOLDING IN CONSTRUCTION on 16-12-2020 Speaker: Sri. Nagesh Puttaswamy, Zonal Head WT & RMDT South India Ultra Tech Cement Ltd.,

Congrats

Srushti Ithal , Secured 9th Rank in MBA



INDUSTRIAL VISIT



Reported by Ms.Supritha

Publications

- ♦ T N Raju **The study of Erosive Property of EN-8 and AISI 1020 Material using Gas Jet Erosion Tester**, International Research Journal of Engineering & Technology Vol. 7, Issue 8 Aug 2020, e-ISSN : 2395-0056
- ♦ Pavan Tejasvi T **Improvement In Stress Corrosion Cracking Of AA 7075**, International Journal of Advance & Technology 31 May 2020, Scopus Indexed ISSN: 2005-4238.
- ♦ N Shashikanth **Comparative Study On CFST And Steel Diagrid Structural System For High Rise Building**, International Research Journal Of Engineering And Technology, 7.34/ISSN 2395-0056.
- ♦ Sathish S , Mohan kumar B **Studies On Glass Fiber Reinforced Polymer Composites At Different Curing Temperatures**, A journal of composition theory, ISSN 0731-6755.
- ♦ H M Somshekar **Effect Of Nanofillers On Abrasion Resistance Of Carbon Fiber Reinforced Phenolic Friction Composites**, Materials science and applications (Scientific research publishing), ISSN 2153-1188.
- ♦ Bhanuprathap R, **Jute/Kelvar Epoxy Nanocomposites :Effect Of Clay Treatment On Dynamic Mechanical Properties**, IOSR Journal Of Engineering, ISSN 2250-3021.
- ♦ Manjunath H S, Srinivasu N, Rathika M, Preethi K **Numerical Simulation Of Heat Transfer Behaviour Of Dissimilar AA5052-AA6061 Plates In Fiction Stir Welding: An Experimental Validation**, International Journal For Scientific Research And Development, ISSN:2321-0613.
- ♦ Vishwanath M M **Numerical Simulation Of Heat Transfer Behaviour Of Dissimilar Aa5052-Aa6061 Plates In Fiction Stir Welding: An Experimental Validation**, Journal Of Mechanical Engineering –Strojnický Casopis, ISSN:2450-5471.
- ♦ Jayaram A S, **Shifting The Maximum Stress From A Critical Section**, International Journal Of Engineering Applied Sciences And Technology, Vol. 4/Issue 5/ISSN:2455-2143.
- ♦ Aravinda D **Intelligent Headlight System**, International Journal Of Scientific And Technology Research, ISSN:2277-8616.
- ♦ H S Manjunath, Dr Sathish S, Sharath kumar S N **Fatigue And Static Thermal Analysis Of Brake Disc For SAE Based Cars**, International Research Journal Of Engineering And Technology, ISSN:2395-0056

Industrial Visits

- ♦ Gerusoppa Power house on 31/01/20
- ♦ VARAHI Underground Power house on 30/1/20
- ♦ IMTEX – 2020 27/01/20
- ♦ SAN Engineering and Locomotive Co LTD 10/1/20
- ♦ Federal Mogul Power train Division 4/01/20

Webinars Organised

- ♦ **Fundamentals of Rotor Dynamics** on 7/12/2020
- ♦ **Rotor Dynamics for Turbo Machine Requirements** on 14/12/2020
- ♦ **Basics of Rotor Dynamics** on 26/12/2020
- ♦ **Machine Learning & Its Application** on 1/8/2020
- ♦ **How to Crack Top Placements, Higher Education, Top Rated Placements** on 19/11/2020

Reported by Pavan Tejasvi

Publications

- ◆ Dr. S Vasudevamurthy, Pankaja H G, Chandrashekar Silli, Mallikarjuna, Ramesh Kumar K S, Suneel **Simulation Studies on Di-Electric Parameters of Insulating Oils in Transformers** 1st International Conference on Recent Trends & Development in Information and Communication Engineering on May 23rd October– 2020(ICRTDIC-2020) Dr. AIT Bengaluru page No 238-246
- ◆ H V Govinda Raju and Shree Varsha **Standalone SCIG Based Wind Energy Conversion System Based on Internal Voltage Motion Equation with Four-Level Nested NPC Converters** 2020, Date of Publication:08-07-2020. Journal of Emerging Technologies and Innovative Research(JETIR), factor, Vol. 7 issue 7, July ISSN
- ◆ Dwarakanath S K, Jyoti Koujalagi **Performance Analysis of Switched Reluctance Motor with Different Core Materials** International Journal of Emerging Technologies and Innovative Research, UGC ISSN:2349-5162 Volume 7, Issue 7, PP 781-785.
- ◆ Padamashree Patil , Babitha S, Jyoti Koujalagi **LabVIEW based model of Switched Reluctance Motor using PI Controller** International Journal of Recent Technology and Engineering, Scopus Indexed/ 6.04 ISSN: 2277-3878, , Vol-8, Issue -6, March, 2020, pp 3668- 3671.
- ◆ Prabhushankar, Manjunath N, Firoz Nadaf, Prashanth, Jyoti. Koujalagi **Battery Management System for Electrical Vehicles** Proceedings of AICTE Sponsored 1st International E-Conference On “Recent Trends & Development in Information and Communication Engineering” (ICRTDIC-2020) 23rd October 2020 ISBN: 9788192710471, pp- 187-189
- ◆ Shivlingaiha K L, Jyoti Koujalagi, **Comprehensive Review of Winding Configuration in Switched Reluctance Motor** 3-Day International Virtual Conf. on Recent Trends in Electrical, Electronics, Telecommunications, Instrumentation Engg., Medical Electronics Engg. & Physics 7 - 9th of Dec. 2020, Dayananda Sagar College Of Engineering Bangalore-560078, Karnataka, India
- ◆ Dr. S Vasudevamurthy, Deepti S Shastrimath, Lakshman, Tushar T swamy, Nadisha H S, Said Aqib **Dissolved Gas Analysis on Transformer Oil** 1st International Conference on Recent Trends & Development in Information and Communication Engineering on May 23rd October– 2020(ICRTDIC-2020) Dr. AIT Bengaluru page No 238-246
- ◆ Dhanyavathi A, Akshay Kumar A V, Bharath M P, Harish M, Sachin **Underground Cable Fault Detection and Notification System** International Journal of Science and Research (IJSR) ISSN: 2319-7064 volume 9 Issue 7, July 2020

- ◆ Malini Thangavelu, Dr.N.Vinoth Kumar, Harini Vaikund **Voltage Oriented Control Of Inverter For Solar Pv System Using Maximum Power Point Tracking** Paideuma Journal ISSN NO: 0090-5674, Vol XIII Issue VIII August 2020,Page No : 199-204.
- ◆ Eranna, Mohammed Mahaboob Ali **Improved Model of Electric Power Steering Control System** International Research Journal of Engineering and technology (IRJET) 08, Aug-2020 Vol. 07, Issue. e-ISSN: 2395-0056, p—ISSN: 2395-0072, pp. 3027-3030,
- ◆ Dr. S Vasudevamurthy **Effect of using PCM as Cooling Medium in Different Types of Heat Sinks.** International Journal of Engineering Research and Technology ISSN: **2278-0181** Volume 9, Issue 8, Aug - 2020, Pp 201-206 **Paper ID : IJERTV9IS080103**
- ◆ Dr. S Vasudevamurthy **Development of Graphene Oxide based Non-Edible Cottonseed Nanofluids for Power Transformers Materials (MDPI), Switzerland. Materials 2020, Vol. 13 Issue 11, Article No.2569 1996-1944 Materials 2020, 13(11), 2569 Published on 04/06/2020**
- ◆ Mukundswamy S **Lineman Safety** International Research Journal of Engineering and Technology Vol 8
- ◆ Mukundswamy S **Design and Simulation of Closed Loop DC/DC Synchronous SEPIC Converter using PID Feedback Controller** International Research Journal of Engineering and Technology Vol 8
- ◆ Archan., Sri latha, Suma., Shivaranjini B.C, Dr. Shankaralingappa C **B5 Mathematical Model Of H-Type Darrieus Vertical Axis Wind Turbine** 2020 JETIR August 2020, Volume 7, Issue 8, ISSN-2349-5162
- ◆ Harshitha K.P, Dr. Shankaralingappa .C.B **Nine Level Active Neutral Point Clamped (9L-ANPC) Inverter with Reduced Power Switches and DC-Link Voltage** International Research Journal of Engineering and Technology (IRJET) ISSN: 2395-0056 ,Volume: 07 Issue: 07 | July 2020. p-ISSN: 2395-0072.
- ◆ Raja A R, Harini Vaikund and Nalini S, **Fuzzy Controller Based Power Quality Improvement for a Microgrid with Energy Management System,** Journal of Computational and Theoretical Nanoscience, American Scientific Publishers, ISSN 1546-1955(print); ISSN : 1546-1963 Vol.17, 1-8, 2020, 1546 1955/2020/ 17/ 001/008, doi: 10.1166/jctn.
- ◆ Harini Vaikund,Malini Thangavelu, Bhavana.H, Mekala Chaithra, Ranjitha.B **Simulation And Analysis Of Microgrid With Distributed Energy Sources Journal of Emerging Technologies and Innovative Research (JETIR).** Publishers: ISSN-2349-5162(Journal No.: JETIR2008376) Volume 7, Issue 8, August 2020. Page No: 568-571

*INDUSTRIAL
VISITS*



- ◆ UG students Sharavathi Hydro Power Plant, Linganamakki Dam and Power Plant, National Institute of Oceanography on 22nd – 27th Feb 2020
- ◆ UG students Varahi Hydro power plant, on 14-03-2020.UG IV
- ◆ PG students “JVS Electronics”, 10 March,2020, PG I & II year students (Power Electronics)

TALKS DELIVERED OUTSIDE

By Dr. Shankaralingappa C B

- ◆ **Distributed Generation and it's Optimization:** : at Sir. M. Visvesvaraya Institute of Technology for the AICTCE sponsored FDP on 10/12/2020.
- ◆ **Intelligent Algorithms for Distributed Generation:** Webinar at JNNC Shivamogga on 27.08.2020
- ◆ **Future Energy Trends and Its impact:** IEEE sponsored Webinar at SJBIT EEE Department Bangalore on 28.08.2020



PATENTS GRANTED

DR. S Vasudevamurthy

A process to extract Liquid Dielectric Coolant from Rice Bran Oil filed on 14/08/2015 4250/CHE/2015 CBR No.17273 on 24-11-2020 Granted Patent No. 352034

A process to extract Liquid Dielectric Coolant from sesame seed Oil" 4250/CHE/2015 CBR No.17273 filed on 14/08/2015 , **Granted Patent No.351971** on 23-11-2020



Reported by Pankaja HG

Publications

- ♦ Vidya Honguntikar, Kavya K, Shruthi P C **High Accuracy QRS Peak Detection For Fetal Movement Monitoring System Using IOT** in Proceedings of AICTE Sponsored 1st International E-Conference On “Recent Trends & Development in Information and Communication Engineering” (ICRTDIC-2020) 23rd October 2020, ISBN : 9788192710471
- ♦ Chandrakala V. K **A Unified Framework To Integrate Artificial Intelligence Into 5G Networks Using Slicing** AICTE Sponsored 1st International E-Conference on Recent Trends in Development in Information and Communication Engg, on 23rd October 2020.
- ♦ Chandrakala V. K **Intelligent Slicing: A Synthesized Frame Work to Integrate Artificial Intelligence into 5G Networks** International Research Journal on Advanced Science Hub , Vol. 2 8th August 2020.
- ♦ Lakshmi M and Prashanth C R, **Performance Analysis of Heterogenous Wireless Sensor Network using Efficient Clustering**, International Conference on Recent Trends and Developments in Information and Communication Engineering, 2020.
- ♦ Lakshmi M and Prashanth C R, **Designing an Energy Efficient Clustering in Heterogeneous Wireless Sensor Networks** International Journal of Computer Networks and Communications, 2020. (Accepted for publication)
- ♦ Dr.B Sivakumar, Praveen K.B, **Design of Enhanced RTP-RTCP Protocols for Heterogeneous Wireless Ad-hoc Networks to Enhance Channel Coverage and Capacity** International Journal of Advanced Trends in Computer Science and Engineering ISSN 2278-3091, Volume 9, Issue 2, (Mar-Apr 2020) page no. 2065-2077.
- ♦ Dr.B Sivakumar **Capacity and Coverage for improvement of Homogeneous Cellular Network using Femto Cells** AICTE Sponsored International Conference on Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020) on 23rd October 2020.
- ♦ Dr.B Sivakumar **Clustering and Data Aggregation in Wireless Sensor Networks (5G/B5G) Using Machine Learning Algorithms** AICTE Sponsored International Conference on Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020) on 23rd October 2020.
- ♦ Dr.B Sivakumar **Analysis of Leaf Diseases Using Multi Support Vector Machine for Smart Agriculture** AICTE Sponsored International Conference on Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020) on 23rd October 2020
- ♦ Dr.B Sivakumar **Weather Monitoring And Forecasting System Using Iot** AICTE Sponsored International Conference on Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020) on 23rd October 2020.

Webinars Organised

Webinar On Science Of Sound – A Glance At Audio Technoogy by Glenn Ebenzer, Audio Engineer and Acoustic Design Consultant, Ebenzer Recording House on 17th July 2020

An Idea Exchange With Alumnus with Dr. Abhijith Ambekar was held on 11.05.2020

e-conference Organised

Recent Trends & Development in Information and Communication Engineering (ICRTDIC -2020) on 23rd October 2020 AICTE Sponsored 1st International E- Conference

Technical Event Organised

Technovate –a Technical event-TTF by the students of TCE was conducted on 12^h March, 2020

Talks Delivered

Dr.Prashanth C.R : **Writing Course Outcomes Based on OBE** on 9th & 27th July 2020 at Shanabasava University, Gulbarga & Dr.AIT

Vidya H. was Conferred with Ph.D. degree from VTU in the area **Wireless Sensor Networks** on February 08th 2020.

Reported by :Ms Sudha Thimmaiah



Webinars Organised

Role of Smart Sensors in Industry 4.0 5th September 2020

The speaker started with introducing the current trends in Industry and what is Industry 4.0 and the role instrumentation in IOT, Artificial Intelligence. Then he discussed about how to solve complex engineering problems using the concepts like big data analytics, deep learning, cloud computing etc. and also spoke about the students preparedness to face the challenging corporate sector.

Network Analysis using MULTISIM 10th September 2020

Speaker taught the participants about realization of electronic circuits using the tool of National Instruments called MULTISIM

Machine Learning Approaches for Image Analysis 19-09-2020

Speaker: **Dr. Cyril Prasanna Raj, Dean R&D, MSCE, Bangalore**

The speaker began with an introduction to machine learning, basic mathematics involved in building machine learning techniques. He also touched upon image processing techniques such as filtering, wavelet transforms, image compression, and segmentation, feature extraction techniques etc. and also shared his research experience and ended with demonstration on one of the image processing application.

Webinar Series organized under AICTE-Margdarshan Scheme for Mentee Institutions

Webinar-1: Online Teaching and Learning 18/09/2020

By Dr.N.J Rao, Rtd. Professor, IISC, Bengaluru

Objective: To demonstrate the benefit of Online teaching in current scenario using advanced tools and platforms for online teaching. The speaker began with an introduction to why online teaching is so important in current situation. He also touched upon different tools available freely for online teaching.



Webinar-2: Communication beyond Content: 25/09/2020

By Dr.K. RajaniKanth, Former Adviser, Ramaiah Institute of technology, Bengaluru

Objective: To demonstrate the benefit of communication in current scenario using advanced tools and platforms. The speaker delivered a talk on why communication is so important in current situation. Webinar session was well received and well appreciated by all participants.



Webinar-3: Outcome Based Education and Accreditation Criteria 10/10/2020

By Dr. C. Nanjundaswamy, Principal, Dr. Ambedkar Institute of Technology, Bengaluru.

The session on Outcome Based Education and Accreditation Criteria towards achieving NBA and importance for any engineering institutions. The program was started with an objective to train the participants to understand importance of outcome education in higher education. Webinar session was well received and well appreciated by all participants.



STANDING ON SHOULDERS OF MATHEMATICAL GIANTS 10th October 2020

Speaker: Mr. Abhinav A. Kalamdani, CEO, Syneddyne Systems, Bangalore

The webinar was based on case studies in the field of Control systems.

Case study 1: Thermo-vacuum chamber for spacecraft testing.

Case study 2: Life support system (LSS) in a submarine.

Case study 3: Rigid body kinematics and finally told about the medical robot called Technological wonder.



AICTE sponsored Short Term Training Program conducted in three phases:

STTP 1: 23rd to 28th November 2020

STTP 2: 7th to 12th December 2020

STTP 3: 4th to 9th January 2021

Title: Pedagogy for Effective use of ICT in Engineering Education

Resource Persons: Prof. N.J. Rao, Prof. K. Rajanikanth, Ms. Vani Shastry, and Ms. Sudha Aithal
Dr. Aditi Arur

The role of ICT in education is becoming more important, and its importance will continue to grow in the future. The use of ICT can facilitate pedagogically, superior instructional methods that can significantly enhance students' active participation in the classroom. Many of the technologies have been evolving over the past two decades. The AICTE and UGC have been urging all educational institutions to use these educational technologies in the classrooms. Unfortunately, their use continues to remain very limited. The pandemic forced the entire country to move into a new normal. In the immediate future, all teaching-learning processes need to be conducted online. In post-COVID situations, ICT tools can be used to make the teaching-learning activities more effective, engaging, and efficient. This online workshop's main aim is to make participating teachers experience online instruction and explore some ICT tools for education for the courses they teach.

The effective use of ICT tools requires the systematic design of courses and familiarity with the tools that can enhance communication between the teacher and students and even reduce the teacher's burden. The workshop will present the design of courses, including the design of assessments in alignment with outcomes, ICT tools for active-learning and collaboration, and assessment. It also explores the advantages of blended learning, including a flipped classroom.

Publication

Nirmala bai L, Monika Shree T S Lora Network Based Solar Panel Power Monitoring System, IJIRSET, Volume : 9 , issue 10 , October 2020

Yashaswini R, Mohith Prajwal M, Nesar H, Aishwarya D N, Campus Navigation using Augmented Reality, IJETRM, Volume 4, issue 8, August 2020

Department of Industrial Engineering & Management

Publications

- ♦ Rajesh K, **Development And Characterization Of AL_6Mg Composite With Fly Ash And Graphite Particle Addition.** International Journal of Research and Analytical Reviews (IJRAR) Jan. 2020
- ♦ Rajesh K, **Optimization Of Wear Parameters Of A Hybrid MMC Using Design Of Experiments,** International journal of Progressive Research in Science and Engineering (IJPRSE), October 2020

WORKSHOP ORGANIZED

Importance of Vacuum & Cryogenic in Basic Science Research : Organised under the ISTE Banner on **and the speakers were** Mr. Sanjay, Quantum Design, Mumbai and Mr. Manikanta, HP, Bangalore



Webinars Organised

- ◆ SCI paper & Research Proposal Writing , 14th August 2020 Speaker: Dr.Ramprabu, DRDO-Bangalore
- ◆ International Webinar on Impact Behaviour of FRPs, 19th August 2020 Dr. B.ShivaMurthy Manipal University, Dubai.
- ◆ Strategies for Writing Research Papers in Top Indexed Journals, 12th December, 2020, Dr. B.ShivaMurthy, Manipal University, Dubai
- ◆ Learning Creative Thinking as a Skill, 24th October 2020, Dr Shruti Patil, Symbiosis International University, Pune
- ◆ Residual Stress Affecting the Structural Integrity of Industrial Components, 10th October 2020, Dr. P. Sampathkumaran, Ex- Joint Director & Head, Materials Technology Division- Central Power Research Institute Bangalore
- ◆ Recent Trends on Industrial Automation & Robotics 26th September 2020, Dr. Sachith.T.S Dept.of Mechanical Engineering, Symbiosis International University, Pune,
- ◆ Latest Trends on Supply Chain Analytics in Industry, 12th September 2020, Mr.Pritam Hombal, CAPEGEMINI-Bangalore
- ◆ Industry 4.0 Fundamentals and Growth in Manufacturing Industry , 19th September 2020, Dr. SatishKumar, Dept.of Mechanical Engineering, Symbiosis International University, Pune
- ◆ Recent Trends on Metals Corrosion in Indian Industry , 5th September 2020, Dr. S.P.Kumaresh Babu Dept.of MME, NIT-Trichy.
- ◆ Wolfram Mathematica: An Overview, 10th July, 2020, Dr. Aravind Hanasoge, Wolfram Alpha LLC, Mr. Darshan Puttaraju, GT Enterprises

Industry Visits



Sharavathy Power Plant 27th-29th Feb. 2020



At Coffee Curling Plant Chikkamagaluru



Visiting Wind Mill at Tumkur on 28th Feb.2020

Two PhD's were awarded under the guidance of Dr N Mohan in the Dept. R& D Centre



Reported by: Dr. Rajeshwari Papanna

Publication:

- ♦ Mahalinga V Mandi, S. Ramesh, **Generation of Binary Sequences of Length 10230 Bits Having Better Odd and Even Correlation with Large Linear Complexity for Use in Global Navigation Satellites Systems (GNSS) Applications**, Mathematical Modeling of Engineering Problems, ISSN: 2369-0739 (print); 2369-0747 (online), Vol. 7, No. 1, March, 2020, pp. 94-102.
- ♦ Mahalinga V Mandi **Performance Evaluation Of Chaotic Spreading Codes In Massive MIMO OFDM System**, Indian Journal of Science and Technology 13(42), ISSN: 0974-6846 (Print), 0974-5645
- ♦ Uma Devi H, Shivaputra, Meenakshi L.Rathod **Analysis and Design of an Optical Biosensor Using Mathematical Modeling**, Lecture Notes in Mechanical Engineering Proceedings of I-DAD 2020 Springer Link Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering pp 481-491, September 2020.
- ♦ Uma Devi.H, **DNA Micro-Chip Analysis And Image Processing To Optimize Genetic Expression** in the proceeding of AICTE Sponsored 1st INTERNATIONAL E- CONFERENCE (DIGITAL) ICRTDIC-2020, October 2020
- ♦ Tanuja Patgar, Ripal Patel. **Emergency Assistive System for Tetraplegia Patient Using Eye Waver Computer Vision Technique**. In Advances in Computational Intelligence Techniques. Algorithms for Intelligent Systems. Springer, February 2020.
- ♦ Divya, **Windowing Approach For Face Recognition Using The Spatial-Temporal Method And Artificial Neural Network**, International Journal of Applied Pattern Recognition, Inderscience publishers, Vol.6 No.2, pp.124 - 162, 2020.
- ♦ Naveen K N , **Multi-Phase Initial Ranging Process For OFDMA Systems: Improved Dynamic Threshold-Based Multi-User Detection Approach**, IET Communications, Volume 14, Issue 13, p. 2130 – 2140, 11 August 2020
- ♦ K. N Hemalatha, **Smart Wearable Device For Asthma Patients** in International journal for research in applied science & engineering technology (IJRASET), Volume 8, Issue 5, May 2020.
- ♦ K. N Hemalatha, **Internal Inpipe Inspection And Rectification Bot**, In international research journal of engineering and Technology (IRJET), Volume 7, Issue 5, May 2020.
- ♦ Girija S **UAV Hand-Over Entity**, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Aug 2020, e-ISSN: 2395-0056, August 2020, pp.1084-88
- ♦ Girija S, **Optimized Reversible Arithmetic and Logic Unit (ALU)**, International Journal of Engineering Research and Applications, Vol. 10, Issue 8, August 2020, pp. 33-38.

- ♦ Anand H D, **Micro-Robot**. International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 8, Issue VI, June 2020. ISSN: 2321-9653;
- ♦ Mala Sinnor, **A Hybrid Approach For Computer Aided Diagnostic System For Malignant Melanoma Detection In Dermoscopic Images** in the proceeding of International conference on Recent trends and development in information and communication engineering, October 2020.
- ♦ Harsha R **Analysis Of Convolution Neural Networks For Rust Control In Building And Other Appearances**, waffen-und kostumkunde Journal, Volume XI, issue IV, Pp no 372 to 378, April 2020
- ♦ Harsha R, **Design And Development Of A Supervised Learning Model For Detection Of Colour In Objects Using CNN**, International Journal of Advanced Science and Technology, Volume 29, No 7 PP NO: 13876-13887, April 2020.
- ♦ Spoorthi P A, **Unusual Event Detection For Enhancing ATM Security**, in Proceedings of AICTE Sponsored 1st International E-Conference On Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020) 23rd October 2020, ISBN : 9788192710471.
- ♦ Kavitha Devi CS, **Self-Driving Tricycle** International Journal for Scientific Research & Development, Volume 6, Issue 8, Pg. No. 107-110, August 2020, ISSN: 2395-1052.
- ♦ Kavitha Devi C.S ,Dr.H.Umadevi, Dr.Jambunath S Baligar, **A Design Of Chebyshev Filter For Wireless Communications In Smart Cities**, in the proceeding of International E-Conference on Recent Trends & Development in information and Communication Engineering(ICRTDIC) – 23rd Oct 2020.
- ♦ Chethan S, **An Efficient High-Speed Lifting Based 1D/2D DWT VLSI Architecture Using CDF 5/3 Wavelet Transform For Image Processing Applications**, in the proceeding of 5th IEEE International Conference On Recent Trend On Electronics, Information And Communication Technology, November 2020.
- ♦ Meenakshi Rathod **Synthesis Of Concentric Circular Array Antenna Thinning Using Round & Push To Limit Binary Evolutionary Programming** International Journal of Future Generation Communication and Networking, 13, 33-44, 2207-9645, December 2020.
- ♦ Swamy TN, **Video And Image Acquisition Challenges To Define Image Resolution For HEVC**. International Journal For Advancement Science And Technology, 958 -965, vol 5s
- ♦ Vidyashree C, **Smart Medicine Vending Machine**, in proceeding of AICTE Sponsored 1st International E-Conference On Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020) 23rd October 2020, ISBN : 9788192710471.
- ♦ B S Sudha. **Development of Colour based Tomato Harvesting Robot** , Volume 8, Issue VIII, International Journal for Research in Applied Science and Engineering Technology (IJRASET) Page No: 974-975, ISSN : 2321-9653, August 2020.
- ♦ Nagarathana HS, Kavyashree S, Madhusudhan M, **Design And Implementation Of IoT Based Vehicle Tracking And Theft Control**, International Journal of Advance Research and Innovative Ideas in Education, ISSN(0)-2395-4396, Vol-7, Issue-1 2021.

- ♦ **DWT Based Feature Extraction for Iris Recognition**, Dr Ramesh S, Dr Dr Mahlinga V Mandi, Dr Shivputra, Meenakshi L Rathod, Shwetha M, Harsha R, DR CHETAN S" Patent Granted Number: 2020102066
- ♦ **An Artificial Intelligence And IOT Based System For Monitoring And Detection Of Electricity Theft**, HARSHA R, Granted Patent Number: 2020101562

Webinars Organized

- ♦ **“Advances in IOT and its Application”** by Dr. Sanjay Pande M B, Professor, Head Dept. of CSE, GMIT, Davangere and by Dr. Mounesh Achari S, Associate Professor, Dept. of CSE, GMIT, Davangere on 10/06/2020.
- ♦ **“Verilog HDL and Opportunities in VLSI”** by Mr. Raja Bandi, Founder and Director of Lucid VLSI on 16/06/2020.
- ♦ **“Insights into Nanotechnology”** by Dr. Vaibhav Meshram, M.Tech (IITB), Ph.D (BITS), Professor & Head, Department of ECE, Dayanand Sagar University (DSU).Bangalore, on 06/08/2020.
- ♦ **“Research Trends In Nano Technology And Its Applications”** by Dr. Shiva Hullavarad, University of Alaska, USA on 13/08/2020.
- ♦ **“Impact of COVID-19 Pandemic on Women”**, Mrs Anjali Prakash Rao, Project manager – WIPRO, Mrs India Earth 2019 - Face of South, Mrs India Charity 2020, Mrs United Nations 2020 – finalist on 14/08/2020.
- ♦ **“Xilinx FPGA Design Flow”** by Vijendra V, Application Engineer, Corel Technologies Pvt. Ltd, Bangalore on 19/08/2020.
- ♦ **“Graduate Aptitude Test in Engineering (GATE) – Importance and Scope”** by Dr. Ramesh S, Professor and Head, Dept. of ECE, Dr. AIT, Bangalore on 26/09/2020.
- ♦ **"Stability through Nyquist Criterion"** by Dr. S.Narayana Iyer, Adjunct Professor, NMAMIT, Ph.D(IITM) in control systems on 11/11/2020.
- ♦ **“Role of Front End Design in VLSI”** by Dr. Satish S Bhairannawar, Dean III (Industry Institute Interaction), Chairperson (CEIR Startup Incubations) & Professor (ECE) SDMCET, CEO Crofting Technologies and Visiting Faculty IIIT Dharwad on 12/11/2020.
- ♦ **“GRE Test and Opportunities in Overseas Education”** by Mr. Philip Thomas, T.I.M.E, Bangalore on 25/11/2020.
- ♦ **“Advanced Energy Harvesting Techniques”** by Dr. Kaushil Pal, Professor, Mechanical and Industrial Engineering, IIT, Roorkee on 11/12/2020.

Workshop Organised

National Level Five Days Virtual FDP on “**Research Directions in Wireless Communication**” From 17/08/2020 to 21/08/2020 TEQIP 3 and ISTE Dr.AIT chapter.

Short Term Training Program on “**Image Processing System Generator and VLSI Chipscope Analyzer**” during 24/8/20 to 28/8/20 ISTE, Dr.AIT student chapter

Insight into C language and its concepts Programming, on 03.08.2020 05.08.2020

TEQIP Assisted Student Training on Future Skill Technology

- ♦ **Internet Of Things (IoT)** July- September 2020
- ♦ **Robotics and Automation** July- September 2020
- ♦ **Cyber Security Future Training** July- September 2020

Lecture and Talk Delivered Outside

Cryptography and its Applications by Dr.S Ramesh at Knowledge Research Academy, Coimbatore on 5th September, 2020.

Dr.Tanuja Patgar speaker at **The World of Wonderful Artificial Neural Network** organized by Progression Alas on 26th and 27th September, 2020.

Introduction to Machine Learning and Deep Learning by Ripal Patel at BVM Engineering College, Vallabh Vidyanagar, Gujarat on 3rd October 2020.

Reported By: Ms. Ripal Patel

Department of Information Science & Engineering

Publications

1. Dr. M V Vijay kumar **Artificial Minds with Consciousness and Common Sense Aspects**, January 2020 Reads DOI: 10.4018/978-1-7998-1754-3.ch069 In book: Robotic Systems, pp.1430-1449.



Won Best Paper Award

2. Divyashree N, Nandini Prasad K.S, **Cognitive Computing Technologies, Products and Applications**, International Conference on Evolutionary Computing and Mobile Sustainable Networks (ICECMSN 2020), **Springer** Conference , 20-21 February 2020 at Sir M. Visvesvaraya Institute of Technology, Bangalore, India.

3. Venkata Reddy P.S, Nandini Prasad K.S, Puttamadappa C , **Investigating Quality of Services Support for Real-time Applications in Mobile Ad hoc Networks**, The International Journal of Analytical and Experimental Modal Analysis, Volume XI, Issue VIII, August 2019, ISSN NO: 0886-9367, pp.1153-1158.

4. Jyothi S , Dr. Shylaja B. S, **Efficient Approach for Resource Provisioning to Manage Workload in Cloud Environment** International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181 IJERTV9IS060979, Vol. 9 Issue 06, June-2020,

5. Satish B Basapur, Vanishree Abhay, Neetha Natesh, **Credit Card Fraud Detection Systems (CCFDS) using Machine Learning (Apache Spark)**, International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 Volume: 07 Issue: 08 | Aug 2020

6. Shilpa Biradar, **Classification of ECG Signal**, International Journal of Recent Technology and Engineering (IJRTE), Volume 8 Issue 6 March 2020 ISSN:2277-3878|

7. Bhaskar R, Dr. Shylaja B S, **Dynamic Virtual Machine Provisioning in Cloud Computing Using Knowledge Based Reduction Method**, 5th International Conference on Computing in engineering & Technology, Springer AISC Series, Jan 9-11, 2020

TALKS DELIVERED

- ♦ **Dr. M V Vijaykumar** Faculty Development Programme on **Artificial Intelligence, Machine Learning and Robotics** during 6th to 10th July, 2020, at Vidyavardaka College of Engineering Mysore
- ♦ **Dr. B.S. Shylaja** **Data Security and Digital Forensics Opportunities and Challenges** on 7th July 2020 at Auro University School of IT Surat
- ♦ **Dr. Nandini Prasad K S** -Faculty Development Program **Emerging Technologies in Advanced Computing on Six Sigma** at EWIT, Bengaluru. on 29th August 2020

Webinars Organised

- ♦ **Recent Trends in Engineering: Industry Perspective** during 26th July to 30th July 2020
- ♦ **How to Track Top Related Placements, Higher Education & Technical Profile Building**, on 19 November 2020
- ♦ **Emerging Trends and Applications of Artificial Intelligence** during 10th to 14th, August, 2020
- ♦ **Deep Learning Models and Applications** on 18th July 2020
- ♦ **Applications of AI in Covid-19**, on June 18th, 2020
- ♦ **Open Source to Boost Your Career**, December 12, 2020
- ♦ **How to Track Top Related Placements, Higher Education & Technical Profile Building**, November 19, 2020
- ♦ **SETBACK to COMEBACK**, September 22, 2020
- ♦ **GRE Test Webinar & Insights to Overseas Education**, September 11, 2020
- ♦ **Data Science and Analytics** July 20, 2020
- ♦ **Introduction to Amazon Web Services** June 1, 2020

Dr. B S Shylaja and Dr.Nandini Prasad K S have been on the Jury of **SMART INDIA HACKATHON-2020** during **01/08 to 03/08**, Organised by MHRD Innovation Cell, GoI

PATENTS

1. **A System Method To Provide Efficient Recovery Of A Data Through An External USB NO** Status: Published Applicant: Dr. M V Vijayakumar
2. **A Single Assistive Device For Physically Challenged People - Deaf, Dumb and Blind** Status :Published
1. Applicant : Dr. B. S Shylaja, Pranam B S, Rahul Chavan, Dr. J. Anitha, Dr. Suma v, Dr. S Balmurghan.
2. **IOT Based Intelligent Shopping System Thereof** NO: 202041047145; Applicant:Dr. B. S Shylaja, Satish B Basapur, Rahul Chavan, Dr. J. Anitha, Dr. S Balmurghan; Status : Published



CONGRATULATIONS

Shilpa Biradar was awarded PhD from VTU on Feb. 2020, for her theses titled **Reliable Routing of Neural Network Based Characterized Data in Wireless Body Sensor Network**

Department of Medical Electronics

Publications

- ♦ Mala Sinnor, Shanthi K J **Survey on Filtering Techniques Applied to ECG Signal** International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-7S, May 2020
- ♦ Shruthi SM, Meghana H, Shanthi KJ, Madhu Nadiger **Automated Malarial Parasite Analysis** Journal of Seybold Report Volume 15, Issue 8, August-2020. ISSN:1533-9211
- ♦ Nayana R Shenoy, Anand Jatti, **Segmentation Of Thyroid Nodules Using Improvised U-Net Architecture** International Journal Of Innovative Technology &Exploring ISSN: 2278-3075, volume9,issue-8, pp.56-60, June2020.
- ♦ AP Manjunatha, H.S.Sheshadri and M.N.Giri Prasad , **Automatic Detection Of Tumor In Mammogram At The Early Stage** IJAER-2020, ISSN 0973-4562, Vol 15, 5(2020) pp.498-502.
- ♦ D K Ravish, Dinesh Nayak S and Sathish Kumar V. **Nonlinear Analysis of EEG for Detection of Seizure Onset Zone**, International Journal of Advanced Science and Technology, vol.29,No.05,pp.9255-9262, May 2020. ISSN: 2005-4238
- ♦ Dr. D K Ravish, Dinesh Nayak S and Sathish Kumar V. **Artificial Neural Networks Based Epileptic Seizure Prediction for Human Environmental Conscientiousness** Journal of Green Engineering, Vol. 10, Issue-10, pp.8643-8662, Oct 2020, ISSN: 1904-4720.
- ♦ Mrs.Renuka N, Dr.Shivaputra and Vindhya K , **Design and Efficient Implementation of Floating Point Multiplier using Pipelined Architecture** in International e-Conference ICRT-DIC-2020 , ISBN:9788192710471,pp.247-252
- ♦ Seema B S, Hamsa Rekha S.D , Sheetal N , **Voice Controlled Home Automation System**, International Research Journal of Engineering and Technology, ISSN:2395-0072, vol.07

TALKS DELIVERED

- ♦ Dr. Shanthi KJ **Brain Waves-EEG** on 23/9/2020 at ATAL FDP on Wonderful World of Sensors
- ♦ Dr. D K Ravish : **Wavelet Transform for Medical Signals** on 7.01.2020 Kollam at FDP on Biomedical Instrumentation and Signal Processing, T.K.M. College of Engineering, Kerala , Kerala.
- ♦ **Dr. D K Ravish : Effective Heart Disease Detection Based On Quantitative Machine Learning Technique** on 13.3.2020 at Muthayammal Engineering College, Rasipuram, Tamilnadu
- ♦ **Dr. DK Ravish: Biosignal Processing Using Neural Network** 23.5.2020 at Muthayammal Engineering College, Rasipuram,
- ♦ **Dr. DK Ravish: Advanced Physiological Signal Processing & Modeling for Neural Networks** 25.6.2020 at Dr. M.G.R. Educational and R Research Institute, Chennai
- ♦ **Dr. D K Ravish: Introduction to Electrophysiology & Bioinstrumentation** on 5.10.2020 at Arasu Engineering College, Kumbakonam, Tamilnadu

Webinars Organised

- ♦ **Fetal Monitoring System** Ms. Honey Joshi, Senior Trainer, Harvey Biomedicals, 27/5/2020
- ♦ **Familiarizing Biomedical Equipments**, Mr. Sumanth Bhat AD Instruments 3/6/2020
- ♦ **Career Options And Opportunities**, Mr. Renjith Philips, Pune, 10/6/2020
- ♦ **Coming out Stronger during Covid-19 Pandemic**, Mr. Avin Agarwal CEO. Cardioteck, Bangalore, 18/7/20
- ♦ **Developing Entrepreneurial Skill, Opportunities in Medical Electronics**, Dr. Bharath kumar Hegde, Autoyos, Bangalore, 26/12/20
- ♦ **Biomedical Applications of Additive Manufacturing**, Dr. Y Ravikumar, Associate Pro-

PATENTS

1. Vein Detector -Design Patent Granted June 2020
2. A Digital Dental Tape for Measuring the Occlusal Vertical Dimension of a Patient's face:

Patent Published Dec. 2020 Joint Research with RajaRajeswari Dental College, Bengaluru



Dr. DK Ravish
Delivering Talk at
TKM College of
Engg. Kollam, Kerala

Dr. DK Ravish
Delivering Talk at
MVJ College of Engineer-
ing Bengaluru



Hospital Internship

for 3rd year students at
BGS Institute of Medi-
cal Sciences & Hospitals
Bangalore during
6/1/2020 to 14/1/2020



Pooled Campus Placement for Biomedical Engineering students Feb. 3 rd & 4th 2020

This event was arranged by Force Biomedicals-Vishakapattanam, an association of biomedical engineers and organized by the department. The students from neighbouring states had also participated in the drive. Nearly 140 students had registered with 6 core companies participating for the drive.



Publications

- ◆ Dr. Bharathi. S **Development of a Model for Identification of Learning Standards in Distance Education using Data Mining and Meaningful Learning**, Journal of Interdisciplinary Cycle Research, ISSN NO: 0022-1945 Volume XII, Issue III, March/2020 ,Page No:1394
- ◆ Dr. Bharathi. **Incremental And Adaptive Fuzzy Clustering For Virtual Learning Environments Data Analysis**, JES, Journal of Engineering Science, Vol 11, Issue 4 , April/ 2020 ISSN NO: 0377-9254, Page No:49".
- ◆ Mrs. Shobha Rani B R Presented papers at International Conference on Recent Trends and Development in Information and Communication Engineering”23 rd October 2020.
- ◆ **Real Time Object Detection with Deep Learning Techniques,**
- ◆ **Real Time Helmet Detection for Riders Safety using Machine Learning**
- ◆ Dr. Indumathi S K presented a paper entitled **Smart Fertigation for Assuring Sustainability in Floriculture Industry** as a service for Industries National Conference on Machine Learning and National Environmental Research, 4th-5 th September 2020.
- ◆ Dr. Indumathi S K presented a paper entitled **Design of a Smart Fertigation System for an Environmental Sustainable Rose Farming** in 2nd International conference on ERIR’2020 on December-12.
- ◆ Dr. Indumathi S K **An IOT Based Irrigation System I Floriculture** IJIRT, UID-150553Vol 7, Issue 7, pg.No.288-292, December-2020.
- ◆ Dr.Dharani.N.V and Dr.S.K Indumathi **Free Space Optical Communication among Vehicles in Vehicular Ad hoc Networks** International Journal of Advanced Research (IJAR)-2020.
- ◆ Mrs. Shivaleela. **Rethinking An Education With Extended Reality** JETIR August 2020, Volume 7, Issue 8, 2020, ISSN-2349-5162
- ◆ Kavyashree N **Effectiveness of Fuzzy Logic Multiple Attribute Decision Making Approach in Six Sigma Methodology in Software Industry**, International Journal of Computer Trends & Technology ISSN: 2231-2803, 1.68, Issue 1 Jan 2020

Webinars Organized

- ♦ **National Educational Policy 2020** from 17.12.20 to 19.12.20 .
- ♦ **Online Teaching And Learning Tools** from 22-24 July-2020
- ♦ **Stress Management For Current Scenario** 20th June 2020.
- ♦ **Realizing the Business Potential of SAP** 10th July-2020
- ♦ International Panel Discussion on **Empowering Positivity** 1st August-2020.
- ♦ **Cyber Security An Overview** on 15th July-2020.
- ♦ **Machine Learning using Python** on 11th Jan 2020
- ♦ **V2X Technology An overview** on 15th August 2020

Dr.S.K Indumathi is awarded with **Best Teacher National Award** in the 2nd International conference on ERIR'2020 by IRDP group of Journals on 12th December

Lectures & Talks Delivered

Dr.Manjunatha Rao. L Dr.Bharathi.S. & Ms. Shobharani were Speakers for Online Faculty Development program on **Online Teaching And Learning Tools**, on all 3 days from 22-24 July, 2020

Dr.Bharathi S , **Artificial Intelligence - Ruling the Current World** on 8th May for UVCE, IEEE student Members , Karnataka

Dr.Bharathi S, **Artificial Intelligence - Ruling the Current World** on 11th May at Dayanand Sagar College of Engineering, Bengaluru and at 5th May at UVCE, Bengaluru

Dr.Bharathi S, **IOT and Applications**, at SJR College for Women on 15th Feb 2020.

Dr.Bharathi S, **Artificial intelligence: Transforming the Current World**, at Vivekananda Institute of Technology, Bengaluru. On 5-8-2020.

Dr.Bharathi S, **Artificial Intelligence & Current World** by Atal Bihari Foundation, Bilaspur, MP on 7-8-2020.

Dr.Indumathi.S.K & Dr. Dharani were Moderator/Speaker for the International Panel Discussion on **Empowering Positivity** Organized on 1st of August-2020 at Dr.AIT.

Reported by : Dr. Dharani. N.V

Publications:

- ♦ Dr. S.Baskaran, **A study on the effectiveness of fund management at Bangalore District & Bangalore Rural District Co-operative Bank**, Strad Research Journal Volume 7, Issue 7 July 2020.Pp 70-75.
- ♦ Dr. S. Baskaran **Optimal Portfolio Construction Through Sharpe Framework With Specific Reference to Constituents Stocks Of S&P BSE Sensex** International Journal of Mechanical and Production Engineering Research and Development (IJMPERD). Sep 04, 2020.
- ♦ Dr. S. Baskaran **Corporate Social Responsibility in India: A Road Map for Corporate Entities to Pay Back to the Society** African Journal of Business and Economic Research. ISSN: 1750-4554/E-ISSN: 1750-4562. Volume 15 Issue 3 Number 12 Dec. 2020.
- ♦ Dr. S. Baskaran **Corporate Social Responsibility in India: A Roadmap for Corporate Entities to Pay Back to the Society** organized by Dayananda Sagar College of Arts, Science And Commerce, Bangalore on 11th and 12th December 2020.
- ♦ Dr. Susheela Devi B Devaru **Consumer Behavior Towards Recycling And Eco-Friendly Products At Bangalore** International Journal of Scientific Research in Science, Engineering and Technology. ISSN: 2395-1990, E-ISSN: 2394-4099, Volume 5, Issue 11, October 2020.
- ♦ Dr. Susheela Devi B Devaru **NFC Based Data Monitoring and Medication scheduling for Patients in Hospitals** Materials Today Proceedings – Elsevier. MATPR-D-20-11079.
- ♦ Dr.Rajeshwari R R **A Study on the Impact of Demographic Factors on The Self Confidence Level of Management Students** International Journal of Creative Research Thoughts (IJCRT) ISSN-2320-2882, Volume 8, Issue 11.
- ♦ Dr.Leela M H **Efficient Market Hypothesis on Selected Healthcare Stocks Using Run Test**, International Journal of Creative Research Thoughts (IJCRT), Vol. 8, Issue 8, August 2020, ISSN: 2320-2882, pp. 3651 – 3667,

Lectures /Talks Delivered

Dr. S.Baskaran, FDP webinar: **Industrial Finance** during 15th to 24th July 2020 at Coimbatore Productive Council (CPC)

Dr. Susheela Devi B Devaru: **Entrepreneurship Development** on 23/04/2020

Channabasaveshwara Institute of Technology, Gubbi, Tumkur

Dr. Leela M H: **Educational Philosophy and Strategy to Meet needs of Industry 4.0**, A HEF-IBA Conference held on 17th January 2020 at Indus Business Academy, Bangalore.

Industrial Visits



Unibic Foods India Private Limited, Bengaluru on 04th January 2020



Featherlite Products Pvt. Ltd. Bangalore on 13th March 2020

Dr. Rajeshwari R R was awarded Ph.D for her thesis on **Impact of Emotional Maturity on Stress and Self Confidence of Management Students in Bangalore Region**

From Bharathiar University, Coimbatore.

Webinars Organised

Dr. Balamurugan **Entrepreneurial Opportunities for MBA Graduates**

Mr. Kumail Kirmani **Marketing: Then: Now: Next** on 10th March 2020.

How to Write Research Papers and Publish in International Journals on 9th July 2020.

Competitive Strategies for Business Sustainability on 22nd July 2020.

Opportunities in Real Estate Industry for Academicians and Business Aspirants on 25th July 2020.

Opportunities and Challenges for Sales and Marketing in FMCG Post COVID 9th September, 2020.

Retailing Landscape in FMCG Sector on 16th October 2020.

Sensitisation of Employees on POSH Act 7th December, 2020.

Karnataka Industrial Policy-2025- A Sensitization Program for Women and Prospective Entrepreneurs 21st November 2020.

Sculpting Yourself for Personal Development 29th September 2020

Strategies for Writing the Research Paper in Top Indexed Journals on 12th December, 2020.

Dream a Startup – Discover, Dream, Design, Deliver on 26th September 2020

CONGRATULATIONS

Dr. Rajeshwari R R was awarded Ph.D for her thesis on **Impact of Emotional Maturity on Stress and Self Confidence of Management Students in Bangalore Region**

From Bharathiar University,
Coimbatore.



Reported by: S. Kavitha

Publications

Dr. C.E. Nanjundappa,

- ♦ **Penetrative Thermomagnetic Convection in a Micropolar Ferrofluid Layer via Internal Heating**, Journal of Experimental & Applied Mechanics, Vol-11(22), 2020, pp: 30-50.
- ♦ **Buoyancy-Surface Tension Driven Forces On Electro-Thermal-Convection In A Rotating Dielectric, Fluid-Saturated Porous Layer: Effect Of Cubic Temperature Gradients**, SN Applied Sciences, Vol 2(2), 2020, pp: 1-12.
- ♦ **Internally Heated Gravity Driven Convection In A Saturated Porous Layer Dielectric Fluid**, AIP Conference Proceedings, Vol. 2297(1), 2020, pp: 20030-1 to 20030-10.
- ♦ **Boundary condition effects on ferro-thermal-convection in a ferrofluid-saturated porous layer with uniform volumetric energy sources**, AIP Conference Proceedings, Vol. 2297(1), 2020, pp: 20017-1 to 20017-10.
- ♦ Dr. C.E. Nanjundappa and Ms. Aswini R, **Quadratic Density And Viscosity Variations On Electro-Thermal-Convection In A Dielectric Fluid-Saturated Porous Layer**, AIP Conference Proceedings, Vol. 2297(1), 2020, pp: 20032-1 to 20032-8.
- ♦ Dr. C.E. Nanjundappa and Ms. Pavithra, **Ferro-Thermal-Convection In A Micropolar Ferrofluid Saturated Porous Layer And Submitted To A Robin Thermal Bounadry Condition**, AIP Conference Proceedings, Vol. 2297(1), 2020, pp: 20028-1 to 20028-10.
- ♦ Dr. C.E. Nanjundappa and Ms. Savitha YL, **Penetrative Ferro-Thermal-Convection in High Porosity Anisotropic Porous Layer Via Internal Heating**, AIP Conference Proceedings, Vol. 2297(1), pp: 20008 - 20011.
- ♦ Dr. C.E. Nanjundappa and Ms. Bhavya S, **Internally Heated Darcy-Brinkman-Benard Ferro-Thermal-Convection In A Ferrofluid Saturated Porous Layer : The Influence Of Boundaries**, AIP Conference Proceedings, Vol. 2297(1), 2020, pp: 20009-1 to 20009-13

Dr. R. Murali,

- ♦ **Domination and s-path domination in brick product graphs of some odd cycle graphs**, Waffen-Und Kostumkunde Journal, Vol. 11(2), 2020.
- ♦ **Domination And S-Path Domination In Some Brick Product Graphs**, Malaya Journal Of Matematik, Vol. 8(1), 2020, pp: 254-257.
- ♦ **Edge Domination In Some Image Graphs**, Gedrag And Organisatie Review, Vol. 33 (2), 2020, pp: 611-620.
- ♦ **Laceability Properties In Edge Tolerant Corona Product Graphs**, TWMS Journal Of Applied And Engineering Mathematics, Vol. 10(3), 2020, pp: 734-740.

Dr. R. Murali, **Performance Evaluation Of Chaotic Spreading Codes in Massive MMO OFDM System**, Indian Journal of Science and Technology, Vol. 13(42), 2020, pp: 4374-4385.

Dr. R. Murali and Dr. Sunitha Kulkarni, **Star-Rainbow Coloring in Some Corona Product Graphs**, Journal Of Physics: Conference Series, No.1597, 2020, pp: 1-8.

Dr. B. Sooryanarayana

- ♦ **Mod Difference Labeling Of Some Classes Of Digraphs**, Malaya Journal of Matematik, Vol. 8(1), 2020, pp: 32-36.
- ♦ **Non-neighbor Sum Connectivity Index and ABC Index**, Acta Universitatis Matthiae Belli, Vol. 1, 2020, pp: 43-58.
- ♦ **Non-Neighbor F Index And Randic Index**, International Journal of Applied Graph Theory, Vol. 4(1), 2020, pp: 29-49.
- ♦ **Some Degree Based Topological Indices Of Transformation Graphs**, Bulletin of the international mathematical virtual institute, Vol. 10(2), 2020, pp: 225-237.
- ♦ **Accurate Alliances in Graphs**, Journal Of Advanced Research In Dynamical & Control Systems, Vol. 12(4), 2020, pp: 203-215.
- ♦ **On Radio Graceful Labeling of a Graph**, International journal of Advanced Science and Technology, Vol. 29(6), 2020, pp: 108-114.
- ♦ **Zagreb Indices at a distance 2**, Journal of Math. Comput. Sci, Vol. 10(3), 2020, pp: 639-655.
- ♦ **Chromatic Number of Transformation Graphs of a Path**, International Journal fo Grid and Distributed comuputing, Vol. 13(1), 2020, pp: 680-686.
- ♦ **On the Upper Security Number Of A Graph**, Communications In Optimization Theory, 2020, Article ID 12.
- ♦ **Neighborhood Resolving sets of a Graph**, International Journal of Applied Engineering and Research, Vol. 15(8), 2020, pp: 778-782.
- ♦ **Wiener Polynomials and Wiener Indices of the Transformation Graphs**, Advanced studies in contemporary mathematics, Vol. 30(4), 2020, pp: 479-494.
- ♦ **Defensive Alliance Difference Secure Sets of A Path**, Advances in Mathematics: Scientific Journal, Vol. 9(12), 2020, pp: 1-11.
- ♦ Dr. Jayalakshmi M, **Neighborhood Pseuso Chromatic Polynomial Of Graphs**, International Journal of Applied Engineering Research, Vol 15(8), 2020, pp: 817-822.
- ♦ Dr. Jayalakshmi M and Dr. Padma M M, **Variety of Rational Resolving Sets of Corona Product Of Graphs**, Advances in Mathematics: Scientific Journal, Vol 9(10), 2020, pp: 8367-8374.
- ♦ Dr. Jayalakshmi M and Dr. Padma M M, **K-Local Resolving And Rational Resolving Sets Of Graphs**, International Journal of Engineering Sciences and Management , Vol 2 (2), 2020, pp: 15-20.

Dr. Jayalakshmi M and Dr. Padma M M, **Variety Of Rational Resolving Sets Of Power Of A Cycle, Test Engineering And Management**, Vol. 83, 2020, pp: 4162-4167.

Dr. Nagarathnamma H, **Effects of Variable Internal Heat Source And Variable Gravity Field on Convection in A Porous Layer**, Malaya Journal of Matematik, Vol. 8(3), 2020, pp: 915-919.

Dr. Nagarathnamma H, **Combined Impact Of Variable Internal Heat Source And Variable Viscosity on The Onset of Convective Motion in A Porous Layer**, Malaya Journal of Matematik, Vol. 8(3), 2020, pp: 973-976.

Dr. Nagarathnamma H, **Marangoni Convection In Superposed Fluid And Anisotropic Porous Layers With Through flow**, Malaya Journal of Matematik, Vol. 8(3), 2020, pp: 845-851.

Dr. Shivaprasanna, **H-Ricci Soliton In Three-Dimensional (ϵ, Δ) -Trans-Sasakian Manifold**, Waffen und Kostumkunde Journal, Vol.11(3), 2020.

Dr. Shivaprasanna, **H-Ricci Soliton On F-Kenmotsu Manifolds**, Journal of Physics, Vol.1543, 2020.

Dr. Shivaprasanna, **CR-Sub-Manifolds of (ϵ, Δ) -Trans-Sasakian Manifold Admitting Generalized Symmetric Metric Connection**, Mathematical Combinatorics, Vol.3, 2020, pp: 56-64.

Dr. Shivaprasanna and Prabhavati G Angadi, **H-Ricci Soliton In A-Para Kenmotsu Manifolds**, Journal of Physics: Conference Series, Vol. 1597(1), 2020.

Dr. Shivaprasanna and Prabhavati G Angadi, **Ricci-Yamabe Solitons on Submanifolds of Some Indefinite Almost Contact Manifolds**, Advances in Mathematics Scientific Journal, Vol. 9(11), 2020.

Webinar Organized

- ◆ Domination Energy in Graph on 11th September 2020.
- ◆ A Global Climate Modeling on 22nd September 2020.
- ◆ Mathematics and Mechanics of Elastic Bodies Described by Novel Constitutive Relations: a tale stories on 28th September 2020.
- ◆ Fourier Series, Fourier Transforms and Wavelets on 10th September 2020.
- ◆ Mathematical Modeling and Physical Reality on 14th September 2020.
- ◆ Discrete Math and Computing: The aesthetic interplay on 15th September 2020.

Talks Delivered :

Dr. B. Sooryanarayana

- ◆ **Entitled Locating Dominating Sets And Its Applications** on 27th Sept. 2020 at a webinar on Recent Trends And Applications Of Graph Theory at Government Degree College, Pithapuram, Andra Pradesh
- ◆ **Graph Theory Applications for Computer Science Engineering Students** on 10th October, 2020 at Sapthagiri College of Engineering Bengaluru

Dr. B. Sooryanarayana,
Received RULA Research
Leadership Award for the
year 2020 under the cate-
gory of "Innovative Re-
searcher in Graph Theory"
at a function held at Trichy
on 26th January 2020



Padma M M, Awarded with
Doctoral Degree from VTU
Belgavi on 8th February 2020
under the guidance of Dr.
Jayalakshmi M



Sunitha Kulkarni Awarded
with Doctoral Degree from
VTU Belgavi On 8th Febru-
ary 2020 under the guidance of
Dr. R Murali



Reported by: Dr. Jayalakshmi M

Department of Chemistry

Publications

Dr. Jahagirdar. A. A, **MgTiO₃:Dy³⁺ Nanophosphor: Its Structural Analysis And NUV Excited Photoluminescence Studies For Solid State Lighting Applications**. Elsevier, Sensor International VOLUME 7, ISSUE 8, 2020, ISSN: 0039-2049, 414-433

Dr. Jahagirdar. A. A, **La₁₀Si₆O₂₇:Tb³⁺ Nanomaterial; Its Photocatalytic And Electrochemical Sensor Activities On Disperse Orange And Fast Blue Dyes**, Elsevier B.V. on behalf of KeAi Communications Co., Ltd. Vol. 2 (2020) 100076

Dr. Shruthi. B, **Dielectric, AC Conductivity and Electromagnetic Interference Shielding Behavior of Graphite oxide/polyvinylpyrrolidone Composites**, SN Applied Sciences, Springer International Publishing, Volume 2, Issue 4, Pages 1-5, 2020

Dr. Shruthi. B **Structural, Dielectric and Magnetic Studies on Solyaniline-Decorated Structural, Dielectric and Magnetic Studies on Polyaniline-Decorated Ni_{0.5}Cu_{0.5}Fe₂O₄ Nanoferrites for Electromagnetic Interference Shielding Applications**, SN Applied Sciences, Springer International Publishing, Volume 2, Issue 4, Pages 1-5, 2020

Dr. S. Soundeswaran, **Fabrication and Characterization of GFRP Composites by Using Twin Roll Technique**, Jour of Adv Research in Dynamical & Control Systems, Vol. 12, No. 1, 2020

Dr. S. Soundeswaran, **Survey on the Intelligibility of Dysarthric Speech**, Journal of Xidian University VOLUME 14, ISSUE 6, 2020 ISSN No:1001-2400

Dr Bhagyalakshmi was awarded Ph.D. from VTU on 8th Feb 2020

Webinars Organised

- ♦ Application Of Green Chemistry Towards Sustainable Technology on 27th August 2020.
- ♦ Advance Materials on Lithium ion Batteries on 18th November 2020

Dr Bhagyalakshmi was awarded **Best Poster Award** for the Poster Paper titled **Synthesis Of Zn/Ca Mixed Ferrites From Waste Egg Shell As Source Of Calcium** In the International Conference – Winter School 2020 on Frontiers in Material Science held at JNCASR during 07-11 December 2020.

Reported by : Dr. Shruthi B

49

Department of Humanities & Social Sciences

Publication

Dr.T.R Shashipriya **Principles In The Incarnations Of Lord Vishnu : An Outlook** Research Scholar-An International Refereed e- Journal of Literary Exploration Vol. 8 , IV Nov 2020, ISSN 2320-6101

Padma S V **P Lankeshara Kallu Karaguva Samaya Mathu Ithara Kathegalu** Dravidian Language vis a vis Indian culture- A Literary Exploration

Somalatha B **Social Media and Constitution**, International Journal of Science and Research Volume-9 issue 12, ISSN 2319-7064

Geetha H, **ESA Methodology In ELT For Technical Education**, International Journal Of English: Literature, Language & Skills Volume 8 Issue 4, January 2020 ISSN 2278-0742,

Prathiba D S **DAY- Dad of a lonely Princess**, Research Scholar-An International Refereed e- Journal of Literary exploration ISSN 2320-6101, Volume 8 Issue 1, February 2020

Webinars Organized

Kannada Muktha Jnana-Tantrajnanada Prachalitha Belavanigegalu - 12th August, 2020, Beluru Sudarshana, Adviser (e- Aadalitha), Government of Karnataka.

Perspectives on Intellectual Property Rights , 25th November, 2020, Dr. V Sudesh, Professor, University of Law College, Bangalore University

Lectures/ Talks Delivered

Geetha H: Grammar and Vocabulary , 01 Dec, 2020 at Sri Gangadhareshwar High School

Value Based Education and Awareness Program at Government Primary School, Thamasandra village, Kanakapura, 7th March 2020 in Association with NSS Unit

Humanitarian League (HSS Department) in collaboration with NSS Unit of Dr. Ambedkar Institute of Technology, had taken an initiative to conduct one day programme on Value Based Education and Awareness for Government School Children and Stree Shakti Sangh in the mark of Women's day celebration at Thamasandra village, on 7th March 2020.

Volunteers were given different tasks, like cleaning the school campus, interaction with school children in various activities related to health awareness, language importance and soft skill training programs that encourage their creative skills in making greeting cards, poster making, and basic vocabulary through power point presentation, puzzles, physical activities and many more. And others involved with women's with holistic interactions and encouraged them to participate in different activities.



Welcome song by the school children, and followed with welcome speech by the school head master.



After refreshment, here starts the real spark of our Dr.AITians.



A Sparrow-

Soliloquy by Geetha H published in the daily 'Deccan Herald' on 02 December, 2020

Wish! I had wings to fly away to a place where I can find solace. Alas! That's not possible for I am bound by responsibilities

Reported by : Dr. Shashipriya

July– Dec. 2020 exams, 248 faculty & students have successfully completed various courses in academic domain. Few of them have excelled in their performances.

A
C
H
I
E
V
E
R
S

Dr. Gangadhar N, Asst. Prof., Mech. Engg. Dept.,

Gold Certificate and topper in two courses

1. **Advances in Welding & Joining Technologies**

2. **Processing of Polymers & Polymer Plastics**



Nayana R Shenoy,
Asst. Prof. Medical
Electronics Dept.,

Gold Certificate
and topper in **Digi-
tal Image Process-
ing**

Sarvamangala SP Asst. Prof.
IEM Dept. Gold Certificate:

Work System Design

Dr. Jayalakshmi M Associate Prof. Mathematics Dept.

Gold Certificate in **Matrix Analysis with Applications**



Dr. Dharini NV Asst. Prof.
MCA Dept.

Topper: **Internet of Things**



M RATHIKA, Asst. Prof. Mech. Engg. Dept

Gold Certificate: Engg. Drawing & Computer Graphics



Dr. Shilpa KC

Asst. Prof. ECE Dept.

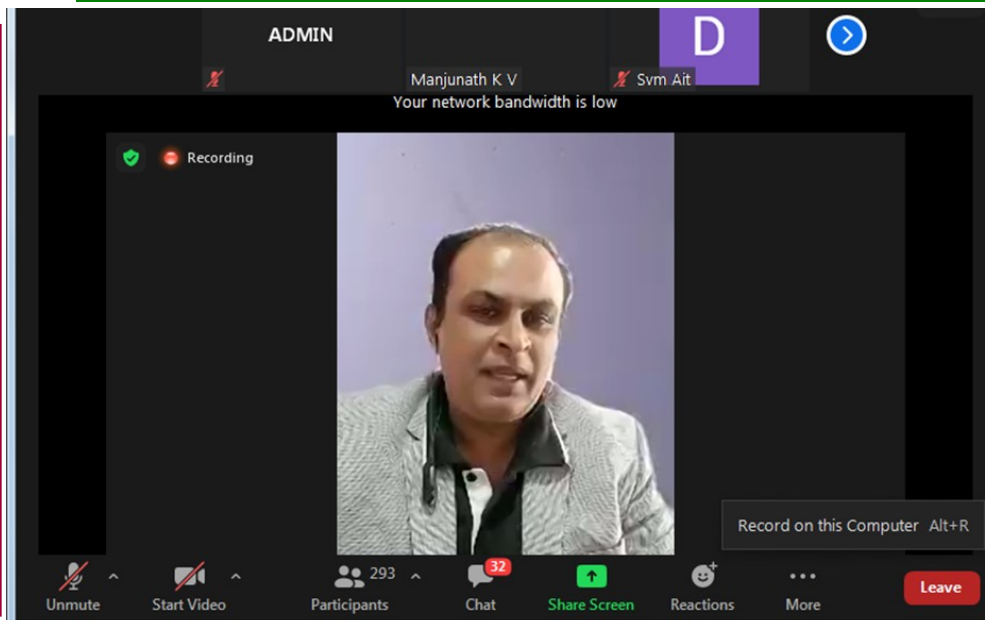
Topper : Microelectronics

Online Alumni Meet 2021

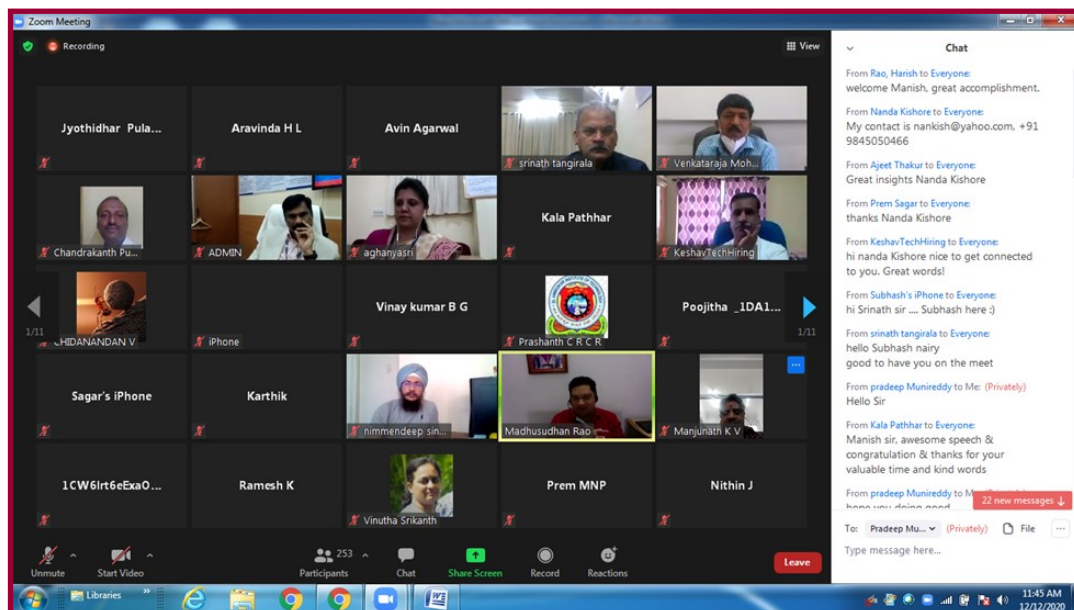
The online Alumni Meet 2020 on 12th Dec.2020 was a great experience, as many alumni joined from overseas. The initial registration exceeded 1000 in number, the meet saw a number close to 400 participants throughout the meeting, as they had the option to join anytime during the meeting, which lasted for 3 hrs. starting from 10.00 am until 1.00 pm.

The Alumni coordinator Dr. Shanthi KJ greeted the Alumni and Principal Dr. C Nanjundaswamy welcomed the Alumni. Principal highlighted the growth of the institute over the 40 years while inviting the alumni to be the brand ambassadors and spread the good will of the institute.

The Chief Guest of the day was, Mr. Nanda Kishore, CSE, 1993 batch. Nanda Kishore Vice President Global Delivery Head – Retail, Consumer Goods, Transportation and Media at Wipro Technologies



He Observed the infrastructure developments and up-gradation that would have happened over the years. Remembered the contribution of all the teachers. He specifically had this for the fellow juniors that “Learning is there throughout life, there is never a dull day!”. Also suggested to teach the definition of “Good” in terms of choosing the right path. He expressed his view on going for exchange programs at broader level that leads to good exposure. He also invited alumni to offer guest lecture to meet student needs on learning technical updates.



Few of the alumni spoke on the occasion and shared their experiences with few good word

Mr. Jyothidhar Pulakunta, ISE 2007 batch, Cruise -San Francisco-Engineering Manager, shared his college days' memories. Motivated fresh graduates about upcoming opportunities during this pandemic.

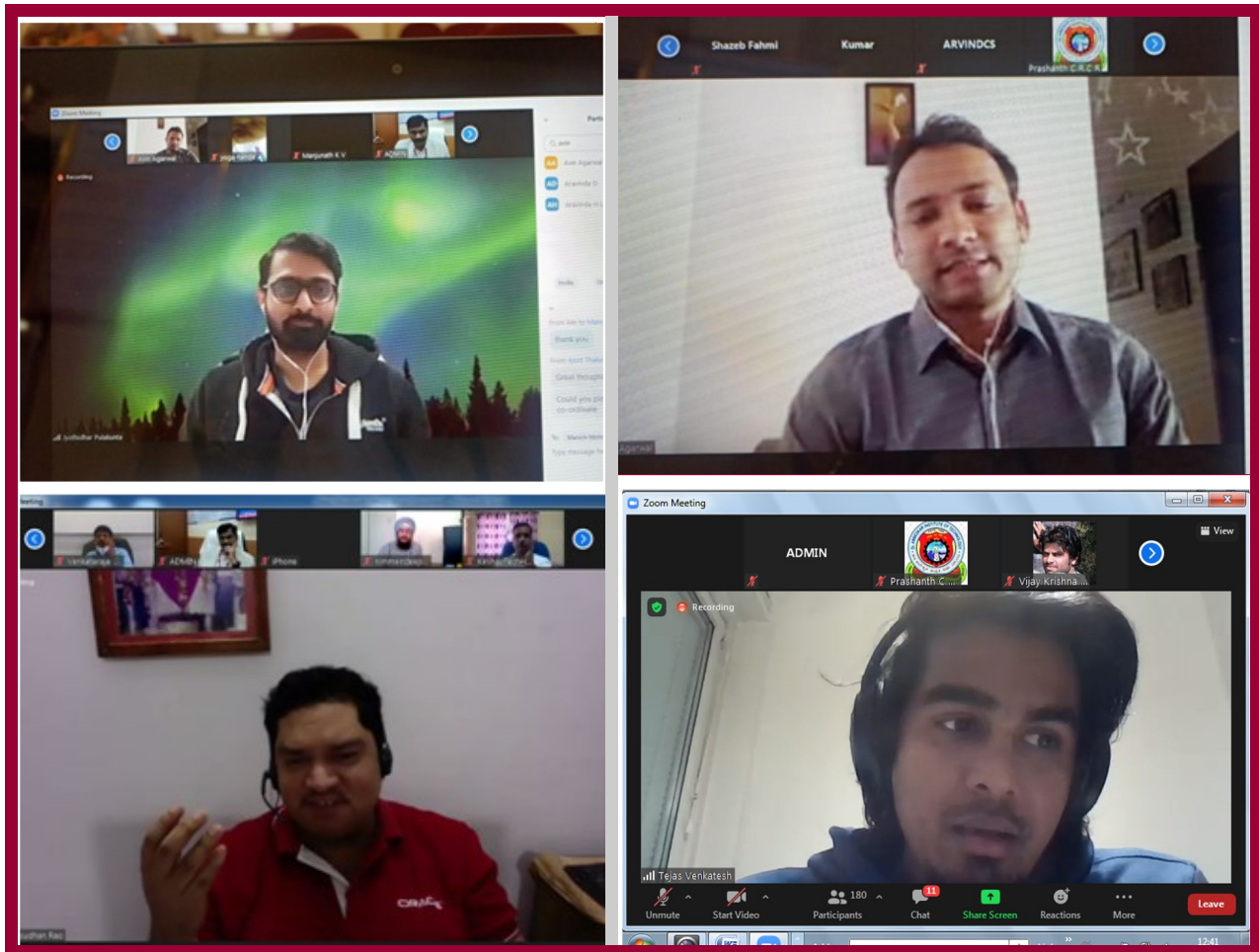
Mr. Avin Agarval, ML 2006 batch an entrepreneur, CEO Cardiotrack , shared his positive views about the dept. which helped him build his career. Also suggested key learning notes such as keep quantifiable goals and clear vision and never stop up skilling.

Mr Premkumar Melukote, ECE 2000 batch, Senior Engineering Manager –Wireless Device Validation Intel Corporation , said Dr.AIT students are no different from those of IIT or NIT. Shared his thoughts as to develop positive attitude.

Mr. Sagar Sen, CSE 2003 batch, Senior Research Scientist, secure IoT Systems SINTEF Digital Oslo-Norway mentioned that learning foundation was great at Dr.AIT. Spoke on the research experience and suggested to have long term and sophisticated thinking for a researcher.

Mr. Madhusudan, TCE 1995 batch, Cloud architect at Oracle has continued relationship with the dept, by giving technical sessions. He recommended, young minds to think as future entrepreneurs as Govt. is encouraging startups.

Mr. Raghavendra, Mech. 1991 batch, KAS officer, A proud alumni, who recalled the advice of the founder Late Sri M.S. Jayaprakash Narayan to choose his career in civil services. He advised youngsters to contribute towards development of the nation.





Mr. Manish Mishra- Alumni EEE , IES – Ministry of Skill Development & Entrepreneurship, narrated his experience of clearing the competitive examination and making it to the government services.



The teachers greeted their dear Alumni and they exchanged pleasantries through chat messages. Finally the Principal spoke about how the Alumni could make a contribution in taking DR. AIT to greater heights and passed the good will message from the management to the Alumni community. The coordinator thanked the Alumni for responding to the call and being there spending time with their alma mater. And closed the meeting with a note to host the meeting physically in 2021 keeping up with the tradition.

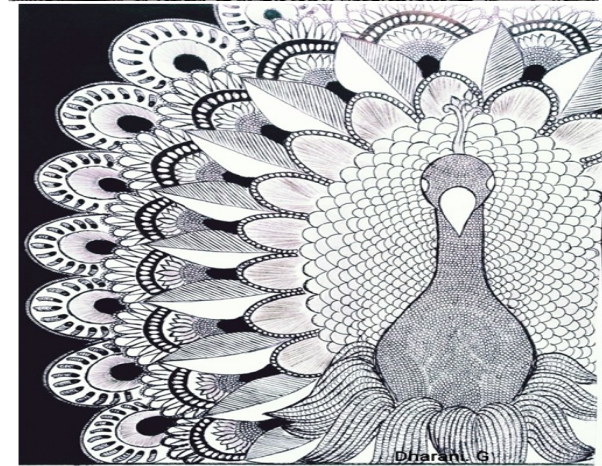
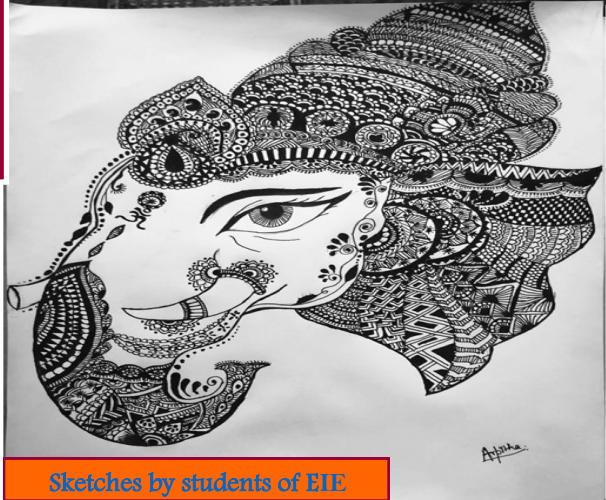
SPORTS

Annual Athletic Meet: 22, Feb 2020



VTU– Bengaluru Central Zone Kho-Kho Men Tournament 2020 was held at Dr. AIT PLN grounds during 27th Feb. Chief Guest was Sri Aprameya K A ,National Kho –Kho Player.





Sketches by students of EIE



EDITORIAL :

CHIEF EDITOR : Dr. C NANJUNDASWAMY, Principal

EDITOR : Dr. SHANTHI K J , HOD Medical Electronics

DR. AMBEDKAR INSTITUTE OF TECHNOLOGY, OUTER RING ROAD MALLATHALLI BANGALORE-56

PH. NO. 23218534,23211232, FAX: 080-23217789 WEBSITE www.drait.edu.in