

Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

# **DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING(ETE)** Faculty Achievements

### Awards received

- 1. Prof.Raghunandan G.H has been awarded as "Best Professor for Electronics and Communication Engineering" by Karnataka Excellence Awards-2021 held on 6.11.2021 at RavindraKalakshetra, Bangalore.
- 2. Dr. Banuprakash .R, for his successful completion of Ph.D. defense titled "Design and Analysis of Microstrip Patch Antenna for Multiband and Reconfigurable Performances" on April 2021.
- **3. Dr Sumathi M S** ,Assistant Professors , ETE , received her **doctoral degree** at 20<sup>th</sup> Annual Convocation 2022, on 3<sup>rd</sup> March 2021 at VTU Belagavi
- 4. Prof.Mallikarjuna Gowda C P, Aishwarya V, Jayashree N and Aishwarya Rao, received an certificate of honour, Best Paper award Gold category "Performance of PSO for Spectrum Allocation in CRN", International Conference on Multidisciplinary Technologies & Challenges in industry-4.0 (ICMTCI-4.0) on Digital Platform, organized by East Point College of Engineering and Technology, Bengaluru, held on 18th -19th September 2020.

## **Book published**

 Prof.Raghunandan G H Authored Textbook on Analog Circuits, Published in June 2021 by Infinite Learning Solutions, ISBN:978-81-948862-0-4.

### **Patent Filed:**

- Prof.Raghunandan G H, Prathibha N has filed a "Design application patent". The Design Accepted and Published, Journal No is 25/2021 and Journal Date is 18/06/2021.
- Prof. Banuprakash R, Assistant Professor, Dept. of ETE, and Dr. Hariprasad S
  A, Director, FET, Jain University, have published patent titled "A Novel Compact
  Printed Antenna loaded wth Hexagonal Complementary Spit Ring
  Resonators(HCSRR) for penta band wireless applications" in Indian Patent

Avalahalli, Doddaballapur Main Road, Bengaluru – 560064 Office Journal no 45/2020, with patent application number 202041047659 , on

06/11/2020.

- 3. Prof. Siddiq Iqbal and Prof. Banuprakash R, Assistant Professors, Dept. of ETE, have published patent titled "Catastrophe detection and smart rescue system utilizing android smart phone with real-time location tracking" in Indian Patent Office Journal no 47/2020, with patent application number 202041049454, on 20/11/2020.Departmental Co-curricular Activities.
- 4. Prof. Saritha I G Assistant Professors, Dept. of ETE has filled a patent on "Smart hearing system for deaf and dumb" on 05/10/2020.
- 5. Prof. Banuprakash R and Prof. Siddiq Iqbal, Assistant Professors, Dept. of ETE, have published patent titled "COVID 19 Thermal Screening using Smart Helmet" in Indian Patent Office Journal no 37/2020, with patent application number 202041036651, on 11/09/2020.

# **Research Proposals submitted**

1. A Research proposal to "SERB, Delhi" was submitted on 9-6-2021, and the title of the project is "Design and Fabrications of a Novel Functionalized Graphene based Supercapacitor for Electrical Battery less Vehicles and Space Applications".

Principle Investigator:Dr. Raju Hajare, Associate Prof &HoD of ETE

**COPI: Suresh Kumar** 

### **Consultancy:**

- 1. Dr. Raju Hajare and Prof.Mallikarjuna Gowda C.P, Dept. of ETE, received consultancy amount of Rs. 10,000/-(Rupees Ten Thousand Only) on 19th July 2021, for the work carried out on variable power supply design from the subsidiary of REJYO CONNECT, Bengaluru.
- Prof.Prathiba.NandProf.Raghunandan G.H, Dept. of ETE, received consultancy amount of Rs. 2500/-(Rupees Ten Thousand Only) on 13th July 2021, for the work carried out on developing a website for VigneshVidyuthControls,Peenya,, Bengaluru.
- Prof. Banuprakash R, Dept. of ETE, has completed a consultancy work of "Testing RF filters using VNA" worth of Rs1200/- on 20.11.2020.



Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

4. **Dr. Banuprakash .R,** Assistant Professor and **Mr. Srinivas Murthy .B**, Instructor, of ETE dept. have completed the consultancy work of testing of Microstrip filter using VNA at R&D, Dept. of ETE, for the client PDIT, Bellary, of worth **Rs. 1600/-**

# Highlights of Events conducted at Dept. of ETE:

#### Skill Based Training(Open Course)

Department of ETE conducted open course on **"Advanced Networking and IOT Applications"** and **"MATLAB Programming on Engineering Applications"** from 1.6.2021 to 5.6.2021 for all the branches of BMSIT&M.

The main Objective of the open course "Advanced Networking and IOT Applications" are to impart knowledge on Advanced concepts of Networking and IOT applications using Various Tool boxes like Packet tracer, Firewalls, IOT tool boxes and 5G networks. The course imparts knowledge on usage of Networking and security tool for IOT applications. And also the objective of the course "MATLAB Programming on Engineering Applications" is to introduce fundamental programming concepts using MATLAB, Various Tool boxes like signal processing, neural network, machine learning tool boxes. The course imparts knowledge on usage of MATLAB tools for signal analysis

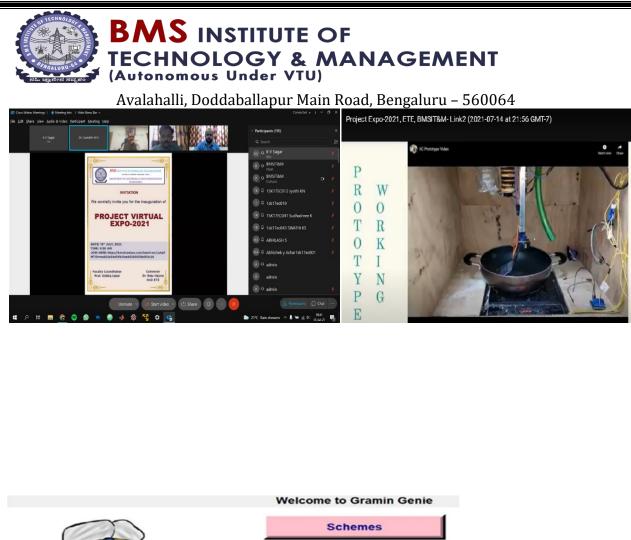


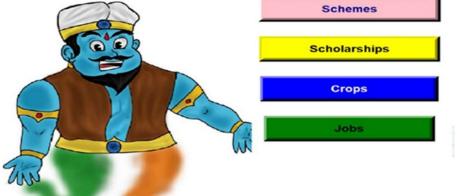


**Open course** 

#### **Project Virtual Expo-2021**

The Project Virtual Expo-2021, held on the 15th of July, went on to be an extremely successful event, with over 80 groups consisting of around 280 students participating from various corners of Karnataka. The Virtual Expo 2021 was created with the intent of allowing students to explore and present their creativity and skill set. The current pandemic is a huge hindrance in the creative flow of students, but this event proved to us that innovation never stops. Hence we took this event online to enable students from any city to be able to participate and showcase their hard work.







The event was coordinated by Prof.Siddiq Iqbal,. The Expo was filled with enthusiasm and excitement from the students and judges alike. Total prize money for the event was Rs.19,000/-. • 1st prize-Rs.10,000/-, was awarded to the project "iChef- The Smart Kitchen" by ShivamVaish& team from BMS College of Engineering, Bengaluru. • 2nd prize-Rs.5,000/- was awarded to the project "Gramin Genie- A smart kiosk" by Rakshith N V & team from Dayanand College of Engineering, Bengaluru. • Two more prizes for innovative projects-Rs.2,000/- each was also awarded.



Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

# Academic year 2021-22

# Faculty Achievements

### **Grants received for Research Proposals**

- 1. A proposal for VTU RESEARCH GRANTS SCHEME -2021 with title, "An Automated Support System for Diagnosis of Cervical Cancer for the mass screening and timely diagnosis" is approved for sanction of 11 lakhs of amount towards this proposal.
  - a. Principle Investigator: Dr. Seema Singh, Professor and Dean External Relations, Dept. of ETE.
  - b. CoPI: Prof Chandraprabha, dept. of ECE
  - c. Dr Roopesh, Medical Director
- 2. Certificate of Recognition

Dr. Raju Hajare, HoD, ETE has been awarded outstanding supervisor by INTEL for guiding the students team in Innovate FPGA Design contest-2022.

### **Research Proposals submitted**

 A Research proposal titled "Innovation Centre for Autonomus Systems" with an amount of Rs 32,00,000/- was submitted to "VGST" under CISEE scheme during March 2022 Principle Investigator: Dr. Raju Hajare, Associate Prof &HoD of ETE

COPI: Dr. Prabhakar Mishra, Adjunct Professor, Dept. of ETE

2. A Proposal to conduct FDP programme on "Electric Vehicles (EV)" with an amount of Rs 2,00,000/- was submitted to "VGST" during March 2022 Principle Investigator: Dr. Raju Hajare, Associate Prof & HoD of ETE
 COPI: Dr. Prabhakar Mishra, Adjunct Professor, Dept. of ETE

Patent Filed:



Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

 Prof.Raghunandan G H, Ninaada M S, Keerthana R has filed a patent "An Automated System And Method For Repelling Animals" on 5/10/2021, Application number 202141045165, C.B.R Number: 37253.

#### **Faculty Awards:**

- Dr. Mallikarjuna GowdaC P received his doctoral degree for the Title "Design and Investigation of Channel Assignment Techniques in Cognitive Radio System", at 21st Annual Convocation 2022, on 10.3. 2022 at VTU Belagavi.
- 2. Dr. Thejaswini S received her doctoral degree for the Title "A Novel Approach for Effective Emotion Recognition using Neural Networks & EEG" under the guidance of Dr. K M Ravikumar, Director, Oxford College of Engineering, Bengaluru, at 21st Annual Convocation 2022, on 10th March 2022 at VTU Belagavi
- 3. Dr. Raghunandan G.H for his successful completion of Ph.D. defense titled: "Design and Development of Energy Efficient Hierarchical Routing Scheme using Data Aggregation and Time Synchronization for Wireless Sensor Network".

#### Memorandum of Understanding

1. MoU's signed with BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT BENGALURU, INDIA. & LA UNIVERSITA' DEGLI STUD DEL SANNIO coordinated by Dr. Raju Hajare Head –Department of Electronics and Telecommunication Engineering, Dr.Banuprakash R Assistant Professor Department of Electronics and Telecommunication Engineering &Dr Silvia LiberataUllo, Department of Telecommunication, UniversitadegliStudi del Sannio di Benevento- Piazza, Guerrazzi, Italy

AGREEMENT OF CULTURAL AND SCIENTIFIC COOPERATION BETWEEN

BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT BENGALURU, INDIA.

AND

#### LA UNIVERSITA' DEGLI STUD DEL SANNIO



- **2.** MoUs signed with VLSI Expert Pvt. Ltd and BMSIT&M on 04.09.2021, Coordinated by Prof.Thejaswini S Asst.Professor,Dept of ETE
- **3.** MoUs signed with Tequed Labs Pvt Ltd and BMSIT&M on 27.08.2021, Coordinated by Prof.Raghunandan G H,Asst.Professor,Dept of ETE

# ESTABLISHING CENTRE OF EXCELLENCE IN COLLOBRATION WITH INTEL, INDIA

Formal inauguration of the latest Intel free FGPA Boards received from Intel, USA for Proposed Centre of Excellence (in collaboration with Intel), at ETE department. The following are the hardware and software received free of cost from Intel, USA.

#### Hardware

- 1. Intel FPGA DE10-Lite
- 2. Intel FPGA DE1-SoC

#### Software

1. Intel® Quartus® Prime Standard Edition Software;

Quantity: 10 Quantity: 05

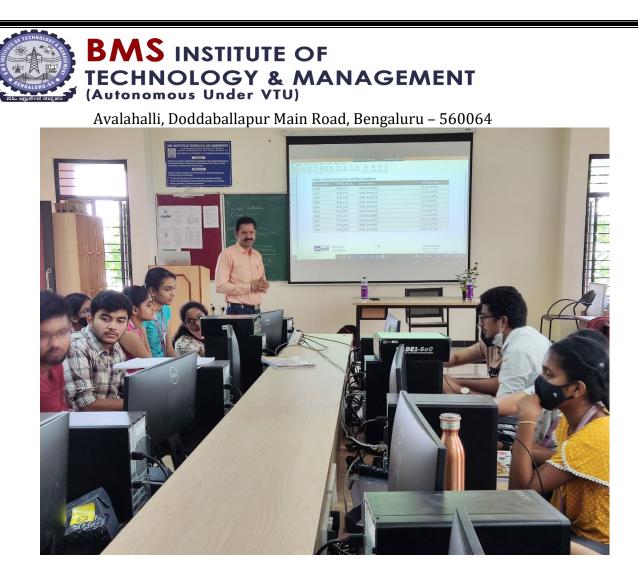
Quantity: 15



# Highlights of Events conducted at Dept. of ETE:

#### Proficiency/skill development Program:

1. The Department of Electronics and Telecommunication Engineering organised a six days Skill development program on "INTEL FPGA Design and Implementation" from 21<sup>st</sup> April to 7<sup>th</sup> May 2022. The sixth semester students of ETE underwent the training. A total of 28 students were enrolled. Mr. PadmanabanKalyana Raman, Intel University Alliance Program coordinator trained the students on FPGA Design and implementation using Intel boards using QUARTUS tool software. The outcome of the course was theStudents were proficient in the Architecture of FPGA. They also learnt technology related and configuration related aspects of state of art FPGA, which will enable them to pursue a career in the domain.

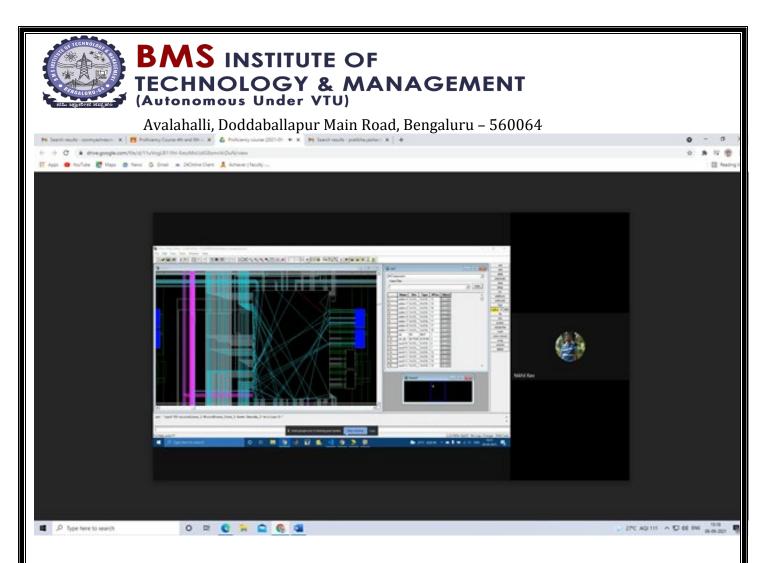


Mr. PadmanabanKalyana Raman, Intel University Alliance Program coordinator training the students on Intel Boards



Students participation for six days Skill development program on "INTEL FPGA Design and Implementation"

2. The Department of Electronics and Telecommunication Engineering organised a Proficiency course on "Embedded System Design using FPGA" from 23<sup>rd</sup> August to 4<sup>th</sup> September 2021. The sixth and fourth semester students of ETE and EEE underwent the training. A total of 24 students were enrolled. The outcome of the course was theStudents were proficient in the Architecture of FPGA, Techniques of efficient area utilization and low power implementation of designs on FPGA. They also learnt technology related and configuration related aspects of state of art FPGA, which will enable them to pursue a career in the domain.



#### **AICTE Sponsored ATAL FDP**

1. Department of ETE organized AICTE sponsored ATAL FDP(online) on "Green **Communication**" from 24.8.2021 to 28.8.2021. The FDP Coordinator Prof.Mallikarjuna Gowda C P briefed about the FDP on inauguration day and **Dr.RajuHajare, HoD, Dept. ETE** invited the Chief guest, Principal, Vice principal and all the Deans, HoD's and all the participants. Dr. M H Kori, Technical director (Retd) ALCATEL Lucent technologies- Bengaluru, was the chief guest and graced the occasion and shared his expertise and views on the need for "Green communication", evolving trends, and translating academic research into impactful applications'Dr.MohanBabu G N, Principal, BMSIT&M had given presidential address and stressed upon the adaptation of sustainable technologies to the sustainable development of Eco system.



AICTE sponsored ATAL FDP on"Green Communication"-2021

#### Industrial Visit

 An Industrial Visit to Visvesvaraya industrial and technological museum on account of Satellite day was arranged for 1<sup>st</sup> semester students on 19<sup>th</sup> April 2022
 Dr. Mallikarjuna Gowda C P, Associate Professor, Srinivas Murthy, instructor and 1sem students attended the QUIZ and around 10 students won the prize.



Discussion with Dr. Guruprasad, Retired Scientist, ISRO



Avalahalli, Doddaballapur Main Road, Bengaluru – 560064



Student receiving prize from Scientist ISRO



Industrial visit at Visvesvaraya industrial and technological museum on account of Satellite day

This is a brief report of events conducted at dept. of ETE for your information.