



# *Sattva*

Department Newsletter  
July 2019 – July 2020

## **Department of Electronics and Communication** **Sai Vidya Institute of Technology** **Rajanukunte, Bangalore-560064**



### **Vision**

**To become a center of academic excellence with innovations to make a significant contribution to the society in the field of Electronics and Communication Engineering**

### **Mission**

- To Educate and Empower the students with state-of-art knowledge and innovation in Electronics & Communication Engineering to meet the global challenges**
- To imbibe the professional competency and ethics congenial to the society through training**

## **About the Department:**

Department of Electronics and Communication Engineering at Sai Vidya Institute of Technology has an UG B.E intake strength of 120 students divided into two sections. The primary objective of the department has been to impart quality technical education to the students. The department is known for its quality, practical-based and research-oriented education imparted to students. Which helps the students to face the real-world challenges of the fast-changing technical world. To make the students technically aware of the advancements in technology around the world, the department provides additional training sessions, workshops, hands-on, webinars, Industrial Visits and other events. We also provide the students with personality development classes, SSB training for armed forces and GATE Coaching, for the student's overall development.

## **Program Educational Objectives (PEOs)**

**PEO1:** Design & Develop Innovative electronic systems.

**PEO2:** Effectively communicate technical information, successfully lead and participate in a multi-disciplinary team environment.

**PEO3:** Engage in lifelong learning through continuing education and industrial practice.

**PEO4:** Demonstrate professional ethics and social awareness.

## **Program Specific Outcomes (PSOs)**

**Graduates will be able to:**

**PSO1:** Design and simulate Electronics and Communication systems using concepts and tools of electronic circuits, signal processing, VLSI technology and communication.

**PSO2:** Architect, partition and select appropriate technologies for implementation of a specified electronics & communication system.

## Director's Message



I am delighted to note that Department of Electronics and Communication Engineering, SVIT is bringing out Department Newsletter. I appreciate the enthusiasm of eminent members of the Department who have contributed to the Newsletter. Department newsletter definitely provides a platform to showcase the activities and achievements of the students and staff such as: conferences attended by staff members and students, competitions won by students, innovative projects carried out by students with the guidance of staff, among others. I wish the students and staff of Department of Electronics and Communication Engineering, all success.

***-Prof. M R Holla  
Director, SVIT***

## Additional Director's Message



Greetings to all the staff members, student friends, parents and other stake holders. I am delighted to present the newsletter of Department of Electronics and Communication and Engineering. With core emphasize on academics, Department of Electronics and Communication Engineering also motivates and nourishes students and staff members in co-curricular and extracurricular activates. The college standing by the spirit of its Vision had hosted many technical events to showcase the innovations of the young budding engineers. We continue to support the cause of contributing to the society and to the nation by providing a holistic growth to the students by imparting quality education and shaping their character through Induction Training programme.

***- Prof. A M Padma Reddy  
Additional Director, SVIT***

## Principal's Message



I am extremely happy to know that the Department of Electronics and Communication Engineering, SVIT is bringing out newsletter for the academic year 2019-2020 and this is an ongoing process portraying the various Departmental activities. It is great to find a considerable number of achievements in academic and non-academic activities which certainly prove that our staff and students are adequately equipped and possess necessary skill-sets to bring laurels to the institution. I wish that this number may grow in the years to come. My Congratulations to ECE team.

**-Dr. H S Ramesh Babu**  
*Principal, SVIT*

## HOD's Message



*Dear Students,*

On behalf of entire Department of ECE, I welcome you all. I hope you will enjoy your stay in our Department. I am very sure after the end of four year you will come out with flying colors professionally qualified. Our Department has outstanding teachers such as Prof. Y Jayasimha, Prof. Vikramathithan among others. Department of ECE has done tremendous achievements in the field of research and developments and the department is catalyzed supported by Vision Group on Science and Technology (Dept. of IT, BT & ST Govt. of Karnataka). The department is constantly encouraging and supporting the students to present their work in top international conference held abroad including USA and Europe, to meet the changing requirement of the industry

**-Dr. Narayan K**  
*Dean R & D, Professor and  
Head Department of ECE, SVIT*

## Editorial Board

**Chief Editor: Dr. Narayan K**

**Editorial Board Member :Dr.Chaya BM**

**Student Member:Bina R, Dept of ECE**

## Faculty

**Prof. Y Jayasimha**, Dean Academics & Associate Professor

**Dr. Narayan K** ,Dean R&D, Professor & HOD

**Dr. T S Jayadeva**, Professor

**Prof. Vikramathithan A C**,Associate Professor & Deputy HOD

**Dr. Raj Barath**, Associate Professor

**Dr. Venkatesha M**, Associate Professor

**Dr. Chaya B M**, Associate Professor

**Mr. Suryanarayana N K**, Assistant Professor

**Ms. Asha K**, Assistant Professor

**Ms. Pavithra G S**, Assistant Professor

**Mr. Pavan Kumar E** , Assistant Professor

**Ms. Nayana K**, Assistant Professor

**Mr. Manoranjan Kumar**, Assistant Professor

**Mr. Darshan R V** , Assistant Professor

**Mrs. Shwetha M**,Assistant Professor

**Ms. Prabha K**, Assistant Professor

**Ms. AkshithMonnappa**, Assistant Professor

**Mr. S Manjunatha Chari**, Assistant Professor

**Mr. Chandana H P**, Assistant Professor

**Ms. Monisha Raj** , Assistant Professor

**Ms. Harshitha P D**, Assistant Professor

**Mr. Adarsh S K**, Assistant Professor

**Ms. Meghana J**, Assistant Professor

## Advisory Board Members

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Professor, Department of ECE, The Oxford College of Engineering Bengaluru

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Professor, Department of ECE, Malnad College of Engineering Hassan

**Mr. Srikanth**

HR Manager, Velankani Electronics, Bengaluru

**Mr. Sripad**

Design Engineer, Sri Dutt Technologies Pvt. Ltd, Bengaluru.

**Dr. Kavitha E**

Department of Telecommunication Engineering , Sir. MVIT Bengaluru

**Dr. Hanumantha Raju**

Professor, Department of ECE, BMSIT, Bengaluru

**Dr. Rajani**

Associate Professor, Department of ECE, RNSIT, Bengaluru

**Ms. Ananya N**

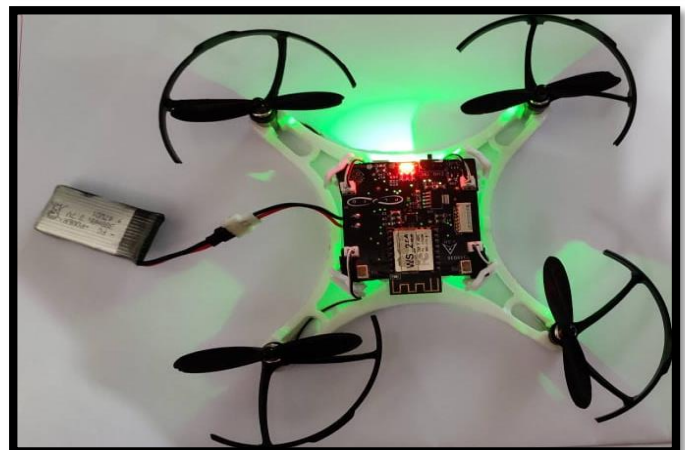
Alumni (2013-17 Batch), Working at Hewlett Packard Enterprise Technical Solutions Consultant

# Events/Workshops/Webinars Conducted

## ➤ IEEE Blended Learning Program, IoT Workshop



**IEEE Blended Learning Workshop** was conducted on 29th and 30th August 2019. The workshop was part of the 2 month Virtual IEEE Blended learning internship. The guests were **Dr.H.S Ramesh Babu** Principal SVIT, **Mr.Prateek Saxena** IEEE BLP Program Coordinator, **Mr.Gautam Shriprakash**, Embedded/IOT Specialist IEEE BLP, **Mr.Gaurav Singh** CEO of WEORG and **Mr.Amith Thool** Managing Director at Dalvik App. Mr.Gaurav and Mr Amith engaged the students in teaching about drones, Embedded system followed by a hands-on Drone making workshop. Around 30+ students had signed up for the IEEE Blended Learning program.



## ➤ Ecosystem approach to affordable health monitoring using IoT, IEEE EMBS Workshop



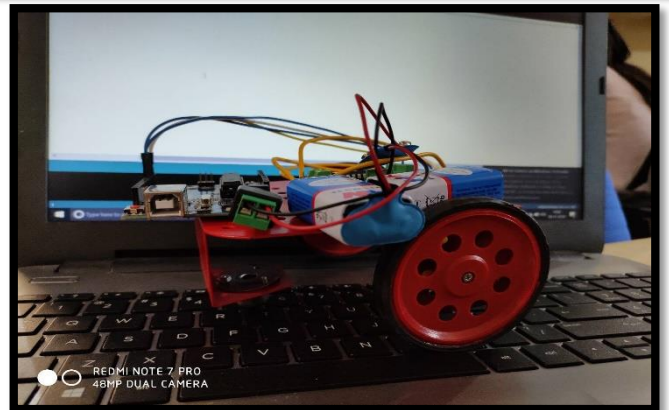
**IEEE EMBS workshop on Ecosystem Approaches to Affordable Healthcare monitoring using IoT** was conducted on 5<sup>th</sup> November 2019. Dr. Narayan K, IEEE SVIT Student Branch Advisor, initiated the event by addressing the students. The speakers were **Dr N Sriraam**, Professor and Head Department of Medical Electronics MSRIT and Chairman IEEE EMBS Bangalore Section and **Mr.Jagannathan Gopalakrishnan** CEO at AARM solutions. The workshop was focused on how the advancements in technology is making healthcare more affordable and reliable, the workshop was attended by more than 180 Students from department of ECE.



## ➤ Mobile Making and Robotics Workshop, Symposium IIT Mumbai



**Mobile Making and Robotics Workshop conducted by Symposium IIT Mumbai, on 7 th November 2019.** The speaker **Mr.Gaurav** from IIT Mumbai, interacted with the students throughout the workshop. The workshop was focused on hands-on programming, creating Mobile Phone and Sensor-based Moving Robot. The students were successful in deploying the robots and made calls using the assembled phones. Around 95+ students from various departments participated in the workshop.





## ➤ Webinars

During COVID pandemic, all of our events shifted to the online world thus the series of webinars. The webinars were initiated by **Dr. Narayan K**, Dean R& D and Head, Department of ECE, Sai Vidya Institute of Technology. And Organised by Faculty coordinators, **Dr. Venkatesha M**, Associate Professor, **Prof. Pavan Kumar E**, Assistant Professor, **Prof. Monisha Raj**, Assistant Professor, Dept of ECE, with the help of student coordinators, **Ms. Binar R** and **Mr. Sourabh V Bhat** along with the immense support of **Prof. Vikramathithan A C**, Associate Professor & Deputy HOD

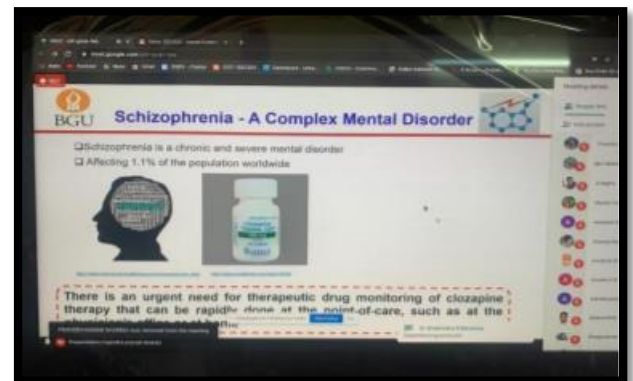
We were able to successfully organise 8 webinars from the dept of ECE in association IEEE SVIT Student branch, Photonics and EMBS Student chapter. The webinars were delivered by eminent people in their field of expertise from around the world. We had on an average 150+ students and 300+ audience from all around the globe. We would like to specially thank our Principal, Dr. Ramesh Babu H S for his encouragement in hosting and also for providing the logistics required for hosting the webinars.

### 1. “ Intelligent Multi-Electrode Arrays for Real-time Treatment Monitoring of Antipsychotics”

By **Dr. Rajendra Prasad Shukla**,  
Postdoctoral Researcher,  
Nanobioelectronics Laboratory (NBEL),  
Department of Biomedical Engineering,  
Ben-Gurion University of the Negev, Israel

**The speaker gave insights into the Challenges faced in clozapine monitoring, how multi-electrode arrays are manufactured and Antipsychotics could be monitored by using a wearable-sensor.**

The webinar was organised on 30<sup>th</sup> June 2020, in association with **IEEE SVIT EMBS Chapter**



### 2. “Importance of Quality Research and Publication For Students and Research Scholars”

By **Dr. Srikanth S Thangade**,  
Asst. Professor,  
School of Electronics and Communication  
Engineering, Reva University, Bangalore

**Thw speaker shared his experience and views on how to do research, quality publications, importance of research and how to be a successful researcher with all the participants. The session was very informative and motivated many young students and research scholars.**

The webinar was organised on 8<sup>th</sup> July 2020, in association with **IEEE SVIT Student Branch**



### 3. “MEMS and Sensors: The need of Today's World”

By **Dr. Koushik Guha**,

Senior Member-IEEE, Asst. Professor (Grade 1),  
Dept. of ECE and Assoc. Dean of Student Welfare &  
Nodal Officer of Scholarships, NIT Silchar, Assam.

**The speaker gave insights on current research topics, various MEMS sensor, MEMS simulation tools and the various applications of MEMS and Sensors.**

The webinar was organised on 16<sup>th</sup> July 2020,  
in association with **IEEE SVIT Photonics Student Chapter.**



### 4. “Recent Developments in Nanotechnology/Nanoelectronics”

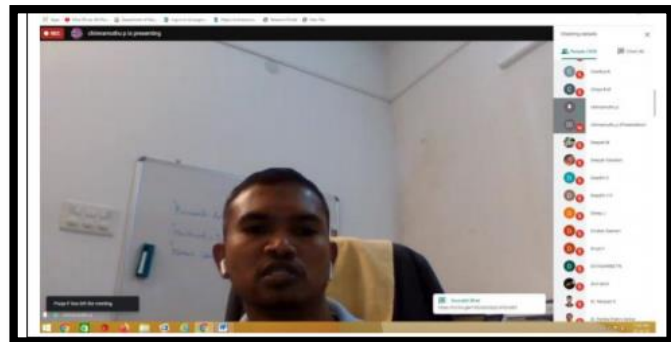
By **Dr. P. Chinnamuthu.**,

Assistant Professor

National Institute of Technology, Nagaland.

**The speaker shared his insight thoughts on various nano materials, nano fabrication techniques. Also he mentioned about the impact of nanotechnology and nanoscience on the current technological developments.**

The webinar was organised on 22<sup>nd</sup> July 2020, in  
association with **IEEE SVIT Photonics Student Chapter**



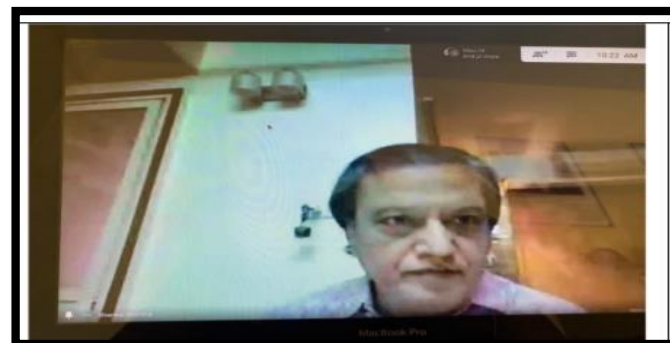
### 5. “Indian Technical Education System”

**Dr S S Mantha**

Former Chairman AICTE , Adj Prof NIAS,  
Bangalore ,Chancellor KL University , Emeritus  
Professor, VJTI, Mumbai .

**The speaker gave us insights about importance of inter-disciplinary and multi-disciplinary learning , discussed on essential skill map for digital transformation and current trends for educational digital content**

The webinar was organised on 27<sup>th</sup> July 2020, in  
association with **IEEE SVIT Student Branch**



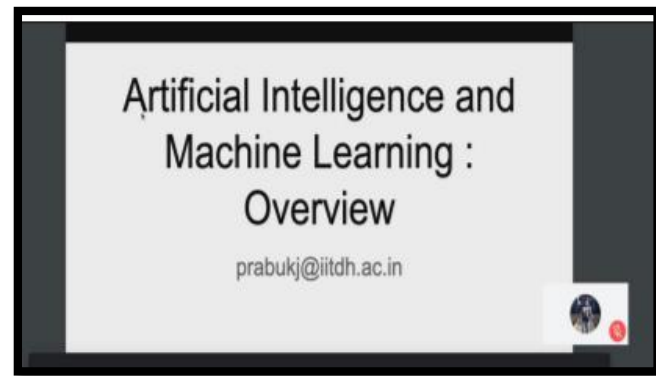
## 6. “Machine Learning”

**Dr. Prabuchandran K.J.,**

Assistant Professor, IIT Dharwad

The speaker started with the basic introduction of artificial intelligence giving the relatable examples and explaining the various concepts and terminologies associated with the same. He later moved on to explaining the concepts of machine learning and comparing it with artificial intelligence and describing various advantages and challenges. He also progressed on to throwing light at Deep Learning and then concluded with a motivation for students to take up machine learning as the field of research.

The webinar was organised on 10<sup>th</sup> August 2020, in association with IEEE SVIT Photonics Student Chapter and IEEE CS/CIS Joint Chapter



## 7. “Nanotechnology: Challenges and Opportunities”

**Professor Chennupati Jagadish,**

Recipient of Australia’s Highest Civilian Honor, AC Companion of the Order of Australia.

Distinguished Professor and Head, Semiconductor Optoelectronics and Nanotechnology Group, Research School of Physics, Australian National University

The speaker explained the importance and need of nanotechnology. He also expressed the role of nanotechnology in every sector. He gave valuable insights in the field of nanotechnology and nanoelectronics and described about its scope in the future

The webinar was organised on 20<sup>th</sup> August 2020, in association with IEEE SVIT Photonics Student Chapter



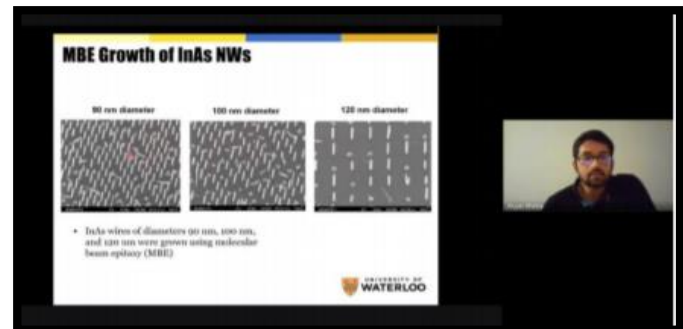
## 8. “Nanowire based IR Photodetector”

**Dr. Arjun Shetty,**

Postdoctoral Fellow, Institute for Quantum Computing, University of Waterloo, Canada.

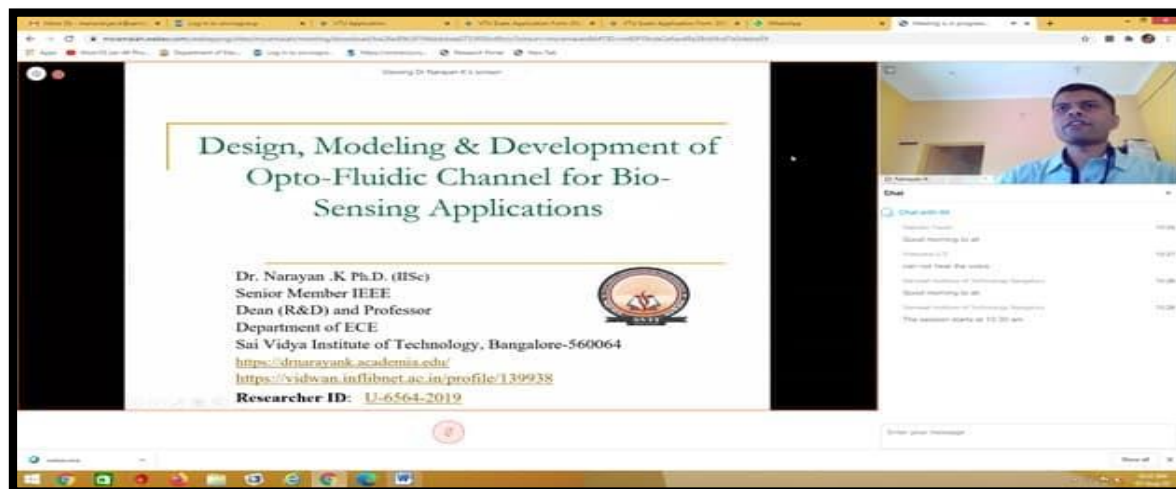
The speaker started with the basic introduction of nanotechnology giving the relatable examples and explaining the various concepts and terminologies associated with the same. He later moved on to explaining the concepts of bottom up approach, top down approach, IR Photodetectors and NW photodetector device fabrication and characterization. He also progressed on to throwing light at problems of using IR Photodetector and then concluded with a motivation for students to take it up as the field of research.

The webinar was organised on 24<sup>th</sup> August 2020, in association with **IEEE SVIT Photonics Student Chapter**



## Invited Talks by our Faculties

### • Invited talks at National Webinars



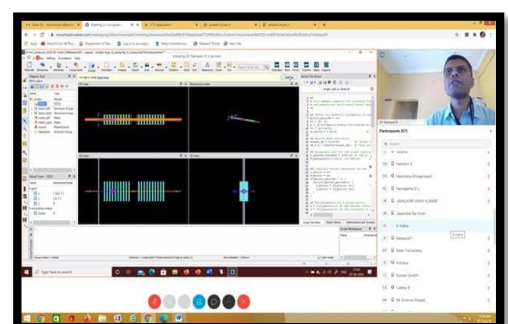
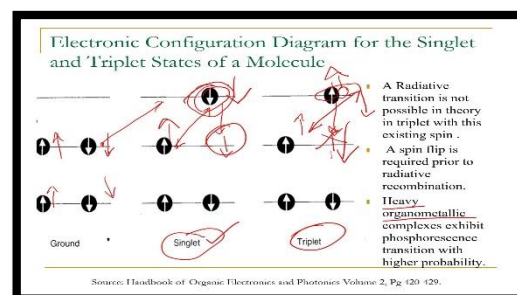
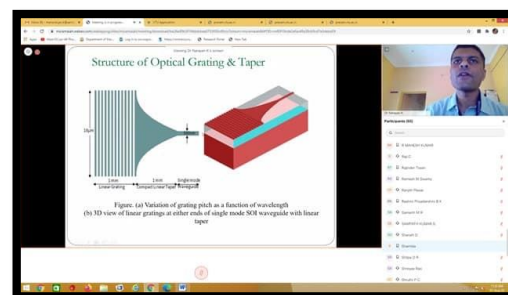
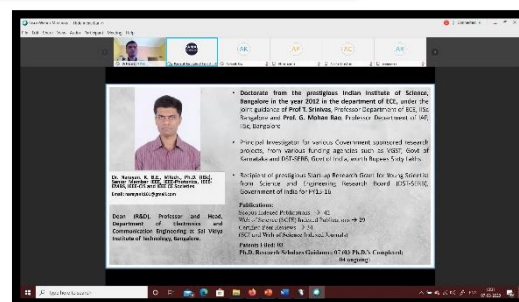
**Dr. Narayan.K**, Professor, Dean R&D, Head, Dept. of ECE was invited deliver technical webinars across various insitutes across India.

1. **“Design, and Development of Fluorescent OLED’s”** on 29-6-2020 at the Invitation of IMPS College of Engineering and Technology, West Bengal

2. **“Development of Fluorescent OLEDs with Improved Luminous Efficiency”** on 25-07-2020 as part of FDP on Current Trends in Physical Sciences organized by **Institute of Technology, Kanpur**

3. **“Development of Indigenous Fluorescent OLEDs”** on 5-8-2020 as part of FDP on Advances in Functional Devices, (AFD) 2020 organized by **Vignan’s Institute of Information Technology, Vishakhapatnam.**

4. **“Design and Development of Opto- Fluidic Channel for Biosensing Applications”** on 7-8-2020 as part of a workshop on Biosensors: Fundamentals to Advances, Scope & Applications 3rd to 8th August 2020, organized by **M S Ramaiah Institute of Technology, Bangalore** , Technically sponsored by **IEEE Bangalore Section, and IEEE Sensors Council, Bangalore Chapter.**



➤ **TEQIP Sponsored 3 days Workshop at Malnad College of Engineering, Hassan**

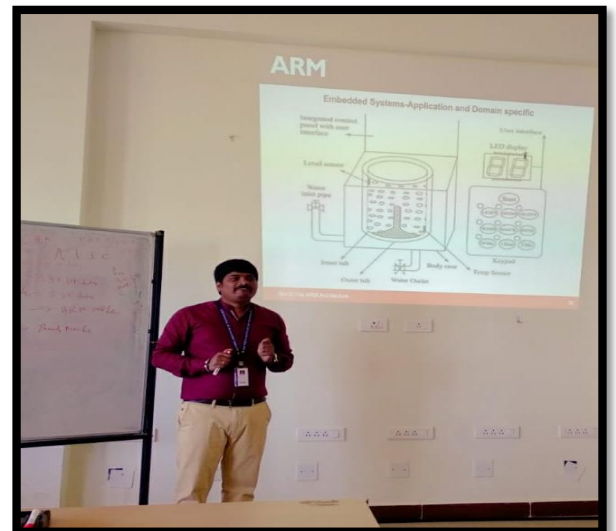


**Dr.Chaya BM**, Associate Professor, Department of ECE, and **Dr. Venkatesha M**, Associate Professor, Department of ECE were invited to give a talk under TEQIP-III Sponsored 3 days Workshop on “**Hands-on Training on Photonic Sensor Simulation Tools**” at Malnad College of Engineering with academic partner **IEEE Photonics Society, Bangalore Chapter**. At Malnad College of Engineering Hassan from 3rd to 5th October 2019.

- **TEQIP Sponsored Technical Talk at VTU PG Regional office, Muddenahalli**



**Mr. Pavan Kumar E**, Assistant Professor Department of ECE was invited to give a TEQIP sponsored technical talk on “**ARM and Embedded systems**” at **VTU PG Regional office, Muddenahalli** .On 23<sup>rd</sup> January 2020 at VTU PG Regional office, Muddenahalli.



## Student Achievements

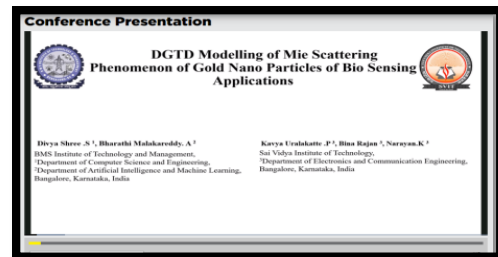


**Mr. Sourabh V Bhat and Ms. Sneha Prakash**, 7<sup>th</sup> Sem students presented the paper titled **“Power Coupling and modal analysis of SPR based Gap Waveguides for optical sensing applications”** at **IEEE SENSORS 2019 CONFERENCE , Montreal, Canada**, during October 28th 2019 and October 30th 2019 . Under the guidance of **Dr. Narayan.K**, Professor, Head, Dept. of ECE and **Dr. Venkatesha M**, Associate Professor, Dept. of ECE.

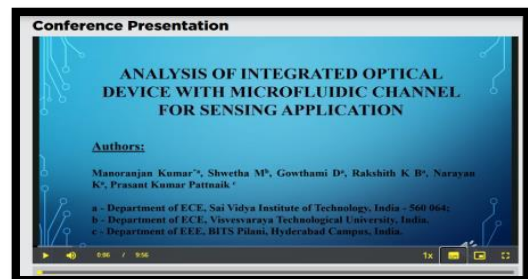
**Mr. Sourabh and Ms. Sneha** interacting **Dr. Rudra Pratap CeNSE** , IISc at IEEE Sensor, 2019 conference, Montreal Canada.

**Ms. Sneha** received a travel grant of **Rs.1,00,000/-**, from Indian National Academy of Engineering

**Mr. Sourabh** received a travel grant of **Rs.25,000/-** , from IEEE Bangalore Section



**Ms. Bina Rajan and Ms. Kavya U.P** , 7<sup>th</sup> Sem students presented the paper titled **“DGTD modeling of Mie scattering phenomenon of gold nano particles for biosensing applications,”** Proc. SPIE 11362, Clinical Biophotonics, 113620B (1 April 2020) **SPIE Photonics Europe Digital Forum 2020**, The **SPIE Photonics Europe Conference 2020** was scheduled at Strasbourg, France but was shifted virtually due to the pandemic. Under the valuable guidance of **Dr. Narayan.K**, Professor, Head, Dept. of ECE



**Mr. Rakshith K B and Ms. Gowthami D** , 7<sup>th</sup> Sem students presented the paper titled **“Analysis of integrated optical device with microfluidic channel for sensing application,”** Proc. SPIE 11364, Integrated Photonics Platforms: Fundamental Research, Manufacturing and Applications, 113641R (2 April 2020) **SPIE Photonics Europe Digital Forum 2020**, The **SPIE Photonics Europe Conference 2020** was scheduled at Strasbourg, France but was shifted virtually due to the pandemic. Under the valuable guidance of **Dr. Narayan.K**, Professor, Head, Dept. of ECE and **Mr. Manoranjan Kumar**, Assitant Professor Department of ECE.





**Mr.Vignesh.S ,Ms.Tanupriya A G ,Mr.Aman Kesari,Ms.Suparna C and Mr.Upendra Gupta**, 7<sup>th</sup> Sem students were Shortlisted for the Finals at **NASA International Space Apps Challenge 2019** ,October 18-21 2019 at Delhi.They were the **Winners** at the state selection that took place at Sir.MVIT College in the Galactic Problem Solver Category



**Ms.Bina R** 7<sup>th</sup> Sem student and **Mr. Pavan Kumar** ,Assitant Professor Department of ECE were part of the Finals at **NASA International Space Apps Challenge 2019** in the Galactic Problem Solver Category ,October 18-21 2019 at School of Engineering Dayananda Sagar University,Bengaluru.



**Mr.Vignesh S, Ms.Tanupriya AG , Ms.Mahima S, Ms.Suparna C and Mr.Sadique Ali** were selected in the Internal Hackathon to represent SVIT in the **Smart India Hackathon Hardware edition 2020** .Their problem statement was **Autonomous quadcopter for delivering medicines at Hilly Areas**,given by Govt. Utrkhand 8<sup>th</sup> Feb 2020



**Ms. Bina R, Ms.Anusha KR, Ms.Bhavana B, Ms.G Kusumanjali , Ms Nandana and Ms.Navya** were selected for the **Round 2 of Smart India Hackathon Hardware Edition**, Their idea was one of the 4 ideas across India selected for round 2.Their problem statement was **Quick analysis of quality of cereals, oilseed and pulses using AI**, which was given by **Department of Science and Technology** . They were selected in the Internal Hackathon to represent SVIT ,8<sup>th</sup> Feb 2020

## ➤ **Doctorates/ thesis defended from the Department of ECE, SVIT during AY 2019-20**



**Dr. Venkatesha M**, Associate Professor, Department of ECE defended his thesis for PhD entitled “**Modeling and Development of Opto-Fluidic Channel for Biosensing Applications**”, under the guidance of **Dr. Narayan.K**, Professor, Dean R&D, Head, Dept. of ECE on 19<sup>th</sup> May 2020 from Visvesvary Technological University, Belagavi.



**Dr. Chaya BM**, Associate Professor, Department of ECE, defender her thesis for PhD entitled “**Design, Analysis and Modeling of OLED based Biosensor**”, under the guidance of **Dr. Narayan.K**, Professor, Dean R&D, Head, Dept. of ECE on 9<sup>th</sup> June 2020, from Visvesvary Technological University, Belagavi.

# Student Publications during AY-2019-20

Sl. No.	USN	Name of the Student	Title of the paper	Name of the Journal/Conference	Publication details (Vol, Issue, page number, year, place)	ISBN/ISSN/DOI
1	1VA16EC021	C HEMANTH KUMAR	Energy conservation Techniques for Improving Lifetime of Wireless Sensor Network: A Survey	2 <sup>nd</sup> International Conference On Smart System and Inventive Technology (ICSSIT 2019) organized by Francis Xavier Engineering College during 27-29 November 2019 at Tirunelveli, Indi	DOI: 10.1109/ICSIT46314.2019.8987775	Paper Presented
2	1VA16EC043	JEEVA J				Paper Presented
3	1VA16EC008	ANIRUDDHA PUROHIT M				Paper Presented
4	1VA16EC006	AKASHAY KUMAR R				Paper Presented
5	1VA14EC058	NANDAN KUMAR N	Cluster-Based Routing for Excellent Resource Gathering in Wireless sensor networks: A Survey	2 <sup>nd</sup> International Conference On Smart System and Inventive Technology (ICSSIT 2019) organized by Francis Xavier Engineering College during 27-29 November , 2019 at Tirunelveli, Indi	IEEE Xplore Part Number: CFP19P17-ART; ISBN:978-1-7281-2119-2	Paper Presented
6	1VA14EC038	KARTHIK BN				Paper Presented
7	1VA14EC035	I HARIKA				Paper Presented
8	1VA14EC028	GOWTHAM S				Paper Presented
9	1VA16EC107	USHA B U	Strategies for Congestion Control in Wireless sensor Networks: A Survey	2 <sup>nd</sup> International conference On Smart System and Inventive Technology (ICSSIT 2019) organized by Francis Xavier Engineering College during 27-29 November , 2019 at Tirunelveli, Indi	DOI: 10.1109/ICSIT46314.2019.8987931	Paper Presented
10	1VA16EC012	ARPITHA G B				Paper Presented
11	1VA16EC085	SM YASEEN				Paper Presented
12	1VA16EC115	VIVEK KUMAR V				Paper Presented

13	1VA16EC045	K R ABHIRAM	Optimized Path Reconstruction in WSN using ANT Colony Optimization	2 <sup>nd</sup> International conference On Smart System and Inventive Technology (ICSSIT 2019) organized by Francis Xavier Engineering College during 27-29 November , 2019 at Tirunelveli, Indi	IEEE Xplore Part Number: CFP19P17-ART; ISBN:978-1-7281-2119-2	Paper Presented
14	1VA16EC048	KIRAN KUMAR V R				Paper Presented
15	1VA16EC016	BELLAMKONDA NITHIN				Paper Presented
16	1VA16EC020	BOGGULA YOGANANDA REDDY				Paper Presented
17	1VA16EC057	MADHUMITHA V	Detection and Analysis of Alzheimer's Disease from Medical Images: a Survey	2 <sup>nd</sup> International conference On Smart System and Inventive Technology (ICSSIT 2019) organized by Francis Xavier Engineering College during 27-29 November , 2019 at Tirunelveli, Indi	DOI: 10.1109/ICSSIT46314.2019.8987741	Paper Presented
18	1VA16EC052	KUSUMA S				Paper Presented
19	1VA16EC014	B MEGHANA				Paper Presented
20	1VA17EC060	NAMRATHA SHETTY T G	Working of Autonomous Vehicles	International Research Journal of Engineering and Technology (IRJET)	Volume 6, Issue 12, December 2019	EISSN:2395-0056 P:2395-0072
21	1VA16EC087	Sampritha Hegde.K.S	Categorizing Brain Tumour in MRI using Digital Image Processing	NATIONAL CONFERENCE ON ADVANCES IN ELECTRONICS, COMPUTING & COMMUNICATION TECHNOLOGY-2020 11-12, AUGUST 2020	Conference Proceedings	Paper presented
22	1VA16EC104	Syed Yunus Bilal				Paper presented
23	1VA16EC109	Vasudha.N.S				Paper presented
24	1VA16EC077	Purushotham.D				Paper presented
25	1VA16EC107	USHA B U	SMART FODDER CULTIVATION USING IoT	Online International Conference on "Smart Modernistic in Electronics and Communication"(ICSMEC -2020)	Paper ID : 0287	Paper presented
26	1VA16EC012	ARPITHA G B				
27	1VA16EC085	SM YASEEN				
28	1VA16EC115	VIVEK KUMAR V				
29	1VA15EC098	V VISWANATH	DESIGN AND IMPLEMENTATION OF SMART AUTOMATED DUSTER TO DUST THE BLACK BOARD	2nd International conference on TROPICAL TRANSCENDS IN SCIENCE, TECHNOLOGY & MANAGEMENT (ICTTSTM-2020)	ISSN: 2394-3114 Vol-40-Issue-70-March 2020	Paper presented
30	1VA15EC049	MANAMOHAN D B				Paper presented
31	1VA15EC052	MEGHA N				Paper presented
32	1VA15EC065	PATAPATI NAVEEN				Paper presented

33	1VA17EC072	Prajwal S	Prevention of accidents in automobiles using ARM7 based CAN	INTERNATIONAL RESEARCH JOURNAL OF ENGINEERING AND TECHNOLOGY (IRJET)	e-ISSN: 2395-0056 P-ISSN 2395-0072	Paper presented
34	1VA15EC091	SUSHEEL KUMAR SHRIMANDAL KAR	DESIGN AND IMPLEMENTATION OF SMART BANKING SYSTEM	2nd International conference on TROPICAL TRANSCENDS IN SCIENCE, TECHNOLOGY & MANAGEMENT (ICTTSTM-2020)	ISSN: 2394-3114 Vol-40-Issue-70-March 2020	Paper presented
35	1VA16EC401	INBA SAGARAN				Paper presented
36	1VA15EC055	MOHAMMAD IMRAN				Paper presented
37	1VA16EC084	RAVI KISHORE A	DEVELOPMENT AND IMPLEMENTATION OF SMART CITY USING IOT	INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)	ISSN: 2320-2882 VOLUME 8, ISSUE 7 JULY 2020	Paper presented
38	1VA16EC089	SETTYPALLI KALYAN				Paper presented
39	1VA16EC094	SRINIVAS G P				Paper presented
40	1VA16EC108	V VINAY VIDHYUTH				Paper presented
41	1VA17EC402	PUNEETH U O	DEVELOPMENT AND IMPLEMENTATION OF UNDERWATER COMMUNICATION USING IoT	INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)	ISSN: 2320-2882 VOLUME 8, ISSUE 7 JULY 2020	Paper presented
42	1VA16EC103	SUVARATHA				Paper presented
43	1VA17EC401	HAMSASHREE				Paper presented
44	1VA17EC403	VANDYA M				Paper presented
45	1VA16EC071	P B SATHYANARAYAN	ANALYZING THE COUPLING CHARACTERISTICS OF RECTANGULAR METALLIC NANO COUPLER WITH METALLIC-INSULATOR-METALLIC WAVEGUIDE STRUCTURE	FIRST ONLINE INTERNATIONAL CONFERENCE ON “ SMART MODERNISTIC IN ELECTRONICS AND COMMUNICATION” (ICSMEC-2020)	Paper ID: 0335	Paper presented
46	1VA16EC074	PRAJWAL P HEGDE				Paper presented
47	1VA16EC078	R NISHANTH				Paper presented
48	1VA16EC112	VINAY P S				Paper presented
49	1VA17E040	KAVYA U P	Smart Agriculture using IOT powered by ARM microcontroller.	International Research Journal of Engineering and Technology (IRJET)	e-ISSN: 2395-0056 P-ISSN 2395-0072	Paper presented
50	1VA17EC059	NAGESH M	ARM Based Health Care Monitoring Services Using Wireless Network	International Research Journal Of Modernization in Engineering Technology and Science	e-ISSN: 2395-0056	Paper presented
51	1VA17EC056	MUKUNDA D S				Paper presented

52	1VA7EC017	CHANDAN GOWDA B			P-ISSN 2395-0072	Paper presented
53	1VA17EC012	B M UDAY PRAKASH				Paper presented
54	1VA17EC062	NARAYANA N	AN AMBULANCE RESCUE SYSTEM USING TRAFFIC SWITCHING  CONTROL UNIT	International Research Journal Of Modernization in Engineering Technology and Science	e-ISSN: 2582-5208  Volume:02/I ssue:05/May -2020	Paper presented
55	1VA17EC031	GOWTHAM S				
56	VA17EC080	RAKSHITH KB	Alcohol Detection System for the safety of Automobile Users	International Research Journal Of Modernization in Engineering Technology and Science	e-ISSN: 2395-0056  p-ISSN: 2395-0072  Volume: 07 Issue: 05   May 2020	Paper presented
57	1VA17EC074	PRANAV R				
58	1VA17EC054	MEGHANA KINI				
59	1VA17EC027	GAGANA NAVEEN A				
60	1VA17EC036	HARSHITHA Y J	ARM BASED GAS MONITORING SYSTEM	International Journal of Progressive Research in Science and Engineering	Volume-1, Issue-2, May-2020	Paper presented
61	1VA17EC051	MANSI D S				Paper presented
62	1VA17EC065	PRIYANKA P				Paper presented
63	1VA17EC066	RUCHITHA P				Paper presented
64	1VA17EC070	POORNACHA NDRA PRAKASH	ARM based vehicle collision avoidance	INTERNATIONAL RESEARCH JOURNAL OF MODERNIZATION IN ENGINEERING TECHNOLOGY AND SCIENCE	e-ISSN: 2582-5208	Paper presented
65	1VA17EC067	PAVAN KALYAN V				Paper presented
66	1VA17EC049	MANOJ KUMAR D A				Paper presented
67	1VA17EC037	DIWAKAR REDDY				Paper presented
68	1VA17EC109	TANUPRIYA A G	ARM cortex M3 based collision detection system	IRJET (International Research Journal of Engineering and Technology	e-ISSN: 2395-0056 Volume: 07 Issue: 05   May 2020 p- ISSN: 2395- 0072	Paper presented
69	1VA17EC068	PAVITHRA C				Paper presented
70	1VA16EC124	GAANAVI DIVAKAR				Paper presented
71	1VA17EC044	Kavya U P	Design and Implementation of Digital System for memories	International journal of innovative research in computer and communication engineering (IJRCCE)	Volume 8, Issue 4, April 2020e-ISSN: 2320-9801, p- ISSN: 2320- 9798	Paper presented
72	1VA17EC032	Gowthami D				Paper presented
73	1VA17EC091	Sangeetha R				Paper presented
74	1VA17EC101	Sowmya S				Paper presented
75	1VA17EC004	AMRUTHA B R	IOT based automatic handling operation		e-ISSN: 2395-0056	Paper presented

76	1VA17EC009	ARUN KUMAR S	theatre using ARM7 processor	International research journal of engineering and technology	Volume: 07 Issue: 05   May 2020 p- ISSN: 2395-0072	Paper presented
77	1VA17EC034	HARSHITHA D S				Paper presented
78	1VA17EC057	NADIMPALLI RAJKUMAR				Paper presented
79	1VA17EC120	Anusha S				Paper presented
80	1va17ec005	Amrutha KC	IoT based home automation using ARM7	International Journal of engineering research & technology	ISSN:2278-0181	Paper presented
81	1va17ec055	Mohana HC				Paper presented
82	1va17ec035	Harshitha K				Paper presented
83	1VA17EC053	Megha M	Landmine detection robot using ARM Cortex	IRJET	e-ISSN: 2395-0056 Volume: 07 Issue: 05   May 2020 p- ISSN: 2395-0072	Paper presented
84	1VA17EC060	Namratha Shetty T G				Paper presented
85	1VA17EC02	Divya V				Paper presented
86	1VA17EC018	Sampath Kumar Reddy	Real Time Vehicle Theft Identity and Control System Based on ARM	INTERNATIONAL RESEARCH JOURNAL OF MODERNIZATION IN ENGINEERING TECHNOLOGY AND SCIENCE	e-ISSN: 2582-5208	Paper presented
87	1VA17EC041	K Lathish Kumar				Paper presented
88	1VA17EC023	Eranti Vikas				Paper presented
89	1VA17EC050	Manoj kumar P A				Paper presented
90	1VA17EC042	Kavya H	Smart home security and control system using ARM7 and GPS	International Journal of Innovative Research in computer and communication engineering	e-ISSN 2320-9801p-ISSN 2320-9798.	Paper presented
91	1VA17EC028	Gajula Pavani				Paper presented
92	1VA17EC025	Fiza Khatoon				Paper presented
93	1VA17EC016	Preethi Esther				Paper presented
94	1VA17EC013	Bhaskar MS	Traffic management system using image processing and ARM processor	International Research Journal of Engineering and technology	e-ISSN: 2395-0056 Volume: 07 Issue: 05   May 2020 p- ISSN: 2395-0072	Paper presented
95	1VA17EC061	Nandana CH				Paper presented
96	1VA17EC069	Pooja P				Paper presented
97	1VA17EC063	Navya S				Paper presented
98	1VA17EC059	NAGESH M	Signal Integrity Issues in Digital System Design	International Research Journal of Engineering and technology	e-ISSN: 2395-0056 Volume: 07 Issue: 05   May 2020 p- ISSN: 2395-0072	Paper presented
99	1VA17EC056	MUKUNDA D S				Paper presented
100	1VA7EC017	CHANDAN GOWDA B				Paper presented
101	1VA17EC012	B M UDAY PRAKASH				Paper presented
102	1VA17EC053	Megha M	Design Optimization in Digital System Design	International Research	Volume 7, Issue 5, May	Paper presented
103	1VA17EC060	Namratha Shetty T G				Paper presented



104	1VA17EC022	Divya V		Journal of Engineering and Technology	2020 e- ISSN:2395-0056, p- ISSN:2395-0072	Paper presented
105	1VA17EC101	Sourabh V Bhat	Development of programmable logic devices	International journal of innovative research in computer and communication engineering	Volume 9 Issue 4, April 2020. ISSN : 2320-9801	Paper presented
106	1VA17EC079	Rainak Sharma				Paper presented
107	1VA17EC065	Priyanka				Paper presented
108	1VA18EC400	Pooja MP				Paper presented
109	1VA17EC056	Mukunda DS	Math model on error detection and correction	International Research Journal of Engineering and Technology (IRJET)	Volume 7, Issue 5, May 2020 e- ISSN:2395-0056, p- ISSN:2395-0072	Paper presented
110	1VA17EC070	Poorna Chandra Prakash				Paper presented
111	1Va17EC050	Manoj kumar PA				Paper presented
112	1VA17EC067	Pavan Kalyan V				Paper presented
113	1VA17EC101	Sourabh V Bhat	SMART AGRICULTURE using IoT powered by ARM Micro Controller			
114	1VA17EC044	Kavya U P				
115	1VA17E079	Rainak Sharma				
116	1VA18EC400	Pooja M P				

## Best Outgoing Student 2019-20



**Ms. Sampritha Hegde** was chosen as “**Best Outgoing student**” from the Department of ECE

# Faculty Publications during AY 2019-20

## Dr.Narayan K

- Swagata Devi, Koushik Guha, Naushad Manzoor Laskar, Sourav Nath; Krishna Lal Baishnab, Jacopo Iannacci, and **Narayan K** “Modelling and analysis of a modified preamplifier for seizure detection”, *Microsyst. Technol.*., **I.F: 1.737** Accepted
- Venkatesha M, and **Narayan K**, “Modeling, Design and Optimization of Compact Taper and Gratings for Mode Coupling to SOI waveguide at C Band” *J. Mod. Opt* , 67:12, 1112-1119, (2020), DOI: <https://doi.org/10.1080/09500340.2020.1810797> I.F: 1.544
- Balasubramanian M, **Narayan K** and P K Pattnaik , “Novel High-Resolution Lateral Dual-Axis Quad-Beam Optical MEMS Accelerometer Using Waveguide Bragg Gratings” *Photonics* **2020**, 7(3), 49; <https://doi.org/10.3390/Photonics7030049> I.F: 2.140
- Chaya B.M, P.K. Pattnaik, and **Narayan .K** , “Modeling and Analysis of Organic Light Emitting Diode with Thin Film Anti-Reflective Coatings”, *J. Nanoelectron. Optoelectron*, Vol 15, No.4, 425-431 (2020) DOI: <https://doi.org/10.1166/jno.2020.2751> **I.F: 0.989**
- Shwetha M, and **Narayan K**, "Improvement in quality factor of double microring resonator for sensing applications," *J. Nanophoton.* 13(2), 026014 (2019), DOI: 10.1117/1.JNP.13.026014. <http://dx.doi.org/10.1117/1.JNP.13.026014>. **I.F: 1.415; Citations: 2**
- Venkatesha M, P K Pattnaik, and **Narayan K** “Modeling and Analysis of SOI Gratings-based Opto-Fluidic Biosensor for Lab-on-a-Chip Applications”, *Photonics* **2019**, 6, 71. DOI: 10.3390/Photonics6020071 **I.F: 2.140; Citations: 1**
- M. Kumar, V. Muniswamy, S. H. Kote and **Narayan K**, "Modeling and Analysis of Silicon Nitride (Si<sub>3</sub>N<sub>4</sub>) based Opto Fluidic Sensor," *2020 IEEE Photonics Conference (IPC)*, Vancouver, BC, Canada, 2020, pp. 1-2, doi: 10.1109/IPC47351.2020.9252507.
- Divya Shree S., Bharathi Malakareddy A., Kavya Uralakatte P., Bina Rajan, and **Narayan K.**, "DGT modeling of Mie scattering phenomenon of gold nano particles for biosensing applications," *Proc. SPIE 11362, Clinical Biophotonics*, 113620B (1 April 2020); doi: <http://dx.doi.org/10.1117/12.2555036>
- Manoranjan Kumar, Shwetha M., Gowthami D., Rakshith K.B., **Narayan K.**, Prasant Kumar Pattnaik, "Analysis of integrated optical device with microfluidic channel for sensing application," *Proc. SPIE 11364, Integrated Photonics Platforms: Fundamental Research, Manufacturing and Applications*, 113641R (2 April 2020); doi: <http://dx.doi.org/10.1117/12.2555850>
- Venkatesha M, Sourabh Bhat, Sneha, and **Narayan .K**, “Power coupling and modal analysis of SPR based gap waveguides” *IEEE Sensors 2019* , held at **Montreal Canada** 27-30th October 2019. DOI: 10.1109/SENSORS43011.2019.8956858
- Manoranjan Kumar, Shwetha M. Poojith T, and **Narayan K.** “Silicon nitride based fluidically tuned photonic crystal for bio-sensing application” held on 8-12th December 2019, **Melbourne, Australia**. *Proc. SPIE 11201, SPIE Micro + Nano Materials, Devices, and Applications 2019*, 112011P (31 December 2019) DOI: <https://doi.org/10.1117/12.2539798>
- Asha K , Suryanarayana N K, Venkatesha M, and **Narayan K** (2020), “Modelling and Analysis of Nanosphere Biosensor”, *2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)*, July 2-4, 2020, DOI: 10.1109/CONECCT50063.2020.9198383

- K. Asha, M. Poojashree, D. J. Manaswitha, K. Rajani, G. S. Harshitha and **K. Narayan** (2019), "A Review On Liquid Core Waveguide based MOEMS Structures," April 2019, 3rd International Conference on Trends in Electronics and Informatics (ICOEI), Tirunelveli, India, 2019, pp. 609-612, DOI: 10.1109/ICOEI.2019.8862510

### Prof. Y Jayasimha

- **Yenumaladoddi Jayasimha** & R. Venkata Siva Reddy (2020) "A Robust Face Emotion Recognition Approach through Optimized SIFT Features and Adaptive Deep Belief Neural Network", Journal of Applied Security Research, DOI: [10.1080/19361610.2019.1656471](https://doi.org/10.1080/19361610.2019.1656471)
- **Yenumaladoddi Jayasimha**, Dr. R Venkata Siva Reddy. (2020) "EAGCNN-CNN based Combined Model for Human Emotion, Age and Gender Estimation". *International Journal of Advanced Science and Technology*, 29(10s), 3850-3861. Retrieved from <http://sersc.org/journals/index.php/IJAST/article/view/20955>

### Prof. Vikramamthithan

- **Vikramathithan Andiappan Chinnasamy**; Dandinashivara Revanna Shashikumar, "Breast cancer detection in mammogram image with segmentation of tumour region" *International Journal of Medical Engineering and Informatics (IJMEI)*, Vol. 12, No. 1, 2020, <https://dx.doi.org/10.1504/IJMEI.2020.105658>
- **A C, Vikramathithan and D R**, Dr. Shashikumar, "Performance of Various Denoising Techniques on Dense Glandular Mammogram" (August 7, 2020). Available at SSRN: <https://ssrn.com/abstract=3668874> or <http://dx.doi.org/10.2139/ssrn.3668874>

### Dr. Venkatesha M

- **Venkatesha M**, and Narayan K, "Modeling, Design and Optimization of Compact Taper and Gratings for Mode Coupling to SOI waveguide at C Band" *J. Mod. Opt* , 67:12, 1112-1119, (2020), DOI: <https://doi.org/10.1080/09500340.2020.1810797> I.F: 1.544
- **Venkatesha M**, P K Pattnaik, and Narayan K "Modeling and Analysis of SOI Gratings-based Opto-Fluidic Biosensor for Lab-on-a-Chip Applications", *Photonics 2019*, 6, 71. DOI: 10.3390/photonics6020071 I.F: 2.140; Citations: 1
- M. Kumar, **V. Muniswamy**, S. H. Kote and Narayan K, "Modeling and Analysis of Silicon Nitride (Si<sub>3</sub>N<sub>4</sub>) based Opto Fluidic Sensor," *2020 IEEE Photonics Conference (IPC)*, Vancouver, BC, Canada, 2020, pp. 1-2, doi: 10.1109/IPC47351.2020.9252507.
- **Venkatesha M**, Sourabh Bhat, Sneha, and Narayan .K, "Power coupling and modal analysis of SPR based gap waveguides" *IEEE Sensors 2019* , held at Montreal Canada 27-30th October 2019. DOI: 10.1109/SENSORS43011.2019.8956858
- Asha K , Suryanarayana N K, **Venkatesha M**, and Narayan K (2020), "Modelling and Analysis of Nanosphere Biosensor", 2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), July 2-4, 2020, DOI: 10.1109/CONECCT50063.2020.9198383

### Dr.Chaya B M

- **Chaya B.M**, P.K. Pattnaik, and Narayan .K , "Modeling and Analysis of Organic Light Emitting Diode with Thin Film Anti-Reflective Coatings", *J. Nanoelectron. Optoelectron*, Vol 15, No.4, 425-431 (2020) DOI: <https://doi.org/10.1166/jno.2020.2751> I.F: 0.989

### Prof. Pavan Kumar E

- Ashwini T R, Meenakshi D M, Pavithra C, Tanupriya A G and **Pavan Kumar E** ,“Enhancement of ATM transaction by implementing fingerprint recognition” ,International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Manjunath C, Harish P, Vinay Kumar AN, **Pavan Kumar E**, “Design of Clocked Synchronised Timing Methodology for Advance Digital System”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- B M Uday Prakash, Nagesh M, Sampath Kumar Reddy, Manoj Kumar D A, **Pavan Kumar E**, “Signal Integrity Issues in Digital System Design”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Mukunda D S, Poornachandra Prakash, Manoj Kumar P A, Pavan Kalyan V, **Pavan kumar E**, “Math Model on Error Detection And Correction”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Nadimpalli Rajkumar, Arunkumar S, **Pavan Kumar E**, “Memories using in Digital System Design”,, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Megha M, Namratha shetty T G, Divya V, **Pavan Kumar E**, “Design Optimization in Digital System”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Kavya U P, Sangeetha R, Subbarayappagari Sowmya, Gowthami D, **Pavan Kumar E**, “Design and Implementation of Digital System for Memories” ,International Journal of Innovative Research in Computer and Communication Engineering Volume 8, Issue 4
- Sourabh V Bhat, Rainak Sharma, Pooja M P, Priyanka P, **Pavan Kumar E**, “Development of Programmable Logic Devices”, International Journal of Innovative Research in Computer and Communication Engineering Volume 8, Issue 4
- Harshitha Y J, Mansi D S, Kavya. H, Fiza Khatoon, **Pavan Kumar E**, “Analysis of ASIC Design Methodology in Advanced Digital System”, International Journal of Innovative Research in Computer and Communication Engineering Volume 8, Issue 4

### Prof. Pavithra G S

- S Tejaswi, Ritu Andrea, Rini Ann Thomas, **Pavithra G S**, “Women Safety Device using LPC2148”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Shreyas B V, Shreyas S Bhat, Aman Keshri, Yashaswini S D, **Pavithra G S**, “IOT Based Smart Rain Water Level Indicator Using ARM CORTEX M3 Microprocessor”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Sourabh V Bhat, Rainak Sharma, Kavya U P , Pooja M P , **Pavithra G S**, “”Smart Agriculture using IoT Powered by ARM Microcontroller, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05
- Megha M, Namratha Shetty T G, Divya V, **Pavithra G S** , “Landmine Detection Robot Using ARM CORTEX”, International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05

- Rakshith KB, Meghana Kini, Pranav R, Gagana Naveen A, **Pavithra GS**, “Alcohol Detection System for the Safety of Automobile Users” , International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue:05

### **Prof. Asha K**

- **Asha K** , Suryanarayana N K, Venkatesha M, and Narayan K (2020), “Modelling and Analysis of Nanosphere Biosensor”, 2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), July 2-4, 2020, DOI: 10.1109/CONECCT50063.2020.9198383
- **K. Asha**, M. Poojashree, D. J. Manaswitha, K. Rajani, G. S. Harshitha and K. Narayan (2019), "A Review On Liquid Core Waveguide based MOEMS Structures," April 2019, 3rd International Conference on Trends in Electronics and Informatics (ICOEI), Tirunelveli, India, 2019, pp. 609-612, DOI: 10.1109/ICOEI.2019.8862510

### **Prof. Suryanarayana N K**

- Asha K , **Suryanarayana N K**, Venkatesha M, and Narayan K (2020), “Modelling and Analysis of Nanosphere Biosensor”, 2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), July 2-4, 2020, DOI: 10.1109/CONECCT50063.2020.9198383

### **Prof. Manoranjan Kumar**

- **M. Kumar**, V. Muniswamy, S. H. Kote and Narayan K, "Modeling and Analysis of Silicon Nitride (Si<sub>3</sub>N<sub>4</sub>) based Opto Fluidic Sensor," 2020 *IEEE Photonics Conference (IPC)*, Vancouver, BC, Canada, 2020, pp. 1-2, doi: 10.1109/IPC47351.2020.9252507.
- **Manoranjan Kumar**, Shwetha M., Gowthami D., Rakshith K.B., Narayan K., Prasant Kumar Pattnaik, "Analysis of integrated optical device with microfluidic channel for sensing application," Proc. SPIE 11364, Integrated Photonics Platforms: Fundamental Research, Manufacturing and Applications, 113641R (2 April 2020); doi: <http://dx.doi.org/10.1117/12.2555850>
- **Manoranjan Kumar**, Shwetha M. Poojith T, and Narayan K. “Silicon nitride based fluidically tuned photonic crystal for bio-sensing application” held on 8-12th December 2019, Melbourne, Australia. Proc. SPIE 11201, SPIE Micro + Nano Materials, Devices, and Applications 2019, 112011P (31 December 2019) DOI: <https://doi.org/10.1117/12.2539798>

## Academic Achievements

- **Around 100 Students** are certified in the **National Programme on Technical and Enhanced Learning (NPTEL)** for various Courses of Electronics and Communication Engineering in the year 2019-20.
- Around 200 students have been certified by **Coursera** for various courses
- Each faculty from the department of ECE has at least 3 Coursera certifications on various courses.