# Newsletter

DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING, SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

**Year - 2019-20** 

Cheif Editor
Dr.R.. S. Gamad
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### **Institute Vision & Mission**

#### Vision

A front line institute in science and technology making significant contributions to human resources development envisaging dynamic needs of society

#### Mission

To generate expert in science and technology akin to society for its accelerated socioeconomic growth in professional and challenging environment imparting human values

## **Department Vision Mission**

#### Vision

The department is committed to provide a holistic education that transforms the students into responsible engineers and facilitates them to build successful careers and excel in the field of Electronics and Instrumentation with social and ethical standards.

#### Mission

To prepare emerging Electronics and Instrumentation engineers to possess good communication skills with the ability to work in multi-disciplinary groups, lead teams and understand their professional and ethical responsibilities for serving the needs of the society.

#### **DEPARTMENTAL ACTIVITY IN SESSION 2019-20**

## 1. LIST OF PAPER PUBLISHED BY THE FACULTIES AND STUDENTS IN ACADEMIC YEAR 2019-20

- 1. Shivendra Singh Parihar and Ramchandra Gurjar "Compact Modelling of Drain Extended MOS Transistor using BSIM-BULK Model"VLSI Desgin and Test (VDAT)-2019 during July 04-06,2019 at IIT Indore. ISSN 1865-0929 ISSN 1865-0937 (electronic)Communications in Computer and Information Science ISBN 978-981-32-9766-1 ISBN 978-981-32-9767-8.
- **2.** Ashu Tilwe, R.C.Gurjar and D.K.Mishra ,"Low Phase Noise Current Starved Ring VCO on MOS Capacitance" International journal of innovative technology and exploring engineering (IJITEE) vol-8 issue-10, august-2019, ISSN:22783075.
- 3. Shreyas Tiwari, Rajesh khatri and Ram Chandra Gurjar "RF Double Balanced Current Mirror UP-Conversion Mixer at 2.4 Ghz frequency" IEEE Sponsored IEMENTech 2019 at IEM Kolkata during august 2019. DOI:10.1109/IEMENTech48150.2019.8981073.
- **4.** Pradeep Rajpoot, R.C.Gurjar and R.S.Gamad, "Low Phase Noise Wide Tuning Range LC Oscillator for RF Application using Varactor Bank" Journal of Telecommunication, Electronic and Computer Engineering(JTEC), Volume-11 no-3 July-sep-2019 ISSN:2180-1843 E-issn:2289-8131.
- 5. Jitendra Patidar, R.Khatri, R.C.Gurjar "Precision Agriculture System Using Verilog Hardware Description Language to desing an ASIC" IEEE Sponsored IEMENTech 2019 at IEM Kolkata during august 2019. DOI: 10.1109/IEMENTech48150.2019.8981128 Electronic ISBN: 978-1-7281-5543-2 Print on Demand(PoD) ISBN: 978-1-7281-5544-9 2019.
- **6.** R.C.Gurjar and D.k.Mishra "A Wide Tuning Range Self-Switched Biasing VCO in 0.18μm CMOS Technology" International journal of information technology and electrical engineering, vol-8 issue-5, ISSN: 2306-708X oct-2019.
- 7. R.C.Gurjar and D.K.Mishra "Design and Performance Analysis of Active Inductor with Low Voltage and High Q Active Inductor" 5 th IEEE International Conference on Inventive Computation Technologies(ICICT-2020), during 26-28 feb 2020.DOI: 10.1109/ICICT48043.2020.9112505 Electronic ISBN: 978-1-7281-4685-0 ,Print on Demand(PoD) ISBN: 978-1-7281-4686-7 , Coimbatore (India)/26-28th Feb-2020,RVS Technical Campus, Coimbatore.
- **8.** Yudhishthir Raut, R. S. Gamad and P. P. Bansod "Objective analysis and bit rate analysis of HEVC compressed 4D-fMRI images International Journal of Imaging Systems and Technology, Wiley March 2019 Vol.29, No. 3 PP. 283-296.
- 9. Vaishali Naik, R.S. Gamad and P. P. Bansod, Efficient initialisation of Distance regularised level set without re-initialisation scheme and quantitative evaluation of IMT in B mode ultrasound common carotid artery Taylor and Francis in Int. Jr. Computer Methods in Biomechanics and Biomedical Engineering: Imaging Visualization 2019 Vol. 7, no. 2, PP. 207–226 ISSN: 2168-1163 Online ISSN: 2168-1171)(2019)

https://www.tandfonline.com/action/journalInformation?journalCode=tciv20.

- **10.** Virendra K., R. S. Gamad Design of Low Power Delay Cell for Wide Tuning Voltage Controlled Oscillator for Frequency Synthesis Applications International Journal of Recent Technology and Engineering 2019 (IJRTE Vol.-7 Issue-5 ISSN: 2277-3878.
- **11.** K.S. Singh, P.P. Bansod, and R.S. Gamad, "ECG Monitoring System using 180nm Technology 23rd International Conference on Electronics, Materials Engineering.
- **12.** A. Sahu, R.S. Gamad and P.P. Bansod, Design and Implementation of Encoder and Decoder for Cyclic Redundancy Check International Conference on Communication and Electronics Systems.
- **13.** Kamini Singh, R.S. Gamad and P.P. Bansod, Design and Analysis for Power Reduction with High SNM of 10T SRAM Cell Communications in Computer and Information Science (CCIS), Springer, p.no. 541-549 2019.
- **14.** Virendra K. Verma, D. K. Mishra and R. S. Gamad , "MODELING AND SIMULATION OF FREQUENCY SYNTHESIZER BASED ON PHASE LOCKED LOOP FOR RF APPLICATIONS" JES Journal of Engineering Sciences, Vol.11, Issue 02, Feb 2020, ISSN: 0377-9254.
- **15.** Saksha Shinde, Dr. Neeraj Sharma, Dr. Prashant Bansod, Dr. Munendra Singh, Chandra Kant Singh Tekam, Automated nucleus segmentation of leukemia blast cells: color spaces study International International Conference on Data, Engineering and Applications (IDEA), 28-29 Feb. 2020 DOI: 10.1109/IDEA49133.2020.

## 2. In SGSITS Indore Department of Electronics and institute organized STTP programme. Here is the detail of STTPs.

S.N.	Name	Session	Coordinator
1.	VLSI Design and Test (conducted in collaboration with IIT indore)	2019-20	Dr. R.S. Gamad
2.	Design and development of system on Chip using Low power VLSI (AICTE Approved)	2019-20	Dr. D.K. Mishra

#### 3. Webinar conducted by the department

- 1. A webinar on" Hardware Accelerator for Machine Learning Application" Conducted by Electronics & Instrumentation dept, SGSITS on 01/06/2020.
- 2. An international webinar on" Technology Trends in Automotive Electronics-An Overview": Hardware Accelerator for Machine

Learning Application" Conducted by Electronics & Instrumentation department, SGSITS on 20/06/2020.

#### 4. No. of Ph. D. No. awarded/Submitted

S.No	<b>).</b>	Name of student	Guided by	Co-Guide
1.		Anjulata Yadav	Dr. P. D.	Dr. P.P. Bansod
			Vyavahare	

# 5. Visit of UG and PG students to MSME(Indo-German Tool) Indore on 28th September 2019.

