



**St. Joseph's Institute of Technology**  
**St. Joseph's Group of Institutions**  
OMR, Chennai - 119



**Department of Electronics and Communication Engineering**  
(Accredited by NBA)

**FACULTY DETAILS**

<b>Staff Name:</b>	<b>Dr. G. ROHINI</b>
<b>Designation:</b>	Professor
<b>Date of Birth:</b>	30.03.1971
<b>Educational Qualification:</b>	M.E., Ph.D
<b>Area of Interest:</b>	Digital Circuits, VLSI, Embedded System
<b>Years of Experience:</b>	23 Years 1 Month
<b>Area of Research:</b>	VLSI
<b>No. of Students Project Guided</b>	66
<b>Supervisor</b>	Sathyabama University Ms.G.Brindha (Reg.No.2013192301) – Ph.D Completed.
<b>FDP &amp; Workshop Funding</b>	<ul style="list-style-type: none"><li>• <b>Sensor and its Application in Navigation System in Marine and Defence Environment</b> funded by <b>AICTE</b> organized by <b>ATAL</b> at a cost of <b>Rs. 93,000</b>.</li><li>• <b>Biological Effects Of Electromagnetic Fields And Radiation</b> funded by <b>Board Of Research In Nuclear Science (BRNS)</b> at a cost of <b>Rs. 40,000</b>.</li><li>• <b>Engineering In Diabetology</b> funded by <b>Indian Council Of Medical Research (DHR ICMR)</b> at a cost of <b>Rs. 50,000</b>.</li></ul>
<b>R &amp; D Activities</b>	<ul style="list-style-type: none"><li>• <b>Mining Haulage Tracking and Monitoring</b> is funded by <b>AROBOT</b> at a cost of <b>Rs 3,50,000</b>.</li><li>• <b>Development of ARM CortexM4 Board</b> is funded by <b>Pantech Pro Labs</b> at a cost of <b>Rs.1,16,000</b>.</li></ul>
<b>Publications Details:</b>	<b>Paper Publications:</b> <ul style="list-style-type: none"><li>• <b>Quality and Durability Checking Of Clothes</b>, International Journal of Scientific &amp; Engineering Research –IJSER.</li><li>• <b>Ring Cross Over Based Genetic Algorithm for DFMB Chip Design and Medical Image Compression</b>, Current Signal Transduction Therapy, Bentham Science Publishers.</li><li>• <b>Automation of Longitudinal Time Series Data Visualization using Plot Specifications obtained from XL file</b>, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8 Issue-6,</li></ul>

August 2019, pp. 3105-3109.

- Quantum Optimization of Evolutionary Algorithm Using Droplet Based Advanced Digital Microfluidic Biochip and Clinical Prognosis Configuration, Journal of Medical Imaging and Health Informatics, Volume 9, Number 6, August 2019, pp. 1329-1336(8).
- Enhanced Technique Based Design and Optimization of DMFB in Restricted Sized, Journal Of Computational And Theoretical Nano science, Vol.14, No. 5, 1546-1955/2017/14/2481/009, Pg. no.- 2481-2489, 2017.
- Efficient Restricted Sized DMFB with Ring Cross Over Technique, International Journal Of Control Theory And Applications, ISSN : 0974 – 5572, volume 10, issue number 38, 2017, pg. 57 – 68.
- Detection of Malignancy of Skin Lesions Based on Local Texture and Fractal Analysis, Research Journal of Pharmaceutical, Biological, and Chemical Sciences, Vol. 6, No. 2, pp. 408-412, 2015.
- Genetic Algorithm based Optimization of Single Node in Reformed-Digital Micro Fluidic Biochip” Indian Journal of Science and Technology Vol 8(29), pg 1-8, ISSN (Print) : 0974-6846 ISSN (Online) : 0974-5645.
- Energy efficient geographical key management scheme for authentication in mobile wireless sensor networks, The Journal of Mobile Communication, Computation and Information Springer US, pp 1–11, Vol 23 (ISSN: 1022-0038.)
- Secured Transmission of Data in Mobile Wireless Sensor Networks, International Journal of Advanced Engineering Technology Vol. VII, ISSN 0976-3945.
- ILP-Based Computer-aided testing and Optimization of Embedded Core, International Journal of Computer Applications, Vol. 11, No. 8, pp. 33-36, 2010.
- Optimal Test Time for System-on-Chip Designs using Fuzzy Logic and Process Algebra, Journal of Computer Science, Vol. 6, No. 1, pp. 12-17, 2010.
- An Efficient Approach to Wrapper Design, TAM Configuration and Test Scheduling for Embedded Cores, European Journal Scientific Research, Vol. 35, No. 4, pp. 593-602, 2009.
- High Performance TAM Controller and Wrapper Design for

	<p>Embedded Cores, International Journal of Engineering Research and Industrial Applications (IJERIA), Vol. 2, No. 6, pp. 47-57, 2009.</p> <p><b>Conferences:</b></p> <ul style="list-style-type: none"> <li>• Energy Harvesting from Machineries for Industries, International conference on System, Computation, Automation and Networking ( ICSCAN 20), Manakula Vinayagar Institute of Technology. 27 &amp;28-03-2020</li> <li>• Puducherry, India</li> <li>• Directed and Safe Driving Implementation using Multi-Featured Smart Helmet, International Conference On Innovations And Research In Marine Electrical And Electronics Engineering (ICIRMEEE 2018), 27<sup>th</sup> and 28<sup>th</sup> September 2018.</li> <li>• Autonomous Mobile Object Classification, National Conference On Recent Trends In Information And Communication (NCRTIC–18), 28<sup>th</sup> March 2018.</li> <li>• Dynamic Washout Multiple Droplet Lab On Chip Routing, 4th International Conference On Signal Processing, Communications And Networking (ICSCN’17), <b>IEEE Conference.</b></li> <li>• FPGA prototyping of video stabilization for micro aerial vehicles, 2nd International Conference on recent trends in engineering and technology.</li> <li>• Dynamic washout multiple droplet lab on chip routing, 4th International conference on signal processing, communications and networking, March 16th– 18th 2017</li> <li>• Design of Reusable and Flexible Test Access Mechanism Architecture for System-on-Chip, PIERS Proceedings, Hangzhou, China, pp. 916-921, March 24-28, 2008.</li> <li>• Area efficient TAM controller and wrapper design for embedded cores, Proceedings of IEEE International Conference on Control, Automation, Communication and Energy Conservation, INCACEC 2009, Perundurai, Erode, pp. 111-114, 2009.</li> </ul> <p><b>Patent:</b></p> <ul style="list-style-type: none"> <li>• Gas Lighter With Leakage And Level Monitoring System, Official Journal Of The Patent Office (<b>Filed No. 202041014653</b>).</li> </ul>
<p><b>FDP &amp; Workshop Attended Details:</b></p>	<ul style="list-style-type: none"> <li>• Faculty Development Program on “Information Management and Coordination Department “from 21/10/19</li> </ul>

to 25/10/19 at **NITTR**, Chandigarh.

- Faculty Development Program on “Introduction to Internet of Things “JUL-OCT 2019 1 ½ Weeks at **NPTEL - AICTE**
- Faculty Development Program on “Research Areas in Smart Antenna Design for CUBESAT Applications “31/10/19 to 06/11/19 at Sri Sairam Institute of Technology ,Chennai (**AICTE SPONSORED**)
- Faculty Development Program on “Python 3.4.3 “10-5-2020 to14-5-2020 at Sri Krishna college of Technology, Coimbatore (**Spoken Tutorial, IIT Bombay**)
- Faculty Development Program on “Data Analysis & Visualisation COVID 19 using Python “7-5-2020 at Jerusalem College of Engineering, Chennai.
- Faculty Development Program on “Embedded and IOT BOOTCAMP “27-5-2020 to 29-5-2020 at Mohamed Sathak A J College of Engineering, Chennai
- Faculty Development Program on “SCILAB “25-05-2020 to 27-05-2020 at St.Joseph’s Institute of Technology, Chennai. **Spoken Tutorial, IIT Bombay.**
- Faculty Development Program on “Cyber Security “18-05-2020 to 22-05-2020 at **AICTE & ATAL** Academy.
- Workshop on “Effective and Efficient Online Teaching in the Age of Corna “16-5-2020 at Bohitree Platform IIT, Bombay
- Faculty Development Program on “Emerging Trends in Embedded Systems “02/07/18 to 07/07/18 at St.Joseph’s College of Engineering, Chennai. (**AICTE-ISTE SPONSORED**)
- Faculty Development Program on “Machine Learning “ 1 Weeks at **NPTEL -AICTE**
- Faculty Development Program on “Deep Learning “ 1 ½ Weeks at **NPTEL -AICTE**
- Faculty Development Program on “Introduction to Industry 4.0 and Industrial IOT 1 ½ Weeks at **NPTEL -AICTE**
- Faculty Development Program on “Industry 4.0 (Smart Manufacturing) “19/11/18 to 20/11/18 at St.Joseph’s Institute of Technology, Chennai. (**MSME SPONSORED**).
- Faculty Development Program on “Ethical Hacking and Cyber Security “22/2/19 to 23/2/19 at AMET , Chennai.
- Faculty Development Program on “Recent Advancements in Artificial Intelligence & Machine Learning “14/11/18 to

	15/11/18 at S.A Engineering College, Chennai <ul style="list-style-type: none"><li>• Faculty Development Program on “Emotional Intelligence “14/5/2018 to 15/5/2018 at Anna adarsh College for Women, Chennai</li></ul>
<b>Professional Membership:</b>	<b>IEEE,ISTE,IETE</b>