



SREE VIDYANIKETHAN ENGINEERING COLLEGE
(Autonomous)

Sree Sainath Nagar, Tirupati – 517 102.



Department of Electronics and Communication Engineering

Council of Scientific and Industrial Research
(CSIR)

Sponsored

TWO DAY NATIONAL WORKSHOP

ON

“VLSI Architectures for Biomedical Image Processing Applications”

The Department of Electronics and Communication Engineering of Sree Vidyanikethan Engineering College has organized a Two-Day national Workshop titled “VLSI Architectures for Biomedical image Processing Applications” during 08-09 August 2019, which is sponsored by council of Scientific and Industrial Research (CSIR).

Objectives of this workshop is

- To identify those emerging VLSI technology and Bio medical applications which are considered as having the greatest potential in providing broad equitable social benefits
- To promote the researchers towards developing the knowledge and ability in addressing the health care needs using VLSI and medical image processing and to solve the latest research issues and happenings relevant to bio-medical image processing through VLSI Architectures.
- To promote research collaboration and partnerships among VLSI and Bio medical professionals for proving the solutions for Bio medical issues through VLSI technologies.

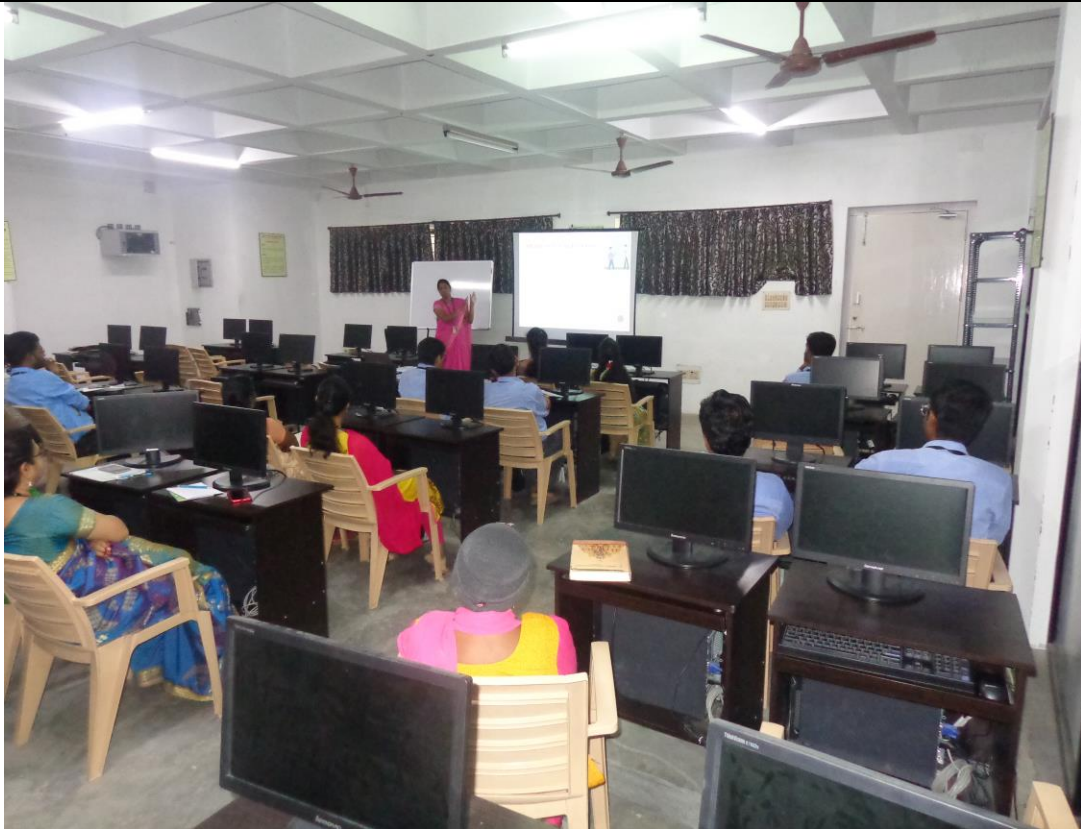
A total of 40 delegates including PG scholars, research scholars and faculty from various institutions have participated in the Workshop. Dr.P.Nagarajan, Associate Professor organized this workshop as convener and Dr.N.Ashok kumar, Associate professor, Dr.N.Vithya Lakshmi , Associate professor and Ms.K.Neelima, Assistant Professor as coordinators under the guidance of Dr. P. V. Ramana, Professor and Head, Department of Electronics and Communication Engineering.

The resource persons constitutes of scientists, Experts, senior faculty members and eminent guest speakers from different R&D organizations, Premier Academic institutions of Engineering and Sciences. The feedback on participants understanding and learning, resource person’s knowledge, knowledge sharing and organization of the workshop is extraordinary and encouraging to organize many workshops of this kind.

Overall, the event has proved successful. The program schedule and photographs of workshop are as follows.

Program Schedule

DATE	TIME SCHEDULE	SESSIONS	TOPIC
Day - 1			
08.08.2019	09:00 AM – 09:30 AM	Inaugural Function	
	09:30 AM- 11:00 AM	Session 1	Introduction to Biomedical image processing and Sources of medical images
	11:00 AM – 11:15 AM	Tea Break	
	11:15 AM – 12:45 PM	Session 2	Design Methods of Bio-Medical image Processing Algorithms and Architectures
	12:45 PM – 01:45 PM	Lunch	
	01:45 PM – 03:00 PM	Session 3	Quick tour on VLSI Design (Analog / Digital / Mixed)
	03:00 PM – 03:15 PM	Tea Break	
	03:15 PM – 04:30 PM	Session 4	Design of VLSI circuits and systems for CT & MRI Scan Biomedical images
Day - 2			
09.08.2019	09:00 AM – 10:30 AM	Session 5	Design of VLSI architectures for Ultrasound Biomedical images
	10:30 AM- 10:45 AM	Tea Break	
	10:45 AM – 12:30 PM	Session 6	Design of VLSI architectures for Bio signals & Biomedical images
	12:30 PM – 01:30 PM	Lunch	
	01:30 PM – 03:15 PM	Session 7	Mixed signal VLSI Circuits and Architectures for Biomedical images (Data conversion)
	03:15 PM – 03:30 PM	Tea Break	
	03:30 PM – 04:00 PM	Valedictory Function	



Dr. K. G. Suma, Associate Professor, Department of CSE, SVEC delivering the content on introduction to Biomedical Image Processing.



Dr. K. G. Suma, Associate Professor, Department of CSE, SVEC delivering the various sources of Medical Images and the corresponding samples.



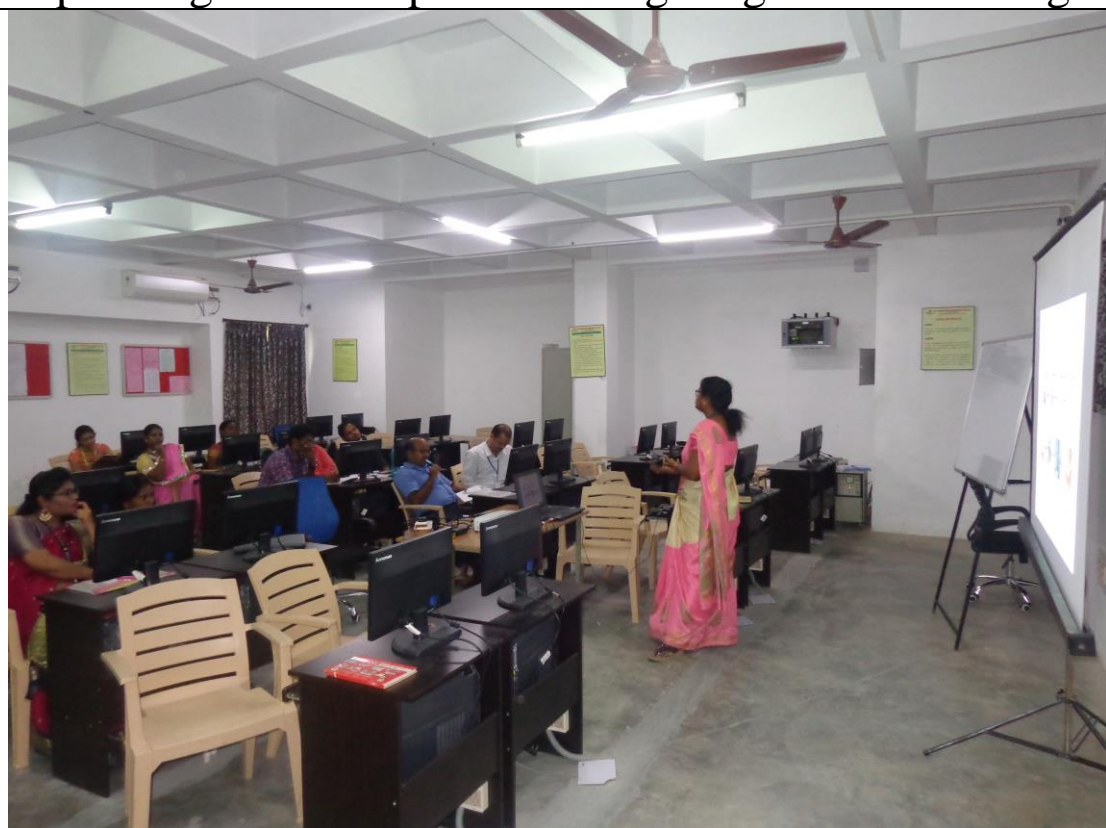
Dr. T.V.V. Satyanarayana, Associate Professor, Department of ECE, SVEC importing the algorithmic knowledge for Biomedical Image Processing and their implementation in MATLAB.



Dr. T.V.V. Satyanarayana, Associate Professor, Department of ECE, SVEC discussing the development of architectures for Biomedical Image Processing.



Dr. N. Vithyalakshmi, Associate Professor, Department of ECE, SVEC explaining the concepts of Analog/ Digital VLSI Design.



Dr. N. Vithyalakshmi, Associate Professor, Department of ECE, SVEC explaining the models for implementing Analog/ Digital VLSI Design.



Dr. T. Kavitha, Associate Professor, Department of ECE, VelTech University, Chennai delivering the concepts of VLSI Circuits for CT/ MRI Images.



Dr. T. Kavitha, Associate Professor, Department of ECE, VelTech University, Chennai delivering the concepts of VLSI Systems modelled for CT/ MRI Images in Simulink and Xilinx Vivado Tools.



Dr. P. Nagarajan, Associate Professor, Department of ECE, SVEC discussing about Mixed Signal VLSI Circuits for Biomedical Applications.



Dr. P. Nagarajan, Associate Professor, Department of ECE, SVEC discussing about Mixed Signal VLSI Architectures for Biomedical Images and Bio-Signals.



Dr. VE. Jayanthi, Professor and Head, Department of Biomedical Engineering, PSNACET, Dindigul (Formerly Scientist – D at Center for research-nano dept) Explaining about VLSI Architectures for Ultrasound Biomedical Image Processing.



Dr. VE. Jayanthi, Professor and Head, Department of Biomedical Engineering, PSNACET, Dindigul (Formerly Formerly Scientist – D at Center for research-nano dept) discussing the research issues in Ultrasound Biomedical Image Processing.



Dr. M. Thiruvani, Associate Professor, Department of ECE, PSNACET, Dindigul explaining the concepts to develop the VLSI Circuits for Bio-Signal and Biomedical Image Processing.



Dr. M. Thiruvani, Associate Professor, Department of ECE, PSNACET, Dindigul discussing about the VLSI architectures for Biomedical Image Processing.



Dr. M. Thiruveni, Associate Professor, Department of ECE, PSNACET, Dindigul enlightening the real world challenges in coupling VLSI with Biomedical Image Processing.



Honorarium received by Dr. VE. Jayanthi from Senior Professor Dr. N. Padmaja.



Honorarium received by Dr. M. Thiruvani from Senior Professor Dr. N. Padmaja.



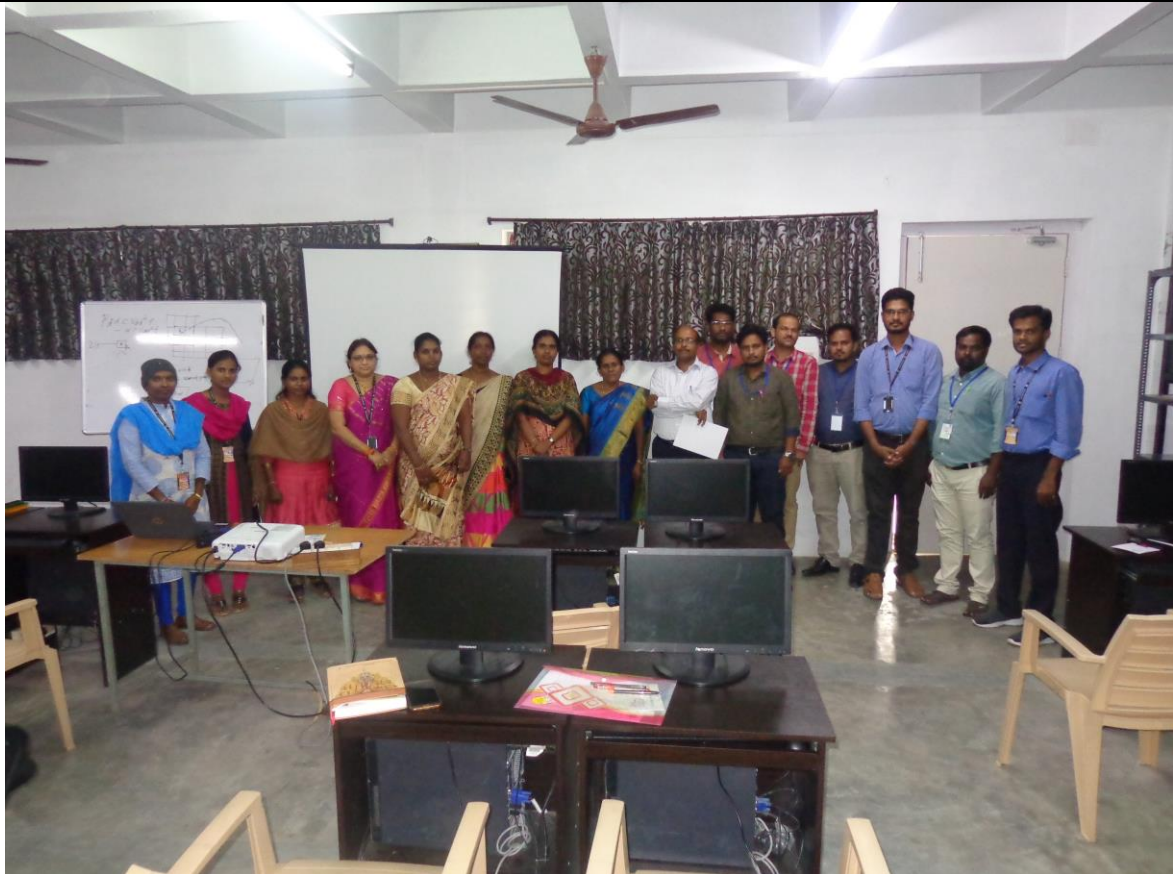
Valedictory followed by issue of Certificates to the Participants by Senior Professor Dr. N. Padmaja.



Valedictory followed by issue of Certificates to the Participants by Resource Person Dr. VE. Jayanthi and Senior Professor Dr. N. Padmaja.



Valedictory followed by issue of Certificates to the Participants by Resource Person Dr. M. Thiruvani and Senior Professor Dr. N. Padmaja.



Valedictory function followed by Group Photo with Participants and Resource Persons.



Valedictory function followed by Group Photo with Students and Resource Persons after discussion about research in interdisciplinary domain of VLSI and Biomedical Engineering.

