

Faculty Profile

N.M.MARY SINDHUJA,

Assistant Professor (Selection Grade)

marysindhujaece@kamarajengg.edu.in

Mobile No:9487759597

Educational Qualification			
Degree	Class & %	Institution	Year
Ph.D.	Information and Communication Engineering	Anna University, Chennai	Pursuing
M.E. (Communication Systems)	76% - First Class with Distinction	MEPCO Schlenk Engineering College,Sivakasi.	2007-2009
B.E (ECE)	73% First Class	St.Xavier's Catholic College of Engineering, Chunkankadai	2004-2007

Experience			
Name of the College	Designation	Period	No. of. Years
Vins Christian College of Engineering, Chunkankadai	Lecturer	16.07.2009 to 30.04.2010	10 months
Kamaraj College of Engineering and Technology	Lecturer	5.07.2010	1 month
Kamaraj College of Engineering and Technology	Assistant Professor	5.08.2010 to till date	8 years 11 months

Area of Specialization

- RF MEMS/NEMS
- Digital Image Processing

Publications

- Published a paper in International Journal of Computer Applications in Engineering Sciences titled “Edge Detection of Synthetic Image using GHM Multiwavelet Transform” Vol II, Issue IV, December 2012.
- Published a paper in International Journal of Engineering Research and Technology (IJERT) titled “Content Based Image Retrieval Based on Spatial Constraints using Lab View” Vol 1, Issue II, January 2013.
- Published a paper in International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering titled “SPIHT Based Compression of Hyper Spectral Images” Volume 2, Issue 10, October 2013
- Published a paper in International Journal of Computer science and mobile computing titled “Performance Analysis of Image Fusion Algorithms using HAAR Wavelet” Volume 3, Issue 1, and January 2014.
- Published a paper in International Journal of Applied Engineering Research titled “Design of RF MEMS Switch for Wireless LAN Applications” Vol 10, No.6, 2015.
- Published a paper in International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) titled “Design of ECPW for high speed device” ,Vol.3,Special Issue 14, March 2016.
- Published a paper in International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) titled “Measure of RF signal power in RF MEMS switch” ,Vol.6,Special Issue 20, March 2017.
- Published a paper in IEEE xplore titled “Analysis of DMTL phase shifter using RF MEMS power sensor”, pp 133-136, 19th, October, 2017.
- Published a paper in Journal of circuits systems and computer titled “Three-Bit DMTL Phase Shifter for Phased Array Antennas” Volume 28, Number 7, 1950112(June 2019).

Conferences

- Published a paper in International conference of Control, Automation, Communication and Energy Conservation titled “Spot edge detection in microarray images using balanced GHM multiwavelet” during April 2009
- Published a paper in International Conference on Engineering and Technology (ICET 2K12) titled “An Implementation of scale Invariant Feature Transform (Sift) Algorithm using Content

Based Image Retrieval” on April 18-20, 2012.

- Published a paper in Second International Conference On Recent Trends In Computer Science and Engineering titled “Performance Evaluation of Brain Tumor Detection Using Wavelet and GHM MultiWavelet Transform” on 3.5.2014 & 4.5.2014.
- Published a paper in IEEE Sponsored 3rd International conference on Innovation, Embedded and Communication systems (ICIIECS) organized by Karpagam College of Engineering, Coimbatore titled “Design of S-Band Microstrip Patch Antenna for Mobile Application” on 17-3-2016 & 18-3-2016.
- Published a paper in National Conference on Signal Processing and Communication Technologies’ 16 (CSPCT’16) organized by Kamaraj College of Engineering and Technology, Virudhunagar titled “Design of ECPW for high speed devices” on 24-3-2016.
- Presented a poster in the National symposium on Nano Science & Technology (NSNST-2016) on the topic “Analysis of 3 Bit Ku Band DMTL Phase Shifter Using Elevated Coplanar Waveguide” at Indian Institute of Science, Bangalore during 29.6.2016 & 30.6.2016.
- Presented a paper in IEEE conference on Emerging Devices and Smart Systems (ICEDSS) titled “Analysis of DMTL phase shifter using RF MEMS power sensor” organized by Mahendra Engineering College on 4.3.2017.
- Published a paper in International Conference on Innovations in information Embedded and Communication Systems (ICIIECS) titled “Equivalent Circuit Modelling Of DMTL Phase Shifter”, Vol.6, 17.3.2017 & 18.3.2017.
- Published a paper in National Conference on Signal Processing and Communication Technologies’ 17 (CSPCT’17) organized by Kamaraj College of Engineering and Technology, Virudhunagar titled “Measure of RF signal power in RF MEMS switch” on 24-3-2017.
- Published a paper in IEEE conference on Emerging Devices and Smart Systems (ICEDSS) titled “Design of 30 degree DMTL Phase Shifter for K band applications” organized by Mahendra Engineering College on 3.3.2018.
- Presented a paper in ISSS National Conference on MEMS, Smart Materials, Structures and Systems titled “One Bit RFMEMS Phase Shifter for k Band Applications” organized by Thiagarajar College of Engineering on 4.10.2018-6.10.2018.
- Presented a paper in ISSS National Conference on MEMS, Smart Materials, Structures and Systems titled “Analysis Of DMTL Phase Shifter Using QL-RKPM Method” organized by Thiagarajar College of Engineering on 4.10.2018-6.10.2018

- Published a paper in International Conference on Recent trends in Engineering, Technology and Management titled “Design of Array Antenna using 4 bit DMTL Phase Shifter” organized by Coimbatore Institute of Engineering and Technology held on 29.3.2019 & 30.3.2019.

FDP/Seminar/workshop/Short Term Course Attended

- Technical Seminar on Wavelet Transforms and its Applications organized by Mepco Schlenk Engineering College, Sivakasi during 4.2.2011 & 5.2.2011
- National Workshop on Micro Electro Mechanical Systems organized by Thiagarajar College of Engineering, Madurai during 1.11.2012 & 2.11.2012.
- Faculty Development Program on Neural and Fuzzy Methods in Engineering organized by CSI Institute of Technology, Nagercoil during 27.9.2013 & 28.9.2013.
- National Workshop on Antenna Simulation and measurement using ADS and Vector Network Analyzer organized by K.L.N College of Engineering, Pottapalayam during 27.02.2014 & 28.02.2014.
- Workshop on Nanoscale Processing in MEMS and NEMS organized by Indian Institute of Science, Bangalore during 7.07.2014.
- Workshop on Biometrics Image Processing and Video Analytics Hands-on Practice organized by Kamaraj College of Engineering and Technology during 27.11.2014, 28.11.2014 & 1.12.2014.
- Hands on Training on Design, Modeling and Simulation using PSIM organized by Thiagarajar College of Engineering, Madurai during 27.06.2014 & 28.06.2014.
- IBM Software training under career Education Program on “IBM CE-Enablement Program-Cloud Computing Architecture “at Kamaraj College of Engineering and Technology during 6.08.2014, 7.08.2014, 11.08.2014 & 12.08.2014.
- IBM Software training under career Education Program on “IBM CE-Enablement Program-Enterprise Application Development (J2EE) for Cloud Deployment“ at Kamaraj College of Engineering and Technology from 6.09.2014 to 9.09.2014.
- National Workshop on Design Skills with ANSOFT organized by Dr.Sivanthi Aditanar College of Engineering, Tiruchendur during 20.02.2015 & 21.02.2015.
- Faculty Development program on “EC6502-Principles of Digital Signal Processing”, organized by Kamaraj College of Engineering and Technology during 1.06.2015 to 7.06.2015.
- National Workshop on Microwaves Through Software Organized By National Institute

Of Technology, Tiruchirappalli during 6.11.2015 & 7.11.2015.

- INUP Familiarization Workshop on "Nanofabrication Technologies" organized by Indian Institute of Science, Bangalore during 18.01.2016 to 20.01.2016.
- Hands on Training on "Nanofabrication Technologies" organized by Indian Institute of Science, Bangalore during 4.02.2016 to 12.02.2016
- Workshop on "Analog system design using ASLK pro" Organized by Kamaraj College of Engineering and Technology in association with EdGate Technologies Pvt. Ltd. on 26.8.2016.
- Workshop on "Mobile Application Development with Arduino" Organized by Kamaraj College of Engineering and Technology during 17.11.2016 & 21.11.2016
- Attended two days seminar on "Recent Trends in RF Antennas & MIC," at KLN College of Engineering on 1.12.2016 & 2.12.2016.
- Attended one day workshop on "Intellisense MEMS workshop" at Thiagarajar College of Engineering on 3.4.2017.
- Attended one day guest lecture on "IoT" at kamaraj college of Engineering organized by IETE professional Society on 18.8.2017.
- Attended two day workshop on "Problem solving using Smith Chart" at Thiagarajar College of Engineering on 9.9.2017 & 10.9.2017.
- Attended one day workshop on "MEMS, Smart Materials, Structures and Systems" at Thiagarajar College of Engineering on 4.10.2018.

Conference/Symposium/FDP/Seminar/workshop/Short Term Course Organized

- Organized Three day FDP on "Programming in ARM cortex processor, Raspberry pi & Realization of Analog circuits using ASLKPRO kit" during 15-12-2016 to 17-12-2016
- Organized a seminar on 'Problem solving using smith chart ' for final year students on 21.10.2017. (Dr.S.KANTHAMANI,ASSo.Prof./ECE,TCE,Madurai)
- Organized a seminar on 'Mathematical Theory of light Transmission in Optical Fibre ' for final year students on 28.10.2017. (Mr.M.Raja,ASSo.Prof./ECE, Institute of Road & Transport Technology,Erode)

Resource Person / Jury / Lectures Delivered

- Acted as resource person for the value added course on 1D and 2D processing using MATLAB and GUI organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 7-9-2015 to 14-9-2015 & 23-9-2015 to 29-9-2015
- Acted as resource person in the workshop on 1D and 2D processing using MATLAB and GUI organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 14-12-2015-19-12-2015
- Acted as resource person for the value added course on 1D and 2D processing using MATLAB and GUI organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 8-8-2016 to 12-8-2016 & 1-8-2016 to 6-8-2016
- Acted as resource person for the Three day FDP on “Programming in ARM cortex processor, Raspberry pi & Realization of Analog circuits using ASLKPRO kit” organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 15-12-2016 to 17-12-2016
- Acted as resource person for the value added course on 1D and 2D processing using MATLAB and GUI organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 30-1-2017 to 4-2-2017.
- Acted as resource person for the value added course on 1D and 2D processing using MATLAB and GUI organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 28-8-2017 to 2-9-2017 & 4-9-2017 to 9-9-2017.
- Acted as resource person for the value added course on PCB Design organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 22-8-2017 to 24-8-2017.
- Acted as resource person for the value added course on PCB Design organized by Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar during 12-9-2017 to 14-9-2017.
- Acted as resource person for guest lecture on Micromachining of RF MEMS organized by Department of Mechatronics, Kamaraj College of Engineering and Technology, Virudhunagar on 12.10.2018.
- Acted as Judge for the Event Paperino (paper presentation) in VYUHA2K18 on 16th March 2018 hosted by ECE Department at KCET

Awards/Recognition Received

- Received appreciation for producing 100% pass for the subject EC6501 Digital Communication during 2015-2016 Odd Semester in the 19th annual day.
- Received appreciation for producing 100% pass for the subject EC6701 RF and Microwave Engineering during 2016-2017 Odd Semester in the 20th annual day.

Patent

NIL

Books Published

- Chapter written for the Book titled "1D & 2D Signal Processing using Matlab and GUI" contribution of Chapter 12 Segmentation with ISBN number 978-93-86537-83-6 at Shanlax publications.
- Chapter written for ATAL Tinkering Manual (Volume 2) titled "Mathematics- Geometrical Shapes with MATLAB Programs" during January 2018.

Membership

- ISTE Member
- IETE Member

Certification

- Cleared British English Certificate Vantage with grade C during september 2016.
- Cleared NPTEL exam on 'Analog Circuits' with Elite during May 2017
- Cleared NPTEL exam on 'Antennas' with Elite during May 2019

Subject Expert

- Analog Circuits

Industrial Visit

- Undergone 5 days internship in Suzlon global Services Ltd., Radhapuram from 13-12.2018 to 17.12.2018