Prof. R. S. GAMAD

(i)	Name	Dr. R. S. Gamad	
(ii)	Qualification	Ph. D.	
(iii)	Designation	Professor & Head	
(iv)	Email-id	gs3300293@sgsitsindore.in/rgamad@sgsits.ac.in	
(v)	Employee No.	3300293	
(Vi)	Department	Electronics & Instrumentation Engineering	
(vii)	Experience	24 ear	

No.	Degree/Exam.	Branch/ specialization	Year of passing	University/
				Institute/
				Board
1.	10+2/Higher	Higher Maths	1991	M.P. Board, Bhopal
	Secondary			
2.	B.E.	Electronics Engineering	1995	Govt. Engineering College Ujjain(M.P.) India
3.	M.E.	Digital Techniques and Instrumentation	2003	Shri G.S. Institute of Technology and Science, Indore//RGPV Technical University, Bhopal
4.	Ph.D.	E&I/ Testing of an A/D Converter	2010	Shri G.S. Institute of Technology and Science, Indore /RGPV Technical University, Bhopal

3. Research Interests

Analog & Mixed signal VLSI Design, ADC Design and Testing, Memory design, Wireless communication

4. Research Publications

(i) Book Chapter published:-

Dr. R. S. Gamad, chapter published in book "**Advance in Electronics and Communication Engineering**" by AkiNik Publication,ISBN:978-93-90322-61-9,E-Book ISBN:978-93-90322-62-6, in year 2020.

(II) Research Papers Published

(i) International Journal						
				Remarks,		
S.No.	Title of Research Paper	Name of Journal and Year/Issue No.	Publication as main author or co-author	if any		

Publications in 2009 as main author & Co-author

- 1. R. S. Gamad and D. K. Mishra, "Gain error, offset error and ENOB estimation of an A/D Converter using histogram technique", *Published in Elsevier, International Journal of Measurement, Science direct publication*, Vol.42, No. 4, pp 570 576, May 2009. ISSN: 0263-2241. Impact Factor: 0.846.
- R. S. Gamad and D. K. Mishra, "Determination of error in nonlinearity estimation in an A/D Converter with triangular wave input", *Published in International Journal of Electronics, Taylor & Francis publications*, Vol. 96, No. 12, pp. 1237-1247, December 2009. ISSN: 0020-7217 Print/ISSN: 1362-3060 online. Impact Factor: 1.257.
- 3. R. S. Gamad and D. K. Mishra, "Effects of Overdrive, Frequency, Sample and Error in Code Transition levels on Computation on ENOB of an A/D Converter", *Published in International Journal of Electronics Engineering Research (IJEER), Research India publication*, Vol. 1, No. 4, pp 3357 3365, 2009. ISSN: 0975-6450.
- 4. Namrata prasad, R. S. Gamad and C. B. Kushwah, "Design of a 2.2-4.0 GHz low phase noise and low power LC VCO", *Published in International Journal of Computer Network and Security (IJCNS), Malaysia*,

Publications in 2010 as main author & Co-author

- 5. R. S. Gamad and C. B. Kushwah, "New design technique of 6 bit Flash A/D Converter, *Published in International Journal of Electronics Engineering Research (IJEER)*, *Research India publication*, Vol. 2, No. 1, pp 9 14, 2010. ISSN: 0975-6450.
- 6. Pradeep Dhakad and R. S. Gamad, "Design and performance verification of cache RAM", *Published in International Journal of Applied Engineering Research, Research India publication, Vol. 5, No. 5,* pp. 837 844, 2010. ISSN: 0973-4562.
- 7. Namrata prasad and R. S. Gamad, "Design of a 3.3 band application LC VCO for low phase noise and low power using current mirror", *Published in International Journal of Computer Network and Security (IJCNS)*, *Malaysia*, Vol. 2, No. 2, pp 30 33, February 2010. ISSN: 2076-2739/EISSN: 2076-9199.
- 8. S. Kale and R. S. Gamad, "Design of a CMOS comparator for low power and high speed", *Published in International Journal of Electronics Engineering Research (IJEER)*, *Research India publication*, Vol. 2, No. 1, pp 29 34, 2010. ISSN: 0975-6450.
- 9. Meena Panchore and R. S. Gamad, "Low power and high speed comparator design using 0.18μm Technology" *Published in International Journal of Electronics Engineering Research (IJEER)*, *Research India publication*, Vol. 2, No. 1, pp 71 77, 2010. ISSN: 0975-6450.
- 10. Meena Panchore, R. S. Gamad and B. C. Nagar, "Design of a CMOS comparator for A/D Converter Application" *Published in International Journal of Computational Intelligence and Information security, Australia*, Vol. 1, No. 4, pp. 4-9, June 2010 Special Issue. ISSN: 1837-7823.
- 11. Namrata Prasad, R. S. Gamad and Mudita Birthare, "Design of a 4.0-6.0 GHz cross-coupled LC-VCO for wireless applications", *Published in International Journal of Electronics & Communication Engineering, International publication house, Newdehli, India,* Vol. 3, No. 1, pp 139 148, 2010. ISSN: 0974-2166.

Publications in 2011 as main author & Co-author

R. S. Gamad and D. K. Mishra, "Code transition error effects on estimation of nonlinearity and ENOB of an A/D converter", *Published in International Journal of Electronics, Taylor & Francis publications*, Vol. 98, No. 11, pp. 1503-1515, November 2011. ISSN: 0020-7217 Print/ISSN: 1362-3060 online. Impact Factor

1.257.

- 13. R. S. Gamad and N. Prasad, "layout design of LC VCO with current mirror using 0.18μm Technology", Published in International Journal of Wireless Engineering and Technology, Scientific Research publishing, Inc., USA, Vol. 2, No. 2, pp. 102-106, April 2011, ISSN: 2152-2294.
- 14. R. S. Gamad and D. K. Mishra, "Computation of error in estimation of nonlinearity in ADC using Histogram technique", *Published in International Journal of Engineering, Scientific Research publishing, Inc., USA,*Vol. 3, No. 6, pp. 583-587, June 2011, ISSN: 1947-3931.
- 15. Ankit Gupta and R. S. Gamad, "Design of a single stage source coupled CMOS VCO using 180 nm Technology", *Published in International Journal of Engineering Research and Application*, Vol. 1, No. 2, pp. 122-124, July 2011. ISSN: 2248-9922.
- 16. Shubhara Yewale and R. S. Gamad, "Analysis and design of a high gain low power fully differential gain boosted folded-cascode op-amp with settling time optimization", *Published in International Journal of Engineering Research and Application*, Vol. 1, No. 3, pp. 666-670, 2011. ISSN: 2248-9922.

Publications in 2012 as main author & Co-author

- 17. Neha Bakawale, Manish Jain and R. S. Gamad "Design and performance verification of current conveyor based pipeline A/D Converter using 180 nm Technology" *Published in International Journal of European Scientific Journal" Published by European Scientific Institute*, PP 118-131, Vol. 8, No.27, Nov. 2012, ISSN: 1857-7881. Impact Factor 1.2875.
- 18. Shubhara Yewale and Radheshyam Gamad, "Design of low power and high speed CMOS comparator for A/D converter application", *Published in International Journal of Wireless Engineering and Technology, Scientific Research publishing, Inc., USA*, Vol. 3, No. 3, pp. 90-95, April 2012. ISSN: 2152-2294.
- 19. Priyanka Dubey and R. S. Gamad, "Layout design of large bandwidth CMOS inverter based positive second generation current conveyor", *Published in International Journal of Electronics Engineering Research (IJEER), Research India publication,* Vol. 4, No. 2, pp 123 131, May 2012. ISSN: 0975-6450.

Publications in 2013 as main author & Co-author

- 20. Ajay shukla, R. S. Gamad and Rohan Raikwar, "Design of a CMOS optical Receiver front-end Using 0.18 μm Technology" *Published in International Journal of Wireless Engineering and Technology, Scientific Research publisher, USA*, PP 46-53, Vol. 4, January 2013. USA. ISSN: 2152-2294.
- 21. Rajani Gupta, P. Bansod and R. S. Gamad, "Quality Measure of the Compressed ECHO, X-Ray and CT Images" Published in International Journal of Images and graphics, world scientific publishing

- company, PP. 01-29, Vol. 13, No. 1, April 2013.
- 22. Vinod Kumar and R. S. Gamad, "Design of a ring oscillator using CS-CMOS for mixed signal SOCs," Published in International Journal of Electrical and Electronics Engineering, PP. 21-26, Vol. 2, No. 2, May 2013, ISSN 2278-9944 (Print), <u>Impact Factor: 1.685</u>
- 23. Vikas Kumar and R. S. Gamad, "Design of a UHF band LNA using active inductor with FFP noise cancelling technique", Published in International Journal of Electronics and Communication Engineering & Technology, PP. 124-131, Vol. 4, No. 3, May-June 2013, ISSN 0976-6464 (Print), Impact Factor: 5.8896 (by GISI).
- 24. Vaishali Naik, R. S. Gamad and P. P. Bansod, "Carotid Artery Segmentation in Ultrasound Images and Measurement of Intima-Media Thickness," *Published in BioMed Research International Journal, Hindawi publication*, PP. 1-10, Vol. 2013, June 2013. lmpact Factor:2.880
- 25. Manish Jain and R. S. Gamad, "Rlative techniques with Histogram technique for estimation of different testing strategy of ADC," *Published in International Journal of Advanced research in computer science and software Engineering*, PP. 1379-1382, Vol. 3, No. 10, Oct. 2013, ISSN 2277-128X

2014-15

- **26. Dr. R.S. Gamad** presented paper **on "Design of a CMOS Optical Receiver Front end using 0.18μm Technology"**in Wireless Engg. And Technology(Scientific Research) 2013,Vol.4 Page No. 46-53.
- **27. Dr. R.S. Gamad** presented paper on "Design and Performance Verification of Current Conveyor based Pipeline ADC using 180nm Technology in Europeon Scientific Journal Nov.2013 Vol.8,ISSN:1857-7881.
- **28. Dr. R.S. Gamad** presented paper on "Design of Ring Oscillator using CS-CMOS for Mixed Signal SoCs" in IJEEE, Vol. 2, Issue 2, May 2013, ISSN: 2278-9944.

2015-16

- **29.** Nivedita Jaiswal and Dr.R.S. Gamad Presented paper on "Design of a New Serializer and Deserializer Architecture for OnchipSerDesTransceivers" in Circuits and systems, 2015, 6.
- **30.** Ajay Agrawal and Dr.R.S. Gamad Presented paper on "Design of A Low power 1.65GBPS Data Channel for HDMI Transmitter" in International Journal of VLSI Design and Communication system (VLSICS) Vol. 6 No. 6, Dec. 2015, DOI: 10.5121/vlsic.2015.6603.

2016-17

31. Alpana A. Deshmukh, Dr. R. S. Gamad and Dr. D. K. Mishra presented paper on "BIST Implementation for Testing Analog Circuit in Mixed Signal Environment" in IJIRMF, Vol. 2, Issue-10,ISSN:2455-0620, Oct-2016.

- **32.** Pushpendra Singh and Dr.R.S. Gamad presented paper on "A Bulk-Driven CMOS OTA with self -Biasing" in IJESC 2016.Vol 6,Issue 9.
- **33.** YudhishthirRaut, Dr. R.S. Gamad and Dr. P.P. Bansod presented paper on "Objective analysis of HEVC (h.265) compressed FMRI Images" in IJCTA, 9(41), 2016, pp. 199-206, ISSN: 0974-5572.
- **34.** AkhileshRajak and Dr. R.S. Gamad presented paper on "Design of a CMOS Differential difference Amplifier" in JI of Instru. Soc of India, Vol. 46 Issue 2, june 2016.

2017-18

- **35**. YudhishtirRaut, Dr. R. S. Gamadand Dr. P. P. Bansod presented paper on "Objective analysis and bit rate analysis of HEVC compressed 4D-fMRI images" in International Journal of Imaging Systems and Technology, DOI: 10.1002/ima.22315, March-2018.
- **36.** Manish Sahajwani, Dr.Alok Jain and Dr.R.S. Gamad presented paper on "An Efficient Diversity Achievement by Opportunistic Relaying in Amplify and Decode and Forward using ZF and MMSE Equalizers" in IJDACR ,ISSN: 2319-4863, Vol:5 Issue 7 ,Feb. 2017.
- **37.** Manish Sahajwani, Dr.Alok Jain and Dr.R.S. Gamad presented paper on "Performance Analysis of Adaptive Modulation using Spatio Temporal Coding and Cooperative Communication" in IJPAM .Vol114 Issue 9.2017,423-435,ISSN: 1311-8080.

<u>2018-19</u>

- **38.** Shiv Ram Mansore, RadheshyamGamad and Dr. D. K. Mishra presented paper on "A single-ended read disturb-free PPN based 9T SRAM cell", Revue roumaine des sciences techniques SerieElectrotechnique et Energetique, Vol. 63, No. 3,pp. 295-299,Dec. 2018. ISSN:0035-4066.
- **39.** Alpana A. Deshmukh, Dr. R. S. Gamad and Dr. D. K. Mishra presented paper on "Modelling and Simulation of Hilbert Transform Phase Detector Based on All Digital Phase Locked Loop" in International Journal of Electronics Engineering, Volume 10, Issue 2, ISSN: 0973-7383, pp. 648-664, Dec-2018.
- **40. Alpana Amit Deshmukh, Dr.RadheshyamGamad and Dr.Deepak kumar Mishra** presented paper on "**Implementation of Phase Locked Loop for FM Demodulator Circuit**" in International Journal of Engineering & Technology, Volume 7 (4) (2018), ISSN:6519-6522, doi: 10.14419/ijet.v7i4.28025, pp. 6519-6522.
- **41.** Nidhi Khanna Renu Mehta and Dr. R. S. Gamad presented paper on "Low Power design of 4-bits counter at circuit and system level of abstraction" in International Journal of Advanced Research, Ideas and Innovations in Technology, Volume-4, Issue-5, ISSN:2454-132X, pp.249-251, Sep-2018.
- **42.** ShivramMansore and Dr.RadheshyamGamad presented paper on "A data-aware write-assist 10T SRAM cell with bit-interleaving capability" Turkish Journal of Electrical Engineering & Computer Sciences, Vol.26,No. 5, sept.2018,ISSN:1300-0632.
- 43. S.R. Mansore, Dr. R. S. Gamad and Dr. D. K. Mishra presented paper on "Schmitt-Trigger Based 12T SRAM Cell with Enhanced Stability" in Journal of Semiconductor Devices and Circuits, ISSN:2455-3379(Online), Volume 5, Issue 1,2018.

2019-20

44. S. R. Mansore, Dr. R.S. Gamad and Dr. D. K. Mishra presented paper on "A 32nm Read Disturb-

- free 11T SRAM Cell with Improved write ability" in Journal of Circuits, Systems and Computers (world scientific), Vol 29, Issue 05, ISSN: 2050067, in 2020.
- **45.** Mr. Virendra K. Verma, Dr. D. K. Mishra and Dr. R.S. Gamad presented paper on "Modelling and Simulation of frequency Synthesizer based on Phase Locked Loop for RF Application" in Journal of Engineering Services, Vol 11, Issue 02,ISSN:0377-9254,Feb-2020.
- **46. Pradeep Rajput, Mr. R. C. Gurjar and Dr. R. S. Gamad** presented paper on "**Low Phase Noise wide Tuning Range LC Oscillator for RF Application using Varactor Bank**" in Journal of Telecommunication, Electronics and Computer Engineering (JTEC), Volume 11,Issue-3, ISSN:2180-1843, E-ISSN:2289-8131, July-Sep. 2019.
- **47. Shubham Nigam, Dr. D. K. Mishra and Dr. R.S. Gamad** presented paper on "Image Compression by Wavelet Transform Using VHDL" in Journal of Applied Science and Computations (JASC), Volume VI, Issue VI, JUNE/2019,ISSN NO:1076-5131, Page No:3060.
- **48.** Mr. Virendra K. Verma, Dr. D. K. Mishra and Dr. R.S. Gamad presented paper on "Design of Low Power Delay Cell for Wide Tuning Voltage Controlled Oscillator for Frequency Synthesis Applications" in International Journal of Recent Technology and Engineering (IJRTE), Volume-7 Issue-5, ISSN: 2277-3878,pp- 255-259,Jan-2019.

(ii) National Journal

Publications in 2003 as main author

49. R. S. Gamad, Mrs Anjana Jain and Mr. Shekhar Sharma, "Software implementation for error detecting and correcting using Linear Block code in digital communication", *Published in Technical Journal, Military College of Telecommunication Engineering, Mhow, India*, pp. 109-121, January 2003.

Publications in 2007 as main author

50. R. S. Gamad and D. K. Mishra, "Estimation of variance for Gain and offset error of an ADC using cumulative Histogram Technique", *Published in Engineering and Environmental Sciences Journal India*, Vol. 1, No. 3, pp 10-15, Jan.– June 2007. ISSN: 0972-9693.

Publications in 2010 as main author

51. R. S. Gamad and D. K. Mishra, "Comparative Evaluation of dynamic testing of A/D Converter using Histogram Technique" *Published in Research Journal of Institute of Engineers (IE)-ET, India,* Vol. 90, pp. 17-20, January 2010.

Publications in 2011 as main author

52. R. S. Gamad and N. Prasad, "Design of an LC VCO for low phase noise and low power consumption", Published in Research Journal of Institute of Engineers IE(I) Journal-EL, India, Vol. 91, pp. 18- 21, March, 2011.

iii) Into	ernational Conference				
S. No.	Title of Paper	Name of Conference	Place/Date	Organizing Society/ Institute	Remarks,

- **53.** D. K. Mishra and R. S. Gamad, "Dynamic Testing of and ADC for Real Application input" Published in IEEE AutoTestcon International Conference, Baltimore, MD, USA, September 12-15, 2011, PP. 354-359.
- **54.** Balchand Nagar and R. S. Gamad, "Comparative Evaluation of Flash ADC Design" Published in International Conference on MEMS & Optoelectronics Technologies, Jan. 22-23, 2010, pp. 229-234.
- **55.** R. S. Gamad & D. K. Mishra, "Estimation of error in nonlinearity in ADC using standard histogram technique" International conf. on circuits and systems (WCECS), San Francisco, USA 22- 24 oct. 2008. pp-185-188.
- **56.** R. S. Gamad & D. K. Mishra, "Determination of non linearity and effective resolution of an A/D converter for arbitrary Application input" International conf. on Circuits and systems, San Francisco USA 24-26 Oct. 2007. pp 220-223.
- **57.** R. S. Gamad and D. K. Mishra, "Determination of Gain error & Offset error using Histogram Technique" International conf. on ICSCIS-07 J.E.C. Jabalpur, INDIA 27-29, Dec.2007, pp 186-191.
- **58.** R. S. Gamad, D. K. Mishra and Sunny Gupta, "Computation of Some A/D Converter Parameters Based on Error Estimation using Histogram Test Method" International conf. SPIT-IEEE Colloquium 07, Mumbai, India, 4-5 Feb. Vol. 2 pp 183 189, 2008.
- **59.** R.S. Gamad, D. K. Mishra and Sunny Gupta "Error Estimation in Code Transition Levels and in INL of an ADCs using Histogram Test Technique" international conf. on VLSI design and embedded system(ICVLSI- 08), pp 139 144,14 16 Feb. 2008, Chennai, India.
- 60. Manish Jain, Sunny Gupta & R. S. Gamad "FPGA based network on chip (NOC) implementation of scalable router" international conf. on VLSI design and embedded system(ICVLSI- 08), pp 209 212,14 16 Feb. 2008, Chennai, India.
- Anand Sevda, Arun Sunaniya & R. S.Gamad "Design and optimization of noise, power consumption and slew rate of a two stage CMOS op amp" International Conf. on advances in computing (ICAC-08),

- 21-22 Feb. 2008, Chikhli, India.
- **62.** R.S.Gamad & Mahendra Singh, A Switched Opamp with rail to rail common mode input range, International conf. (IEEE, RACE Bikaner 24-25 march 2007.
- **63.** R.S. Gamad & K. Samadhiya, Advanced high Performance bus arbiter, International conf. (IEEE, RACE Bikaner 24-25 march 2007.
- R.S.Gamad & Hemant Saxena, FIFO controller Design techniques in JPEG 2000 encoder, International Conf. on Modeling & Simulation Coimbatore, 27-29 August 2007.
 - **65.** R. S. Gamad & Hemant Saxena, Arbiter design Technique with first come first served priority scheme, National Conf. on VLSI and Comm. Engg.16-17 march 2007, pp. 35-37.
 - **66.** R. S. Gamad & K. Samadhiya, Advanced high Performance bus arbiter, 4th Level National Technical Symposium Feb. 2007 Bhopal.
 - **67.** R. S. Gamad & A. Sujalpurkar, Implementation of E-Primer data rate 2.048 Mbps Technology through VHDL Coding, National Conference on Information Technology (ITEEPP-07), April 06-07, 2007 Thapar University Patiala, India.
 - **68.** R. S. Gamad & M. Singh, A Switched Op-amp with rail to rail common mode input range, National Conference on Information Technology (ITEEPP-07), April 06-07, 2007 Thapar University Patiala, India.
 - **69.** Sunny Gupta, R.S.Gamad & Manish Jain " op-amp design for 12 bit ADC with fast settling time and higher bandwidth" National Conf. on challenges of power sector in 21st century, pp 122-125, 13-14 Nov. 2007, Jabalpur, India.
 - **70.** Sunny Gupta, A. Shujalpurkar & R.S.Gamad "Fault testing of telephone block modem through atrenta's spyglass tool "National Conf. on challenges of power sector in 21st century, pp 116-119, 13-14 Nov. 2007, Jabalpur, India.
 - **71.** Anand sevda, Arun sunaniya, R.S. Gamad & Manish Jain "Design & Optimization of Noise & Power Consumption of a Two-stage CMOS OP-AMP" National level conf. SGSITS, Indore, India, Page 402-406, 18-20 Dec. 2007.

5. List of Conferences/Workshops/STTP/FDP/Seminars Organized

S.No.	Details of scientific EVENT	Year	Sponsored Agency
1.	Recent Trends in VLSI Design(5 day STC at SGSITS Indore)	Apr-18	TEQIP-III
2.	Advancement in Microelectronics and VLSI Design(5 days STTP at SGSITS Indore)	March-19	TEQIP-III
3.	VLSI Design and Test(International Symposiom, collobration with IIT Indore)	Jul-19	TEQIP-III, VLSI Society of India
4.	Design and development of system on Chip using Low power VLSI(6 days STTP at SGSITS Indore)	Nov-19	AICTE
5.	Mixed Signal and Radio Frequency VLSI Design	Nov. 23 -28, 2020	AICTE
6.	Mixed Signal and Radio Frequency VLSI Design(3 STTPs online organized by E & I Engg. SGSITS Indore)	Dec. 07 – 12, 2020	AICTE
7.	Mixed Signal and Radio Frequency VLSI Design(3 STTPs online organized by E & I Engg. SGSITS Indore)	Dec. 14 – 19, 2020	AICTE

6. Invited Lectures/Expert Talks/Chairmanships at Conferences

- Dr. R.S. Gamad Professor, delivered an online expert lecture on "Research objective and challenges in Mixed Signal and RF VLSI Design" at AICTE sponsored STTP (Short Term Training Program) on "Mixed Signal and Radio Frequency VLSI Design" on 23/11/2020, 7/12/2020 and 15/12/2020.
- 2. Dr. R.S. Gamad Professor, delivered an online expert lecture on "How to start Research and Research Paper Writing" at B.M. Institute of Technology

and Science, Indore on 29th June 2020.

- **3.** Dr. R.S. Gamad Professor, delivered an online expert lecture on "How to start Research and Research Proposal Writing" at Mandsaur University, Indore on **15th September 2020.**
- **4.** Dr. R.S. Gamad Professor, delivered an expert lecture on "How to start Research and Research Paper Writing" at B.M. Institute of Technology and Science, Indore on **16th September 2017.**
- **5.** Dr. R.S. Gamad Professor, delivered an online expert lecture on "Importance of ADC in Wireless Communication" at B.M. Institute of Technology and Science, Indore on **17th February 2018**.

10.	Invited Lectures/Talks Delivered				
(i)	Expert Lecture on Data converter, 20/06/2009 at MIT, Ujjain.				
(ii)	Expert lecture on VLSI design, 17/07/2010 at MIT, Ujjain				
(iii)	Invited talk on testing techniques of ADC, National level techno-management				
	ELECTRIC 2011 at MIT, Mandsuar.				
(iv)	Expert lecture on Analog design and process modeling, 12/03/2011 at MIT, Ujjain.				
(v)	Session chair in National level conf. At Sanghavi Inst. 2012, Indore.				
(vi)	Expert lecture on VLSI design and testing, 20/10/2012 at MITS, Ujjain.				
(vii)	Session chair in National level conf. 19/12/2013 at Prestige Institute, Indore.				
(viii)	Session Chair in National level Conf. 15-16 march 2013 at SVCE, Indore.				
(ix)	Session chair in National level Techno- Management FEST, Chameli Devi. Institute,				
	Indore 12/03/2014.				
(x)	Expert lecture on DSP and its applications, 08/02/2014 at MIT Ujjain.				
(xi)	Keynote Speaker in National level Conf. on recent trends and issues in Engg. Tech.,				

S.No.	Details of Scientific event	Year	Capacity in which involved
01.	R.T.M.V. (Research trend in Microelectronics & VLSI Design) 3 days Workshop at S.G.S.I.T.S. Indore.	May 2007	TEQIP