

Sinhgad Technical Education Society's

Sinhgad College of Engineering Vadgaon (Budruk) Off. SinhgadRoad, S.No. 44/1,



Dr. Madan Balkrishna Mali Ph. D. E&TC

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Significant Achievement

- GATE Score of 92.5 Percentile, IIT Bombay
- University First Rank in M. Tech. Received First rank Memento & Certificate from Vice Chancellor Received Licensed Software and FPGA Boards worth of Rs. 12 Million from Actel Inc., USA under MoU signed with Actel Inc., USA in Jul 2005. Received softwares and development boards. Projects are being carried out every year.
 Resource person to more than 50 Institutes & Industries.
- → Commissioned the new laboratories in Liaison with ARM STMicroelectronics & Cypress through the agreements. Funds received is Rs. 90 Million in the form of resources.
- The indigenous Robotics laboratory is being set up in liaison with e-Yantra:IIT Bombay.
- Worked & completed research project funded by University.
 Research guide at University in domain of "Mixed Signal Chip Design".

Academic Qualification

Degree	Institute Name	University Name	Year of Passing	Percentage	Grade	Qualification Status
CEP	IIT, Bombay	Indian institute of technology, bombay	2005	-	В	Completed
Ph. D.	Government College of Engineering, Pune	Universiy of pune	2012	-	Awarded	Completed
M.TECH.	Center for Electronic Design & Technology India, Aurangabad	Marathwada university aurangabad	1997	84.0%	Very Good	Completed
BE Electronics	S.S.V.P.S. College of Engineering, Dhule	Universiy of pune	1994	68.0%	First Class with Distinction	Completed
Diploma In Industrial Electronics	Government Polytechnic, Latur	Board of technical education	1986	62.0%	First Class	Completed

Conference Details

Name	Venue	Date	Level	Category	Туре	Sponsored By
National Symposium on Pervasive Computing(NS PC)	SCOE, Pune	15 Mar 2013 to 16 Mar 2013		Quality Improvement Programs		TEQIP

26th International conference on VLSI Design2013 and 12th International Conference on Embedded Systems	Hotel Hyath, Pune	05 Jan 2013 to 10 Jan 2013	International	Research	IEEE & VLSI Society of India
Innovation- 2010	SCOE, Pune	26 Oct 2010 to 27 Oct 2010	National	Research	University of Pune
National Conference on Pervasive Computing (NCPC-2010)	SCOE, Pune	09 Apr 2010 to 10 Apr 2010	National	Research	IEEE & Bank of Marashtra
ePGCON - 2009	SCOE, Pune	17 Apr 2009 to 17 Apr 2009	National	Research	University of Pune
INNOVATION 2008	SCOE, Pune	17 Nov 2008 to 17 Nov 2008	National	Research	University of Pune
National Level ConferenceTec hnoBuzz, 2007	SVCP, Pune	16 Feb 2007 to 17 Feb 2007	National	Research	ISTE
National Conference TSyGECA-06	Hotel Blue Diamond, Aurangabad	23 Jan 2006 to 24 Jan 2006	National	Research	Govt. COE, Aurangabad
National Renewable Energy Convention-99	Hotel Sayaji- School of Energy & Environmental Studies, Devi AhilyaVishwa Vidyalaya, Indore	20 Dec 1999 to 22 Dec 1999	International	Research	Solar Energy Society of India
Innovation 2015	Pune	01 Jul 2015 to 01 Jul 2015	National	Research	University
e-PG Project Exibition	AISSMS IOIT, Pune	29 May 2015 to 30 May 2015	National	Research	University
NCSEEE-2015	VIIT, Pune	28 Mar 2015 to 28 Mar 2015	National	Research	IEEE
IEEE Global Conf. on Wireless Computing and Networking (GCWCN- 2014)	SIT Lonavala	22 Dec 2014 to 24 Dec 2014	International	Research	IEEE
ICPC-2015	SCOE	08 Jan 2015 to 10 Jan 2015	International	Research	IEEE & University
INDICON-2014	YASHADA, Pune	11 Dec 2014 to 13 Dec 2014	International	Research	IEEE
International Conf on Information Processing	VIT Pune	17 Dec 2015 to 19 Dec 2015	Technical	Research	Self
INNOVATION - 2015	MES Wadia CoE, Pune	01 Jul 2015 to 01 Jul 2015	Technical	Research	SPPU

Research Projects

Project name	Description	Status	Budget	Prject type
VLSI Implementation of Low Drift, Low Power Bandgap Reference	Voltage Reference circuit is an important building block in analog circuits. Different circuits are employed to generate such voltage reference. Bandgap reference circuits generate a reference voltage equal to the bandgap of the material used which is independent of temperature and supply voltage variations. In the project the main aim is to design and implement a bandgap reference architecture having low temperature coefficient, high value of PSRR while having extremely low power dissipation.	Completed	100000	Simulation Projects

Consultancy Details

Title	Description	Agency	Percentage Completion	Amount Sanctioned	Amount Received
Mode Power Supply	This consultancy work consists of circuit design needed for high frequency switch mode regulator needed in power supplies.	Powercon Systems, Aurangabad	100	0	0

Research Papers and Journals

ISSN/ISBN No	Paper Title	Publish Date	Journal/Confe rence Name	Level	Paper Status	Authors
NA	Greenhouse Wireless Sensor Network Monitoring and Management	2013	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Vehicle Tire Pressure and Temperature Monitoring System	2013	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	BiCMOS Linear Low Noiswe Amplifier using Current Mirror and CMFF	2013	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Adaptive Light Control and Vehicle Monitoring	2013	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Low Voltage Class AB CMOS Fully Differential Op- Amp with Adaptive Bias	2013	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali

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NA	Vehicle Tire Pressure and Temperature Monitoring System	2013	NSPC-SCOE	Conference - National level	Accepted and Published	MadanMali
NA	High Speed Vedic-Math ALU	2013	NSPC-SCOE	Conference - National level	Accepted and Published	MadanMali
NA	Low Voltage Class AB CMOS Fully Differential Op- Amp with Adaptive Bias	2013	NSPC-SCOE	Conference - National level	Accepted and Published	MadanMali
NA	High Speed Vedic-Math ALU	2013	NSPC-SCOE	Conference - National level	Accepted and Published	MadanMali
2229-5518	brief survey of a DCT-Based Speech Enhancement System	2013	Scientific& Engineering Research	Refereed Journal	Accepted and Published	MadanMali
NA	Analysis of Current Steering Digital to Analog Converter	2012	Electrical and Electronics Engg	Conference - International level	Accepted and Published	MadanMali
NA	A DCT Based Speed Enhancement System	2012	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Current Steering Digital to Analog Converter	2012	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Skew Compensation Technique for Parallel Optical Interconnection for Free Distribution of Digital Signals	2012	. ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Video Surveillance System Using FPGA	2012	. ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Companding Based PAPR Reduction Technique	2012	ePGCON- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Video Surveillance System Using FPGA	2012	CIIT	Refereed Journal	Accepted	MadanMali
AISC 178	CMOS 8-Bit Current Steering Digital Random Return to Zero DAC	2012	Advance in Intelligent and Soft Computing	Refereed Journal	Accepted and Published	MadanMali
NA	Energy Aware Data Storage Manager	2011	Futuristic Applications in Electronics Engg.	Conference - National level	Accepted and Published	MadanMali
NA	Optimization of Memory Energy by Innovative Data Access Management	2011	Advances in Engg., Management & General Sciences	Conference - National level	Accepted and Published	MadanMali
0973-6107	90 nm Deep Submicron Low Power Band Gap Reference for Battery Operated Systems	2011	Advances in Computational Sciences and Technology	Refereed Journal	Accepted and Published	MadanMali

0974-973X	A 657 mV, 43 µW,Second Order CMOS Bandgap Reference on Chip	2011	Programmable Device Circuits and Systems	Refereed Journal	Accepted and Published	MadanMali
0974-973X	FPGA Implementation of Novel Data Packet Switchable HDLC Protocol	2011	Programmable Device Circuits and Systems	Refereed Journal	Accepted and Published	MadanMali
NA	VLSI Implementation of Low Drift, Low Power Bandgap Reference	2010	BCUD- University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	FPGA Implementation of High Level Data Link Control Transceiver	2010	Information & Communication Technology	Conference - International level	Accepted and Published	MadanMali
NA	Architecture of Dynamically Reconfigurable Multicontext Logic Device for System on Chip	2010	NCPC 2010	Conference - National level	Accepted and Published	MadanMali
NA	50 µW,Ultra Low Power, Bandgap Reference for Portable Embedded Devices	2010	NCPC 2010	Conference - National level	Accepted and Published	MadanMali
NA	Remote Access of Energy Meter Through Wireless	2010	NCPC 2010	Conference - State level	Accepted and Published	MadanMali
NA	Measure and Compensate Circuit for Clock Skew Compensation	2010	NCPC 2010	Conference - State level	Accepted and Published	MadanMali
NA	Remote Motor Control for Agricultural Farm	2010	NCPC 2010	Conference - State level	Accepted and Published	MadanMali
NA	Low Dropout Regulators	2010	NCPC 2010	Conference - State level	Accepted and Published	MadanMali
NA	Effect of PVT Variation and its Compensation	2010	NCPC 2010	Conference - State level	Accepted and Published	MadanMali
NA		2010	NCPC 2010	Conference - State level	Accepted and Published	MadanMali
NA	VLSI Implementation of Novel Data Packet Switchable HDLC Protocol	2010	. Advances on Recent Trends in Communication & Networks	Conference - International level	Accepted and Published	MadanMali
NA	Low Power and Fast Performing Skew Compensation Circuit	2010	Instrumentation	Conference - International level	Accepted and Published	MadanMali

NA	Architecture of Dynamically Reconfigurable Logic Device	2009	Emerging Trends in Embedded Systems and VLSI	Conference - National level	Accepted and Published	MadanMali
NA	Dynamically Reconfigurable Logic Device Architecture	2009	Futuristic Computer Applications	Conference - National level	Accepted and Published	MadanMali
NA	FPGA Implementation of Single Channel HDLC Protocol Transceiver	2009	Advances in Instrumentation , Signal Processing & Communication	Conference - National level	Accepted and Published	MadanMali
NA	Deep Submicron Implementation of CMOS RISC Processor	2009	ePGCON	Conference - State level	Accepted and Published	MadanMali
NA	Clock Skew Compensation By Closed Loop Technique	2008	BCUD â?? University of Pune,	Conference - State level	Accepted and Published	MadanMali
NA	Implementation of J1939 protocol for CAN Bus	2008	BCUD â?? University of Pune	Conference - State level	Accepted and Published	MadanMali
NA	Adaptive Filter Implementation on FPGA	2007	Emerging Trends in Signal Processing and Communication	Conference - National level	Accepted and Published	MadanMali
NA	DICOM Medical Image Compression for Telemedicine Applications in Rural Areas	2007	Advances in Computer Vision and Information Technology	Conference - International level	Accepted and Published	MadanMali
NA	SPIHT Based Medical Image Compression for Telemedicine	2007	Advanced Computing and Computer Networks	Conference - National level	Accepted and Published	MadanMali
NA	Low Power Low Voltage Opamp	2013	NCLTE 2013	Conference- National level	Accepted and Published	MadanMali
NA	Vehicle tyre pressure and temperature monitoring system	2013	NCLTE 2013	Conference- National level	Accepted and Published	MadanMali
NA	0.8Vlow power operational transconductan ce amplifier	2013	Int. Journal of Engineering Research & Technology	Journal - International level	Accepted and Published	MadanMali
2249-8958	Speech enhancement using DCT	2013	International Journal of Engineering & Advanced Technology	Journal - International level	Accepted and Published	MadanMali
2321-7545	A review on design of low power asynchronous viterbi decoder for wireless communication	2015	Int. Journal of Scientific Research and Education	Journal - International level	Accepted and Published	MadanMali
2319-8753	A review of clock gating techniques in low power applications	2015	Int. J. of Innovative research in science, engineering and technology	Journal - International level	Accepted and Published	MadanMali

2319-8753	Low power 10T SRAM design for dynamic power reduction	2015	Int. J. of innovative research in science, engineering and technology	Journal - International level	Accepted and Published	MadanMali
2321-3361	A 10T SRAM Cell design with charge sharing mechanism	2015	Int. J. of Engineering, Science and Communication	Journal - International level	Accepted and Published	MadanMali
NA	A review : Beam forming using adaptive antenna array	2013	National Conf. on Latest Treands in E&TC	Conference- National level	Accepted and Published	MadanMali
NA	A 90nm low power OTA using adaptive bias	2015	Int. Conf. on Pervasive Computing	Conference- International level	Accepted and Published	MadanMali
NA	Beam forming algorithms for smart antenna systems	2014	e-PGCON 2014	Conference - State level	Accepted and Published	MadanMali
NA	DOA Estimation algorithms for adaptive antenna systems	2014	ePGCON 2014	Conference - State level	Accepted and Published	MadanMali
NA	A review: DOA estimation for adaptive antenna array	2013	National Conf. on latest treands in E&TC	Conference- National level	Accepted and Published	MadanMali
2278-2834	DOA estimation for adaptive antenna systems	2014	Int. J. of electronics and communication engineering	Journal - International level	Accepted and Published	MadanMali
2278-0181	Analysis of LMS and NLMS adaptive beamforming algorithms	2014	Int. J. of Engineering Research and Technology	Journal - International level	Accepted and Published	MadanMali
NA	Low power low voltage OTA using adaptive bias	2014	Int. Conf. on E&TC, Electrical and computer engineering	Conference- International level	Accepted and Published	MadanMali
NA	Variation in Sampling frequency of ECG signal and implementation of feature extraction algorithm	2014	Int. Conf on E&TC, Electrical & Computer Engineering	Conference- International level	Accepted and Published	MadanMali
NA	Low power low voltage OTA using adaptive bias	2014	ePGCON 2014	Conference - State level	Accepted and Published	MadanMali
NA	Variation in sampling frequency of ECG signal and implementation of feature extraction algorithm	2014	ePGCON 2014	Conference - State level	Accepted and Published	MadanMali
2278-0181	A 2.4GHz low power high gain CMOS RF LNA in 90nm technology	2014	Int. J. of Engineering Research and Technology	Journal - International level	Accepted and Published	MadanMali

NA	Adaptive Light Control and Vehicle	2013	NCLTE - 2013	Conference- National level	Accepted and Published	MadanMali
NA	monitoring Fault Tolerant SRAM by redundant array structure	2015	Int. Conf. on Pervasive Computing 2015	Conference- International level	Accepted and Published	MadanMali
NA	Low power 0.4V operational common mode feedforwardtran sconductance amplifier	2014	Int. J. Circuits and Architecture Design	Journal - International level	Accepted and Published	MadanMali
	Wireless Notice Display	2016	ePGPEX-2016	Other	Accepted and Published	MadanMali
2278-1021	Wireless Notice Display	2016	International Journal of Advanced Research in Computer and COmmunicatio n Engineering	Journal - International level	Accepted and Published	MadanMali
2320-9801	Wireless LED Matrix Display System	2016	International Journal of Innovative Research in Computer and Communication Engineering	Journal - International level	Accepted and Published	MadanMali
2278-1021	An Internet Controlled Robotic Arm Using an Android Mobile and FPGA Board	2016	International Journal of Advanced Research in Computer and Communication Engineering	Journal - International level	Accepted and Published	MadanMali
2320-9801	General Ward Patient Monitoring System	2016	International Journal of Innovative Research in Computer and Communication Engineering	Journal - International level	Accepted and Published	MadanMali
2320-9801	Quaternary Adder Design on FPGA	2016	International Journal of Innovative Research in Computer and Communication Engineering	Journal - International level	Accepted and Published	MadanMali
2319-8753	A Review on Quaternary High Performance Arithmetic Unit Design	2016	International Journal of Innovative Research in Science, Engineering and Technology	Journal - International level	Accepted and Published	MadanMali
2278-1021	Wireless Signal Transmission using an Android Mobile and FPGA	2016	International Journal of advanced Research in Computer and Communication Engineering	Journal - International level	Accepted and Published	
2278-1021	Wireless Signal Transmission using an Android Mobile and FPGA	2016	International Journal of advanced Research in Computer and Communication Engineering	Journal - International level	Accepted and Published	MadanMali
	An Intelligent Patient Monitoring and Reporting System	2016	ePGPEX-2016	Other	Accepted and Published	MadanMali

	Embedded	2016	ePGPEX-2016	Other	Accepted and	MadanMali
	Robot Control: Using an Android Mobile and FPGA		5. 5. 2x 2010	2	Published	ddi.iividii
	Quaternary High Performance Arithmetic Unit Design	2016	ePGPEX-2016	Other	Accepted and Published	MadanMali
2278-1021	A Review: Remote Patient Monitoring System	2016	International Journal of Advanced Research in Computer and COmmunicatio n Engineering	Other	Accepted and Published	
2278-1021	A Review: Remote Patient Monitoring System	2016	International Journal of Advanced Research in Computer and COmmunicatio n Engineering	Journal - International level	Accepted and Published	MadanMali
2321-2004	Greenhouse Wireless Network Monitoring and Management Using IoT	2016	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering	Journal - International level	Accepted and Published	
2321-2004	Greenhouse Wireless Network Monitoring and Management Using IoT	2016	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering	Journal - International level	Accepted and Published	MadanMali
2319-8753	A Review on Clock Skew Compensation Techniques	2015	International Journal of Innovative Research in Science, Engineering and Technology	Journal - International level	Accepted and Published	MadanMali

Membership Details

Membership Body	Details	Duration	Level
ISTE	LMISTE-LM-31017	Life Member	National
Solar Energy Society of India	Life Member	Life Member	National

Post Held

Organization Name	Post	Organization Category	Appointment Status	Duration
S.E.S. College of Engg. and Polytechnic, Dhule	Asst. Lecturer and Lecturer	Academic	fulltime /permanent	Aug 01,1987 to Jul 09,1995
S.E.S. College of Engg., Kopergaon	Lecturer	Academic	Full time and Permanent	Feb 19,1997 to Dec 31,1999
Sinhgad COE, Pune- 41	Lecturer	Academic	Full time and Permanent	Jan 08,2000 to Oct 31,2000
Sinhgad COE, Pune- 41	Asst. Professor	Academic	Full time and Permanent	Nov 01,2000 to Oct 31,2008
Sinhgad COE, Pune-41	Professor	Academic	Full time and Permanent	Nov 01,2008 to
Sinhgad COE, Pune- 41	Head -Dept. of E&T/C Engg	Academic	Full time and Permanent	Jul 15,2011 to

Self Contribution

Organizational Development Contribution(2013-2014)					
Date	Venue	Contribution	Category		
	STES Society Office	Representation from Teaching	LMC Committee Member		

Organizational Development Contribution(2000-2001)				
Date	Venue	Contribution	Category	
02,Aug - 30,Jun	-	Appointed as Senior Warden - Boys Hostel B	Senior Warden STES Boys Hostel	

Organizational Development Contribution(2001-2002)					
Date	Venue	Contribution	Category		
01,Jul - 30,Jun	-	Continued as Senior Warden	Senior Warden STES Boys Hostel		
01,Jul - 30,Jun	STES Campus	Checking of hygiene	Inspection work of Hygiene		

Academic Development Contribution(2013-2014)				
Date	Venue	Contribution	Category	
24,Jun - 24,Jun	SCOE, Pune	Signed MoU with Texas Instruments	MOU	
06,Jan	SCOE, Pune	Signed MoU with Campus Component pertaining to Embedded Image Processing	MOU	

Institutional Development Contribution(2013-2014)				
Date	Venue	Contribution	Category	
	SCOE Pune	Grievances Committee	committee member	

Academic Development Contribution(2007-2008)				
Date	Venue	Contribution	Category	
	SCOE, Pune	Designed, proposed and started New P.G. program (M.E. VLSI & Embedded Systems)	committee member	

Academic Development Contribution(2008-2009)					
Date	Venue	Contribution	Category		
	, , ,	Conference for PG Electronics Engineering Students ePGCON -2009	Coordinator		

Academic Development Contribution(2012-2013)				
Date	Venue	Contribution	Category	
	SCOE, Pune	IEEE Student Awareness Contest SAC 2012	Convener	

Student Development Contribution(2009-2010)				
Date	Venue	Contribution	Category	
	SCOE, Pune	PG Coordinator from 2007- 10	PG coordinator	
	SCOE, Pune	Teacher Guardian from 2006-11	TEACHER GAURDIAN	

Organizational Developme	ent Contribution(2010-2011)		
Date	Venue	Contribution	Category
	STES Society Office	Representation from teaching	LMC Committee Member

Organizational Development Contribution(2011-2012)				
Date	ate Venue Contribution Category			
	STES Society Office	Representation from office	LMC Committee Member	

Self Growth(2000-2001)			
Date	Venue	Contribution	Category
	SCOE Pune	Selected as Assistant Professor	Assistant Professor

Self Growth(2008-2009)				
Date Venue Contribution Category				
	SCOE Pune	Selected as Professor	Professor	

Self Growth(2011-2012)			
Date	Venue	Contribution	Category
		Appointed as Head of Department	Head of Department

Institutional Development Contribution(2014-2015)			
Date	Venue	Contribution	Category
15,Apr - 18,Apr	SCOE	Worked as Incharge Principal	Incharge Principal
13,Apr - 13,Apr	SCOE	LMC Committee Member	LMC Committee Member
01,Jul - 30,Jun	SCOE	Best Faculty Award Committee Member	Best Faculty Award Committee Member
09,Oct	SCOE	LMC Committee Member	LMC Committee Member

Organizational Development Contribution(2014-2015)				
Date	Venue	Contribution	Category	
09,Oct - 09,Oct	STES Society Office	LMC Committee Member	LMC Committee Member	
11,Jan - 16,Feb	SCOE Auditorium	Incharge of inaugration of Techtonic-2015	Incharge	

Academic Development Contribution(2014-2015)				
Date	Venue	Contribution	Category	
01,Jun - 13,Jun	SCOE	Convener - AICTE SDP on Soft Computing	Convener	
11,Jun - 13,Jun	SCOE	Organized faculty orientation workshop for university subject - VLSI Design & Technology	Organisor	
29,May - 30,May	AISSMS IOIT	Represented SCOE as Coordinator in ePGPEX	Coordinator	
08,Jan - 10,Jan	SCOE	General Chair &Organizor of IEEE Int. Conf. ICPC 2015	Organisor	

Student Development Contribution(2014-2015)			
Date	Venue	Contribution	Category
01,Jul - 30,Jun	SCOE	Value Addition Programs (VAP) for SE, TE, BE and ME students	Organisor
01,Jul - 30,Jun	SCOE	Student development through expert sessions of industry personnel	Organisor
01,Jul - 30,Jun	SCOE	Industrial Visits to enhance awareness of the students	Organisor
01,Jul - 30,Jun	SCOE	Organization of training programs for students to boost hands on experience	Organisor

Self Growth(2014-2015)				
Date	Venue	Contribution	Category	
01,Jul - 30,Jun	Academic Institutions &	Invited as expert and resource person due to acquired wisdom	Resource Person	

Self Growth(2015-2016)				
Date	Venue	Contribution	Category	
01,Jul - 30,Jun	Professional Bodies, Academic Institutions & Industries	Invited as expert and resource person due to acquired wisdom	Resource Person	
01,Jul - 30,Jun	Department of E&TC, Sinhgad College of Engineering, Pune	Commissioned the new laboratories in Liaison with ARM STMicroelectronics & Cypress through the agreements.	Mentor	
01,Jul - 30,Jun	Department of E&TC, Sinhgad College of Engineering, Pune	Robotics laboratory is being set up in liaison with e-Yantra:IIT Bombay	Mentor	

Declaration

I hereby declare that all the above information furnished by me is true to the best of my knowledge.

Date :02-Aug-2016 Dr. Madan Mali