

# National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

## Curriculum Vitae



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

**Dr.P.Muthuchidambaranathan** received his B.Engg. Degree in Electronics and Communication Engineering from Government College of Technology, Coimbatore, India, in 1992, the M.Engg. Degree in Microwave and Optical Engineering, from A.C. College of Engineering and Technology, Karaikudi, India, in 1994. He obtained his Ph.D. degree in optical communication from the National Institute of Technology (NIT), Tiruchirappalli, India in 2009. He is currently working as an Associate Professor in the Department of Electronics and Communication Engineering, National Institute of Technology (NIT), Tiruchirappalli, India. His research interests include recent technologies in wireless communications, and optical communications. He published his research papers in refereed international journals, and international and national conferences. He is an author of the textbook “Wireless Communications” (published by Prentice Hall of India).

1.	Name:	Dr. P. Muthuchidambaranathan
2.	Designation:	Associate Professor
3.	Office Address:	Department of Electronics and Communication Engineering, National Institute of Technology, Tiruchirappalli 620015
4.	Telephone (Direct) (Optional): Mobile (Optional):	+91-431-2503309 +91-9442572510
5.	Email (Primary):	muthuc@nitt.edu
6.	Field(s) of Specialization:	1) Wireless Communication 2) Optical Communication 3) Electromagnetics

### 7. Employment Profile

Job Title	Employer	From	To
R & D Engineer	Radiall Protectron Pvt.Ltd	10.10.1994	05.05.1995
Lecturer	Shanmugha College of Engineering, Thanjavur	01-06-1995	30-04-1997

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Lecturer	NIT-Tiruchirappalli during	02-05-1997	01-05-2002
Lecturer (S.S)	NIT-Tiruchirappalli	02-05-2002	30.06.2007
Lecturer(S.G)	NIT-Tiruchirappalli	01.07.2007	30.06.2010
Associate Professor	NIT-Tiruchirappalli	01.07.2010	Till date

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	NIT Tiruchirappalli	2009	First Class	Analysis of Soliton Propagation in Birefringent Optical Fibers
M.E.	ACCET, Karaikudi (Madurai Kamaraj University)	1994	First Class	Microwave and Optical Engineering
B.E	Govt. College of Tech. Coimbatore (Bharathiar University)	1992	First Class	Electronics and Communication Engineering
HSC	St.Mary's Hr.Sec.School, Dindigul	1988	First Class	I Group
SSLC	St.Mary's Hr.Sec.School, Dindigul	1986	First Class	I Group

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Member of M.S. and Ph.D. Admissions Committee	NIT Tiruchirappalli	2014	Till date
DAC member of Computer Support Group	Computer Support Group	-	-

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DAC member	ECE	-	-
Member of M.S. and Ph.D. Admissions Committee	ECE	2010	Till date
Hostel Warden	Lapis	-	-
	Agate Hostel	1997	1998

### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
DC Member	Anna University Chennai, Deemed Universities	-	-
Result Committee Member	Periyar Maniammai University, Thanjavur	-	-

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
-	-	-

### 12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
-	-	-	-	-

### 13. Details of Academic Work

#### (i) Curriculum Development

- a) Active participation in revising the UG & PG syllabus every year.
- b) Staff in charge of Communication Engineering Laboratory and developing new experiments to apply the recent trends adopted in the field of Communication systems.
- c) Doing all matters pertaining to Communication Engineering laboratory like procurement and maintenance of equipment, purchase of components, arranging for the service/repair of defective equipments etc.
- d) Participated in developing laboratory instruction material for Communication Engineering Lab; Introduced new experiments based on WiComm Kit and CommSim.
- e) Giving software assignments & mini projects to the students in the upcoming fields of Wireless Communication and Optical Communication during their course of study.

#### (ii) Courses taught at Postgraduate and Undergraduate levels

List of subjects/labs	UG/PG
Engineering Electromagnetics	UG

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Fiber Optic Communication	UG
Analog Integrated Circuits	UG
Electronic Circuits	UG
Digital Systems	UG
Wireless Communication	UG & PG
Fiber Optic Communication Systems	UG, PG
Broadband Wireless Technologies	PG

(iii) Projects guided at Postgraduate level

Sl. No	Name of the Thesis	Year
1.	Outage probability analysis of dual-hop multi-relay cooperative decode-and-forward system over generalized $\eta-\mu$ and $\kappa-\mu$ fading channel	December 2015
2.	Performance analysis of K-user single hop and multi-hop channel using decode-and-forward relays	December 2015
3.	On frequency domain channel estimation using WARP V3 hardware platform	December 2015
4.	Performance analysis of DF relaying over a dual-hop mixed faded generalized channels	May 2015
5.	Performance improvement methods for FSO communication system over the Malaga-distribution channel	May 2015
6.	Analysis of mixed RF/FSO dual hop transmission system for different modulation schemes using decode and forward relaying	May 2015
7.	Discrete wavelet based approach for channel estimation with moving average window on WARPLab	May 2015
8.	Implementation of automatic modulation classification using cumulants on Warp V3 board	May 2015
9.	OFDM transmitter implementation on XILINX VIRTEX-6 FPGA based WARP V3 kit	May 2014
10.	Implementation of OFDM receiver on XILINX VIRTEX-6 FPGA based WARP V3 board	May 2014
11.	Non-line-of-sight under water wireless optical communication using Optisystem	May 2014
12.	Multibit soft combination and detection for cooperative spectrum sensing in cognitive radio networks	May 2014
13.	OFDM based reporting scheme in cooperative spectrum sensing	May 2014
14.	Cooperative MIMO spectrum sensing in cognitive radio networks	May 2013
15.	Non-line-of-sight under water wireless optical wireless communication system considering multiple scattering of	May 2013

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	photons	
16.	Performance analysis of precoding algorithms for MU-MIMO systems	May 2013
17.	Optimal multi antenna spectrum sensing technique for cognitive radio systems	May 2013

(iv) Other contribution(s)

- a) Developing Wireless System Design Lab
- b) Time-table coordinator. Preparing Class Time-table for UG and PG.
- c) Doing Course allotment to faculty of ECE and Distribution.
- d) Distribution of workload to M.Tech. Scholars in connection with the laboratory classes, cycle tests and end semester examinations.
- e) In-charge of department Xerox machine servicing and maintenance.
- f) Performing as a PAC Chairman in UG and PG levels
- g) Member of M.Tech. Communication Systems Project committee.
- h) Coordinating the final year B.Tech projects and comprehensive exam during the past years.

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Wireless System Design Lab (Co-Coordinator)	DST-FIST	2012	2017	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
M. Raja	Transceiver Design for MIMO and OFDM Wireless Communication Systems	Supervisor	2009-2013
S. Hariharan	Centralized Cooperative Spectrum Sensing with MIMO for Reporting in Cognitive Radio Networks	Supervisor	2010-2015
Jagadeesh V K	Performance Analysis of Free Space Optical Systems over Malaga Distributed	Supervisor	2011-2016

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	Turbulence Channel		
M.Surendar	Design and Performance Analysis of Space-Time Block-Coded Cooperative Communication Systems over Multipath Fading Channels	Supervisor	2012- Thesis Submitted (Oct'2016)
Sudheesh P G	Interference Alignment	Supervisor	2014- Ongoing
Vineeth Palliyembil	Free Space Optics	Supervisor	2015- Ongoing
Narasimman M	Next Generation Wireless Networks	Supervisor	2015- Ongoing

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
18.10.2013	Concepts and applications of Wireless Technology	National	Speaker	National level workshop on Practical Issues in Wireless Technologies,	Kings College of Engineering, Pudukottai
04-05.10.2013	Wireless Networks	National	Speaker	Workshop on Recent Challenges in MVIEW-2013,	Shri Angalamman College of Engg.&Tech., Tiruchirappalli
05-11.08.2013	Wireless Communication	National	Speaker	Dept. of ECE, TEQIP	Anna University,

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				Sponsored FDP	Tiruchirappalli
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### 17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Design, Simulation and Research Application of Advanced wireless standards Using EEsosf	National	July 23-25, 2015	Coordinator	National Institute of Technology, Tiruchirappalli
Microwaves through software	National	November 6 & 7, 2015	Coordinator	National Institute of Technology, Tiruchirappalli
Evolution of 5G and IoT through Cognitive Radio Networks	National	May 6 & 7, 2016	Coordinator	National Institute of Technology, Tiruchirappalli

### 18. Invited Talks delivered

Topic	Date	Inviting Organization
Electromagnetic Concepts and applications	21.08.2014	EEE Association - MOUNT ZION College of Engineering & Technology, Pudukkottai
Concepts and applications of Cellular Technology	28 .01.2015	Department of ECE, Saranathan College of Engineering, Tiruchirappalli
Electromagnetic Concepts and applications	13.02.2014	ECE Association, MIET College of Engineering, Tiruchirappalli

Given many talks and seminars on Electromagnetic Theory, Optical Communications, Wireless Communications in various colleges in Tamilnadu

### 19. Membership of Learned Societies

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Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Member	IETE	M189094 (2007)
Associate Member	IECE	AM086789-9 (2000)
Life Member	ISTE	LM30443 (2000)

20. Academic Foreign Visits

Country	Duration of Visit	Programme	
Singapore	2-4 July 2007	Fourth IEEE and IFIP international conference on Wireless and Optical Communication Networks (WOCN 2007), Singapore	
Scholars Visit Under Guidance			
Ph.D. Scholar Visited Abroad	Duration of Visit	University Visited	Area & Foreign Supervisor
M. Raja	Jan-June 2011 & Jan-June 2012	University of Saskatchewan, Saskatoon, SK, Canada.	Transceiver Design for MIMO Systems Prof. Dr. Ha H. Nguyen
S. Hariharan	Sep 2011-Feb 2012	University of Saskatchewan, Saskatoon, SK, Canada.	Cognitive Radio Prof. Dr. Ha H. Nguyen
Jagadeesh V K	Dec 2012-May 2013	University of Saskatchewan, Saskatoon, SK, Canada.	Underwater Optical Wireless Communication Dr. Francis M. Bui

21. Publications

(A) Refereed Research Journals

Author(s)	Title of the paper	Journal	Volume No.	Page No.	Year
P.Muthuchidambaranathan and D.Ravikumar	Optical Solitons for Ultra-High Speed Communications	WSEAS Transactions Communications	6(7)	p745	2007
P.Muthuchidambaranathan, N.Kalyanasundaram and D.Ravikumar	Soliton Propagation in Birefringent Fibers	Fiber and Integrated Optics, Taylor & Francis	27(2)	-	2008
P.Muthuchidambaranathan, N.Kalyanasundaram and M.Krishnam Raju	Analysis of Soliton Propagation in Birefringent Fibers	International Journal of Microwave and Optical Technology	4(6)	368-373	2009
N.Kalyanasundaram and P.Muthuchidambaranathan	Nonlinear pulse propagation in a weakly birefringent optical fiber Part 1:	Progress in Electromagnetics Research B	Vol. 19	205-231	2010



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	Derivation of Coupled Nonlinear Schrodinger equations (CNLSE)				
M.Raja, P.Muthuchidambaranathan and Ha H. Nguyen	Transceiver Design for MIMO Systems with Improper Modulations	Wireless Personal Communications, Springer	vol. 68	265-280	2012
M.Raja and P.Muthuchidambaranathan	A Novel Nonlinear Constellation Precoding for OFDM Systems with Subcarrier Grouping	Wireless Personal Communications, Springer	2013 73(3) 867-884	897-884	2013
M.Raja and P.Muthuchidambaranathan	SVD-Assisted Joint Precoder and Decoder Design for the Uplink of MU-MIMO Systems With Improper Modulation	Wireless Personal Communications, Springer	2013 73(3)	1129-1142	2013
M.Raja and P.Muthuchidambaranathan	Multiuser MIMO Transceiver Design for Uplink and Downlink with Imperfect	Wireless Personal Communications, Springer	75(2)	1215-1234	2014
M. Raja, Ha H. Nguyen and P. Muthuchidambaranathan	Joint Optimization of Precoder and Decoder in Multiuser MIMO Systems	REV Journal on Electronics and Communications (REV-JEC) (IEEE Communications Society)	2	1-2	2012
M.Raja, P.Muthuchidambaranathan	SVD-Based Transmit Beamforming for Various Modulations with Convolution Encoding	ICTACT Journal on Communication and Technology	2(03)	1-7	2011
M.Raja, P.Muthuchidambaranathan	Performance Analysis of Closed-Loop MIMO system	International Journal of Computer Applications (IJCA)	4(12)	14-19	2010
M.Raja, P.Muthuchidambaranathan	A Novel Nonlinear Constellation Precoding for OFDM Systems with Subcarrier Grouping	Wireless Personal Communications, Springer	73(3)	867-884	2013
M.Raja, P.Muthuchidambaranathan	SVD-Assisted Joint Precoder and Decoder Design for the Uplink of MU-	Wireless Personal Communications, Springer	73(3)	1129-1142	2013

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	MIMO Systems with Improper Modulation				
M.Raja, P.Muthuchidambaranathan	Multiuser MIMO Transceiver design for Uplink and Downlink with Imperfect CSI	Wireless Personal Communications, Springer	75(2)	1-20	2014
S. Hariharan, P. Muthuchidambaranathan	Analysis of Linear Equalizers for Cooperative Multi-User MIMO Based Reporting System	WASET - International Journal of Electrical, Robotics, Electronics and Communications Engineering	8(5)	823-827	2014
S. Hariharan, P. Muthuchidambaranathan	Cooperative MIMO Based Reporting System for IEEE 802.22 Standard Over Fading Channels	Wireless Personal Communications, Springer	80(1)	1-12	2014
S. Hariharan, P. Muthuchidambaranathan	Analysis of Linear Equalizers for Cooperative Multi-User MIMO Based Reporting System	WASET- International Journal of Electrical, Robotics, Electronics and Communications Engineering	8(5)	811-815	2014
S. Hariharan, K. Chaitanya, P. Muthuchidambaranathan	Centralized Cooperative Spectrum Sensing with MIMO in the reporting Network over $\kappa$ - $\mu$ fading channel	WASET - International Journal of Electrical, Computer, Electronics and Communication Engineering	8(11)	1665-1670	2014
Jagadeesh VK, P. Muthuchidambaranathan, FM Bui and Vineeth P	Performance of a subcarrier intensity modulated differential phase-shift keying over generalized turbulence channel	AEU - International Journal of Electronics and Communications,	69(11)	1569-1573	2015
Jagadeesh VK, Vineeth P ,P. Muthuchidambaranathan, and FM Bui	Free space optical communication using subcarrier intensity modulation	Wiley, Microwave and Optical Technology Letters	57(8)	1958-1961	2015

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	through generalized turbulence channel with pointing error.				
Jagadeesh VK, Naveen KV and P. Muthuchidambaranathan	BER Performance of NLOS Underwater Wireless Optical Communication with Multiple Scattering	WASET - International Journal of Computer, Electrical, Automation, Control and Information Engineering	9(2)	563-566	2015
Surendar, M., K. Chaitanya and P. Muthuchidambaranathan	Performance analysis of multiple relay cooperative communication over generalized $\kappa$ - $\mu$ and $\eta$ - $\mu$ fading channels	Elsevier, AEU - International Journal of Electronics and Communications,	69(9)	1220-1225	2015
Surendar, M., and P. Muthuchidambaranathan	Low complexity and high diversity gain non-linear constellation precoded MIMO-OFDM system with subcarrier grouping	Elsevier, AEU - International Journal of Electronics and Communications	70(3)	265-271	2016
Jagadeesh Vellakudiyan; Imran Shafique Ansari; Vineeth Palliyembil; Palanivel Muthuchidambaranathan and Khalid A. Qaraqe	Channel capacity analysis of a mixed dual-hop radio-frequency-free space optical transmission system with Málaga distribution	IET Communications DOI: <a href="https://doi.org/10.1049/iet-com.2016.0041">10.1049/iet-com.2016.0041</a>	Volume 10, Issue 16	2119-2124	2016

**(B) Conferences/Workshops/Symposia Proceedings**

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
P.Muthuchidambaranathan	Genetic algorithm assisted antenna diversity aided multi carrier detection in Wireless Communication	Microwaves, Antenna, Propagation and Remote sensing	-	-	International Center for Radio Science, Jodhpur	2003
P.Muthuchidambaranathan and S.Sundaresan	Virtual Cellular Infrastructure for Mobile Ad hoc Networks	International Workshop on Wireless Ad-hoc Networks		IWWAN 2005	London	2005

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P.Muthuchidambaranathan and S.Sundaresan	CDMA based MAC for MANET	International Workshop on Network Architecture and Service Models	22-24	NASM'2005	Shanghai, China	2005
P.Muthuchidambaranathan and G.Rama Krishna Rao	Soliton Pulse Compression Using Nonlinear Optical Loop Mirror	International technical conference IASTED	-	IASTED	Canada	2006
B.Malarkodi, P.Muthuchidambaranathan and V.V.Chakravarthy	Dynamic Power & Sub-channel allocation in Multi user OFDM systems	National Conference on Emerging Trends in Engineering & Technology (NCETET)	-	NCETET	Kottayam	2007
P.Muthuchidambaranathan, N.Kalyanasundaram and D.Ravikumar	Transmission Control and Stability of Soliton Propagation in Birefringent fibers	Fourth IEEE and IFIP international conference on Wireless and Optical Communication Networks (WOCN 2007)	-	WOCN 2007	Singapore	2007
P.Muthuchidambaranathan, N.Kalyanasundaram and D.Ravikumar	High Speed Optical Communication Techniques	Third national conference on Signals, Systems and Communication (NCSSC-2007) at the College of University Guindy	-	NCSSC-2007	Chennai	2007
P.Muthuchidambaranathan, N.Kalyanasundaram and K.Pradeep Kumar	Spun Fibers for High Speed Optical Networks	IEEE and IFIP international conference on Wireless and Optical Communications Networks(WOCN-2008)	-	WOCN-2008	Indonesia	2008
P.Muthuchidambaranathan, N.Kalyanasundaram and M.Krishnam Raju	Analysis of Optical Soliton Propagation in Birefringent Fibers	IASTED international conference on Wireless and Optical Communications (WOC-2008)	-	WOC-2008	Canada	2008
P.Muthuchidambaranathan, N.Kalyanasundaram and M.Krishnam Raju	Analysis of Optical Soliton Propagation in Birefringent Fibers	IEEE conference TENCON-2008	-	TENCON-2008	Hyderabad	2008
P.Muthuchidambaranathan and N.Kalyanasundaram	Analysis of pulse broadening in dispersion managed soliton system	TENCON 2009	-	TENCON 2009	Singapore	2009
M.Raja, P.Muthuchidambaranathan	Transmit Beamforming Method Based on Singular Value Decomposition for MIMO Systems	ICCAIE 2010	5-7	ICCAIE 2010	Malaysia	2010
M.Raja, P.Muthuchidambaranathan	BER Performance of SVD-based Transmit Beamforming with Various Modulation Techniques	5th IEEE International Conference on Industrial and Information Systems (ICIIS)	pp155-160	ICIIS	India	2010
B.Sravanthi, P.Muthuchidambaranathan and S.Raghavan	Interaction and stability of soliton in Birefringent fibers	ICNEAC-2011,		ICNEAC-2011	Narsapur	2011
M.Raja, P.Muthuchidambaranathan	Minimum Total MSE based Transceiver Design for Single-user MIMO System	Proc. of 17th IEEE Asia-Pacific Conference on Communications (APCC)3 ==	720-725	APCC	Malaysia	2011
M. Raja and	Joint Precoding and	International	Vol 6.	ICCCS-	India	2012

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P.Muthuchidambaranathan	Decoding in MU-MIMO Downlink Systems with Perfect Channel State Information (CSI)	Conference on Communication, Computing and Security (ICCCS-2012), Procedia Technology, Elsevier	pp708-715	2012		
M. Raja and P.Muthuchidambaranathan	Joint Optimization of Precoder and Decoder in Multiuser MIMO Systems with Imperfect Channel State Information (CSI)	Proc. of IEEE International Conference on Computing Communication and Networking Technologies (ICCCNT-2012)	pp1-5	ICCCNT-2012	India	2012
Sanka, K., M.Raja, P.Muthuchidambaranathan	Improved minimum total MSE transceiver design with imperfect CSI at both ends of a MIMO link	3rd IEEE International Conference on Electronics Computer Technology (ICECT)	Pp23-27	ICECT	India	2011
A. Kalaiselvan, M. Raja and P.Muthuchidambaranathan	Performance Analysis of Multiuser MIMO Systems using Non-Iterative Technique	Proc. of International Conference of Signal processing, image processing and Pattern Recognition (ICSIPR'13)	-	ICSIPR'13	India	2013
S. Hariharan, S.Venkata siva prasad, P.Muthuchidambaranathan	Average Detection Probability Analysis for Cooperative - MIMO Spectrum Sensing in Cognitive Radio Networks	ICACCI, Aug. 22-25, 2013, India	pp.133-136	ICACCI	India	2013
M. Surendar and P.Muthuchidambaranathan	Channel Coded STBC-OFDM Based Transmit Diversity Systems in Multipath Rayleigh-Fading Channels	Advanced Computing, Networking and Security (ADCONS), 2013 2nd International Conference	160-163	ADCONS	India	2013
Sandeep Singh Virk and P. Muthuchidambaranathan	Use of SC-FDMA on downlink of LTE technology	7th International Conference on Advanced Computing and Communication Technologies (ICACCT)	-	ICACCT	-	2013
Sandeep Singh Virk and P. Muthuchidambaranathan	Comparative performance analysis of Zero Forcing, Minimum Mean Square Error and Decision Feedback equalizer	International Conference on Green Computing, Communication and Conservation of Energy (ICGCE)	136-139	ICGCE	-	2013
Kalaiselvan and P.Muthuchidambaranathan	Performance Analysis of Multiuser MIMO Broadcast channel based on LQ Decomposition	IEEE International Conference on Green Computing, Communication and Conservation of Energy (ICGCE)	pp 807-810	ICGCE	-	2013
Surendar, M.; P.Muthuchidambaranathan,	A novel joint ML detector for transmit diversity systems in frequency selective fading channels	Computational Intelligence and Computing Research (ICCIC), 2013 IEEE International Conference	pp1,426-28	ICCIC	India	2013
Bishwajeet Sah, M. Surendar and P. Muthuchidambaranathan	Frequency Domain Joint MMSE-SIC Equalizer for MIMO SC-FDMA LTE-A	IEEE International Conference International	-	ICECS-14	India	2014

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	Uplink	Conference on Electronics and Communication Systems 2014 (ICECS-14)				
Arpita Choudhary, Jagadeesh V K, P Muthuchidambaranathan	Pathloss analysis of NLOS Underwater Wireless Optical Communication channel	IEEE International Conference on Electronics and Communication Systems 2014 (ICECS-14)	-	ICECS-14		2014
Seshanna Katam, P. Muthuchidambaranathan	Low complexity SLM-PTS Method for Reduction of PAPR in OFDM systems	3rd International Conference on Eco-Friendly Computing And Communication Systems (ICECCS 2014)	-	ICECCS	Surathkal	2014
Jagadeesh V K, Arpita Choudhary, Francis. M Bui, P Muthuchidambaranathan	Characterization of Channel Impulse Responses for NLOS Underwater Wireless Optical Communications	IEEE Fourth International Conference on Advances in Computing and Communications	pp.77-79	-	-	2014
Jagadeesh V. K, Vineeth Palliyembil, P.Muthuchidambaranathan, Francis M. Bui	Channel Capacity and Outage Probability Analysis of Sub-carrier Intensity Modulated BPSK System over M-distribution Free Space Optical Channel	2nd International Conference on Electronics and Communication Systems (ICECS 2015)	-	ICECS 2015	Coimbatore	2015
Seshanna Katam, P. Muthuchidambaranathan	Modified SLM Method For Reduction of PAPR in OFDM Systems Using Decimal Sequences	International Conference on Signal Processing ,Informatics Communication and Energy Systems (SPICES 2015)	-	SPICES 2015	Calicut	2015
S. Hariharan, K. Chaitanya, P. Muthuchidambaranathan	Analytical Expression of Average Detection Probability for a Linear MMSE Combiner in Cognitive Radio Networks	2nd International Conference on Electronics and Communication Systems (ICECS 2015)	1463-1467	ICECS 2015	Coimbatore	2015
Sudheesh P G, Chiranjeevi Manda and P Muthuchidambaranathan	On Frequency domain Channel estimation using WARP v3 hardware platform	International Conference on Electronics and Communication Systems(ICECS)2016	-	ICECS)2016	Coimbatore	2016
<b>Sudheesh P G</b> , Maurizio Magarini, P Muthuchidambaranathan	Interference Alignment for the K-user MIMO X Network Using Time Division Multiple Access	-	-	IEEE DISCOVER 2016	-	2016
<b>Sudheesh P G</b> , Maurizio Magarini, P Muthuchidambaranathan, "" ,	Optimal Overhead Selection for Interference Alignment in Time-varying Two-user MIMO X Channel	-	-	IEEE DISCOVER 2016	-	2016
<b>Sudheesh P G</b> , Maurizio Magarini, P Muthuchidambaranathan	Achieving Maximum System Capacity in Multiple- High Altitude Platforms through Interference Alignment	-	-	Accepted in ICIS	-	2016

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<b>Sudheesh P G</b> , Gaurav Kumar and P Muthuchidambaranathan	Performance Analysis of Dual Hop Decode-and- Forward Relaying with Interference Alignment	Conference on Advances in Signal Processing- 2016			Pune	2016
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(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Dr.Muthuchidambaranathan	Wireless Communications	Prentice Hall of India	2008	978-81-203-3514-1