



Prof. Dr. R.Valli
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Department of ECE
Manakula Vinayagar Institute of
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R.VALLI

PROFESSIONAL OBJECTIVE:

To pursue post doctoral research in the field of communication in a reputed institution abroad

EDUCATIONAL QUALIFICATION:

DOCTOR OF PHILOSOPHY (Ph.D)	2012
WIRELESS COMMUNICATION	
Pondicherry Engineering College, Puducherry, Pondicherry University, Puducherry, India	
Post Graduate (M.Tech)	
ELECTRONICS AND COMMUNICATION	2005
Pondicherry Engineering College, Puducherry, Pondicherry University, Puducherry. India.	
Under Graduate (B.E)	1996
ELECTRONICS AND COMMUNICATION	
Madras University	

Work experience: (starting from present position)

S.No	Employer	Designation	Period of Service	Nature of Work
1	Mankula Vinayagar Institute of Technology	Professor	From 01.08.15 to Till date	Teaching and Research
2	Adhiparasakthi Engineering College	Professor	From 02.01.13 to 10.07.15	Teaching and Research
3	Adhiparasakthi Engineering College	Associate Professor	From 01.07.12 to 01.01.13	Teaching and Research
4	Adhiparasakthi Engineering College	Assistant Professor	From 01.09.05 to 01.07.12	Teaching
5	Adhiparasakthi Engineering College	Lecturer	From 4.11.98 to 31.08.05	Teaching

Teaching Activities: (Subjects Taught)

(i) Under Graduate :

1. Basic Electrical and Electronics Engineering
2. Wireless communication
3. Communication engineering
4. High speed networks
5. High performance communication
6. Mobile communication
7. Embedded systems
8. Broadband communication
9. Microprocessor and Microcontrollers
10. Digital logic design
11. Application specific integrated circuits
12. Linear integrated circuits

(ii) Post Graduate:

1. Advanced Digital System Design
2. Wireless communication
3. High speed networks
4. CAD for VLSI design
5. Wireless Sensor network

(iii) Laboratories handled:

1. LIC lab
2. Microprocessor and microcontroller lab
3. EDC lab
4. Electronic circuits lab
5. System design lab
6. Microwave lab

Consultancy and Sponsored Research activities:

Sl. No	Name of the Scheme	Title of the Proposal	Amount Sanctioned /Fund requested (Rs)	Duration	Status Completed/* Ongoing
1	STTP, ISTE	Contemporary world of Electricity-Solar Energy	Self financing	22.11.16	Completed
2	SEMINAR GRANT, CSIR	Recent Trends In Hybrid Power Generation	75,000	30.11.16	Completed
3	SUMMER SCHOOL, INSA	Bio Inspired Power Systems	5,00,000	20.12.16	-
4	FDP, DST	Integrating Smart Grid With Renewable Energy Systems	2,50,000	30.11.16	-
5	Research Scheme Of Power/ CPRI	Design and development of reliable and high power inverter fed multiphase induction motor drive for Industrial Applications with Reduced Cost for crucial applications	25,60,540	03.01.17	-

6	Research, Design, Development And Demonstration (RDD&D)/ MNRE	An intelligent solar energy based green energy drive	34,00,000	06.01.17	-
7	EXTRA MUTUAL RESEARCH FUNDING/ SERB	Table top biomass gasifier for home applications	41,65,000	05.01.17	-
8	IPR Awareness program/ DeitY	IPR Management for Start ups in Electronics & ICT Sectors	2,00,000	05.01.17	-
9	Conducting Technology based entrepreneurship development programs/NSTED B	EDP on solar power and LEDs	3,00,000	10.01.17	-
10	Research proposal scheme/ AICTE	Super capacitor storage for hybrid renewable power generation system	17,50,000	10.01.17	-
11	Seminar/MNRE	Rural electrification	2,00,000	12.01.17	-
12	FDP/SERB	Bio Inspired Solar Technologies	5,00,000	12.01.17	-
13	AICTE-ISTE/ Induction/Refresh er Program	Smart Grid, Internet of things and Green Computing-The future of energy Intelligence	3,00,000	4.12.2017	Completed
14	AICTE-PMKVY	Assistant Electrician course	4,05,000	09.05.2017	Sanctioned and ongoing 405000
15	SERB MATRICES	Queuing model for Resource allocation in Future Wireless Communication	2,00,000	04.04.2018	-

Major tasks handled:

- Has been the Head of the department of Electrical and Electronics Engineering at Manakula Vinayagar Institute of Technology till April 2017
- IEEE-ICSCAN 2018 Coordinator

- IEEE student branch counselor
- Research and Development cell -Coordinator
- Member of quality Assurance cell
- Board of Studies member
- DAC member for IFET Engineering college
- DAC member for SKPEngineering college

Paper Publications / Presentation:

	Published
International Journal	16
National Journal	1
International Conference	11
National Conference	

FDP/STTP/Workshops attended : 18

Reviewer for the journals : 03

- Reviewer of International Journal of Information and Communication Technology (IJICT) <http://www.inderscience.com/ijict>
- Reviewer of Egyptian Informatics Journal, <http://www.sciencedirect.com/science/journal/11108665>
- Reviewer of ICTACT Journal of Communication
- Acted as reviewer of TEQIP sponsored CIC 2016 Conference

Research guidance	: NIL
Project Guidance (UG)	: approximately 50
(PG)	: 10
Guest Lectures delivered	: 12
Professional Membership	: 04
	<ul style="list-style-type: none">• IEEE member• Life member Indian Society for Technical Education• Member IAENG• Senior Member IACSIT

ANNEXURE

List of Publications

International Journals: [16]

1. "Analysis of cluster based routing protocols for energy efficiency and security using IPSEC in wireless sensor networks", *International Journal on Computer Engineering and Information Technology* vol.1, no.1, pp.157-164, Nov. 2008 - Jan 2009.
2. "A Non-cooperative game theoretic approach for power control in Virtual MIMO wireless sensor network", *International Journal of UbiComp*, vol.1, no.3, pp.44-55, July 2010, DOI : 10.5121/iju.2010.1304
3. "Game theoretic approach for power control using error control coding in wireless sensor networks", *International Journal of Computer Applications*, vol. 7, no.1, pp. 31-36, September 2010, ISBN: 978-93-80746-37-1, DOI: 10.5120/776-1095.
4. "Utility enhancement by power control in WSN with hexagonal deployment scheme using game theoretic approach with pricing", *International Journal of Computers and Communications*, vol. 5, no.4, pp. 263-270, 2011
5. "Power control with MIDRS Codes in VMIMO WSN using game theoretic approach", *International Journal of Soft Computing and Engineering (IJSCE)*, vol.1, issue.6, pp. 377-381, January 2012, ISSN: 2231-2307.
6. "Utility based power control with FEC in hexagonally deployed WSN", *International Journal of Computer Science Issues (IJCSI)*, vol.9, issue 2, no.2, pp. 348-354, March 2012, ISSN: 1694-0814
7. "Energy efficient coalition game theoretic approach for MIMO based wireless sensor network", *European Journal of Scientific Research (EJSR)*, vol.74, no.3, pp. 326-336, April

2012, ISSN 1450-216X.

8. "Adaptive Modulation and Coding for Lifetime Enhancement of WSN using Game Theoretic Approach", ***WSEAS Transactions on Communication***, Issue 6, Volume 12, pp.251-260, June 2013
9. "Adaptive modulation and coding for utility enhancement in VMIMO WSN using game theory", ***International Journal of Computer Theory and Engineering***, vol. 5, no. 6, December 2013
10. "Energy efficient routing for biomedical Wireless sensor networks", ***Asian Journal of Science and Applied Technology (AJSAT)***, pp 17-23Vol.3.No.1 2015
11. "Simulation and Analysis of RSSI based Trilateration Algorithm for Localization in Contiki-OS", ***ICTACT Journal on Communication Technology***, pp.1351-1355, vol.7, issue 3, September 2016.
12. "Comparative Analysis Of Cascaded H-Bridge MLI For Drive Applications" International Conference on **Current Research in Engineering Science and Technology(SSRG group Publications)** ICCREST Special issue- May 2016
13. "A novel cascaded H bridge multilevel inverter topology with reduced switch count for THD Minimization"***ADVANCES in NATURAL and APPLIED SCIENCES***, pp.338-348, vol.11,Special issue 3, April 2017.
14. "Fault Tolerant Cascaded H-Bridge Multilevel Inverter by Reconfiguration of Modulation"***ADVANCES in NATURAL and APPLIED SCIENCES***, pp.357-362, vol.11,Special issue 3, April 2017.
15. "Power control for capacity enhancement in MCCDMA-MIMO system using Bayesian water filling game theory" ***ADVANCES in NATURAL and APPLIED SCIENCES***, pp.562-571,

vol.11,Special issue 3, April 2017.

16. "An Effectual Fault Tolerant Methodology for Mobile IP in Wireless Systems" **Indian Journal of Technical Education** (Received Best paper National award).

INTERNATIONAL /NATIONAL CONFERENCES: [11]

1. "A Load Disseminated Mobility Management for Multistratum Hierarchical Mobile IP Networks in Wireless System" **Proceedings of the International Conference on Recent trends in Informations Systems (IRIS'06)**, Kovilpatti, TamilNadu, India, Jan. 6-8, 2006, pp.226-239.
2. "Transmission power control in virtual MIMO wireless sensor network using game theoretic approach", **Proceedings of 1st International Conference on Computer Science and Information Technology**, Bangalore, Springer (LNCS) pp.535-545, Jan 2011.
3. "Utility based power control with pricing using MIDRS codes in wireless sensor networks", **Proceedings of IEEE International Symposium on Humanities, Science and Engineering Research**, Kualalumpur, Malaysia, 5-7 June 2011.
4. "Utility enhancement by power control in WSN with different topologies using game theoretic approach", **Proceedings of 5th WSEAS International Conference on Communications and Information Technology**, Corfu Island, Greece, pp.85-89,July 14-17, 2011, ISBN: 978-1-61804-018-3.
5. "Utility Enhancement by Game Theoretic Approach using Square Grid Topology in WSN", **Proceedings of IEEE International Conference on Process Automation, Control and Computing**, CIT, Coimbatore, India. July 20-22, 2011.
6. "Energy Efficient Adaptive Modulation for Power Control in WSN using Game Theoretic Approach", **Proceedings of International Conference on Information and Communication**

Technology, Chennai, India, pp.58-64, December 24, 2011. Organised by Interscience Research Network **(Received Best paper award)**.

7. "Utility based power control with different deployment schemes in VMIMO WSN", **Proceedings of IEEE International Conference on Advances in Engineering, Science and Management**, Nagapattinam, India, vol.2. pp.432-435, March 30-31, 2012 **(Received Best paper award)**.
8. "Adaptive modulation and coding for utility enhancement in VMIMO WSN using game theory", **Proceedings of IEEE International Conference on Electronics Computer Technology**, Kanyakumari, India, vol.2, pp.633-637, April 6-8, 2012.
9. "Power control with QoS constraints in WSN using Game theoretic approach", **Proceedings of IEEE International Conference on Computing, Communication and networking technologies**, Coimbatore, July, 26-28, 2012.
10. "Utility Improvement by Power Control using MIDRS Codes in Hexagonally Deployed VMIMO WSN", **Proceedings of International Conference Engineering and Applied Science 2012**, Colombo, Sri Lanka, DOI: [10.2316/P.2012.785-131](https://doi.org/10.2316/P.2012.785-131).
11. "Energy Efficient routing for Bio-medical wireless sensor networks", **Proceedings of International Conference on Engineering, Management and Applied Sciences ICEMAS 2015**, Tamilnadu, India

WORKSHOPS/FDP/SEMINARS/OTHER TRAININGS ATTENDED [8]

1. Attended the IEEE Sponsored workshop titled "Industrial Automation using IoT" held at Manakula Vinayagar Institute of Technology held at 7th July 2018
2. Attended one day workshop titled "Energy conservation and its methodologies" held at MVIT and Pondicherry HR circle on 19th Nov 2017
3. Attended the CSIR Sponsored seminar titled "Recent trends in hybrid power generation" held

at MIT from 30th June to 1st July 2017

4. Attended the ISTE Sponsored STTP titled “Contemporary World of electricity-Solar Energy” held at Manakula Vinayagar Institute of Technology held on 27th Nov 2017 to 1st Nov 2017
5. Attended the ICT and national instruments Sponsored training titled “NI Graphical System Design Platform for IoT App” held at Manakula Vinayagar Institute of Technology on 23rd to 25th March 2017
6. Attended the training titled “Solar energy-Technology and products” held at PHOCOS Solar India Pvt Ltd, Puducherry from 9th to 10th June 2016
7. Attended the training titled “Accreditation –Norms, Standards, Implementation In Technical Education by Dr. Alagumurthy, professor, Pondicherry engineering college held at Manakula Vinayagar Institute of Technology on 4th June 2016
8. Attended the training titled “Embedded system and development” by Nextgen technologies, Chennai from 20th Nov 2015

Guest Lectures Delivered

1. Chairperson for the International Conference “WIMONE 2011” held at Bangalore during 1-3 January 2011.
2. Keynote address in the FDP on Communication theory, organized by Karpaga Vinayaga Engineering College in association with Anna University, December 10 – 16, 2012.
3. Lecture on “Microcontrollers” at Adhiparasakthi Polytechnic College
4. Acted as Judge for the Paper Presentation & Project Display Contest in the National Level Technical Symposium at SKP Engineering College
5. Acted as Judge for the Paper Presentation in the National Level Technical Symposium at VRS College of Engineering & Technology.
6. Keynote address in the ANNA University sponsored FDP on “Linear Integrated Circuits” at Karpaga Vinayaga Engineering College on 06.12.2013.
7. Guest Lecture on “Analog to Digital Convertors and Digital to Analog Convertors” at Saveetha Engineering College, Chennai on 26th February 2014.
8. Chief Guest for the Valedictory function of the Symposium “FEDINA’14” by Department of CSE, Annai Teresa College of Engineering on 22nd March 2014.

9. Acted as Jury for the National Conference conducted by Department of Information Technology, at IFET College of Engineering on 5th April 2014.
10. Acted as resource person for the Anna University sponsored FDP on “SONET/SDH, WDM networks and wavelength routed networks” at Saveetha Engineering College, Chennai on 24th June 2014.
11. Acted as resource person for the Anna University sponsored FDP on “VLSI Design” at Karpaga Vinayaga Engineering College on 09th December 2014.
12. Jury for the project contest organized by “Department of ECE”, Karpaga Vinayaga College of Engineering and Technology, on 31.3.2015
13. Acted as resource person for the Anna University sponsored FDP on “Security using game thory” at Adhiparasakthi Engineering College on 12th May 2015.
14. Published the article titled “**The Right Outcome**” in ICT connect