Curriculam Vitae

Dr. C. Nagamani obtained her B.Tech in Electrical and Electronics Engg from SVU College of Engg., Tirupati and M.Tech. in Power Electronics from I.I.T., Kanpur. She was with IIT Delhi as a Senior Scientific Officer in 1984 after which she joined Central Power Research Institute, Bangalore as an Engineering Officer. She joined the department of Electrical and Electronics Engineering, Regional Engineering College, Tiruchirappalli (now known as National Institute of Technology, Tiruchirappalli) as a lecturer in 1990. Subsequently she obtained her doctoral degree from University of Technology, Sydney as an awardee of Overseas Postgraduate Scholarship in 2001. Presently she is a professor in the same department. Her research areas are Power electronics and drives, FACTS and application of power controllers for grid integration of renewable energy sources such as wind and solar PV systems.

She has published and presented several technical articles in reputed national and international journals and conferences. She has been serving as a reviewer for various reputed international journals such as IEEE, IET, Elsevier, Springer etc and is a senior member of IEEE since February 2016. She has been guiding a number of M.Tech, M.S. and Ph.D scholars. She has been involved in executing several sponsored research projects with a total worth more than two crores. The sponsors include DST, National Mission on Power Electronics Technology, DEITY, and Ministry of coal, Government of India. She is a regular invitee for delivering expert lectures in the field of power controllers at various academic institutions.

Dr. C. Nagamani served as the Head of the Department of Electrical and Electronics Engineering as during 2005 to 2008. She served also as the Dean, Planning and Development during 2012 - 2015 and as Dean (academic) during 2017-2018. She is a nominated member

in various committees assisting the administration in matters of importance. She has also been serving as a member in various doctoral committees, Board of Studies and Staff Selection Committee for various reputed institutions.

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1.	Name	Dr. C. NAGAMANI
2.	Designation	**Professor**
3.	Office Address	Department of Electrical and Electronics Engineering National Institute of Technology, Trichirappalli-620 015
4.	Telephone (Direct)	04312503254
5.	Email (Primary)	cnmani@nitt.edu
6.	Field(s) of Specialization	Power Electronics and drives, FACTs controllers, power controllers for grid interfacing wind and solar PV systems

7. Employment Profile

Job Title	Employer	From	To
Senior Scientific Officer – II	I.I.T. Delhi, India	1.2.1984	10.10.1984
Research Associate	C.P.R.I., Bangalore, India	26.10.1984	4.6.1985
Engineering Officer – I		5.6.1985	15.6.1989
Engineering Officer – II		16.6.1989	28.11.1990
Lecturer	REC, Tiruchirappalli	3.12.1990	18.3.1993
Lecturer Senior scale		19.3.1993	9.10.1998
Selection grade Lecturer		9.10.1998	19.12.2001
Assistant Professor	N.I.T., Tiruchirappalli (formerly REC, Tiruchirappalli)	20.12.2001	22.4.2007
Professor		23.4.2007	Till date

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

Degree	Board/University	Year of passing	Division/Grade	Subjects
Ph.D. Degree	University of Technology, Sydney	2001	Not applicable	Electrical Engg
Master's Degree	I.I.T., Kanpur	1984	Not applicable	Power Electronics
Bachelor's Degree	SVUCE, Tirupati	1980	1st class with distinction	Electrical and Electronics Engg
Intermediate	Board of Intermediate Education, A.P	1976	1st class	Maths and Physical Sciences
S.S.C.	Board of Secondary Education, A.P	1st class	1st class	Maths, Sciences, Social Studies and languages

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department /Centre/Institution	From	To
Head, EEE Dept.	NIT-Tiruchirappalli	Dec.2005	Jan.2009
Dean (P&D)	NIT-Tiruchirappalli	Nov.2012	Sept.2015
Dean(academic)	NIT-Tiruchirappalli	Jan. 2017	Dec. 2018
Internal Complaints Committee (ICC)	NIT-Tiruchirappalli	June 2017	July 2018
Inquiring Authority (Presenting Officer)	NIT-Tiruchirappalli	Dec. 2016	June 2017
Grievance Redressal Committee	NIT-Tiruchirappalli	June 2015 Jan. 2017	November 2015 December 2017

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Resource person	NIT Warangal,	2013	
Member,Board of studies	JNTU Ananthapur,	2013	2016
Resource person	NIT Suratkal	2014	
Member,Board of studies	Thiagarajar College of Engineering,Madura	2014	2016
Member ,Staff selection committee	JNTU Hyderabad	2017	

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
1997	Overseas Post graduate Research Scholarship (OPRS)	Government of Australia

12. Fellowships Nil

13. Details of Academic Work

(i) Curriculum Development

- Introduced new course for B. Tech students- Power Electronics Application to Power Systems (elective)
- Introduced new course for M. Tech students – Flexible AC Transmission Systems
- Developed new research laboratory- Power Converter Research Laboratory
- Involved in revision of curriculum and syllabi for B.Tech (EEE), M.Tech (PS) and M.Tech (PE) at NIT Trichy

(ii) Courses taught at Undergraduate level:

Electron Devices, Computer aided Design of Electrical Machines, Linear Integrated Circuits, Power Electronics, Basics of Electrical Engineering, Power Electronic Application to Power Systems (New Course Introduced) and Circuit Theory

Courses taught at Undergraduate level:

Power Conversion Techniques, Solid state drives, System Theory, Flexible AC Transmission System, Hybrid Electrical Vehicles

(iii) Projects guided at Postgraduate level:

Guided more than 40 M.Tech projects

(iv) Other contribution(s)

At the institute level, served as convener of various committees and as member in other committees, from time to time. Also at the department level, served as DPEC Chairman for M.Tech. Power Systems, Member in Ph.D. and M.S. admission committees.

a) Establishment of New Lab(s)

S. No	Lab Name	UG/PG	Branch	Year of Establishment
1	Solar Photovoltaic And Renewable Energy Laboratory-	UG	EEE	2012
2	Power Converter Research Laboratory-2009	PG/Research	Common for Power Systems and Power Electronics	2009

b) Patents filed

S. No.	Title	Patent Number	National/ International	Date of filing of Patent
1.	A Photovoltaic System and A Method of Arranging PV Arrays In PV System	Application no. 3192/CHE/2013 A Publication date: 10.01.2014	International	17.7.2013
2.	Dual axis solar tracking using auxiliary solar cells	Application no. 201641012920 A Publication date: 17.06.2016	International	13.04.2016

3	A system and a method for extracting maximum power in Thermo-electrical Generators	Application no. : 201741030634 A Publication date: 20.07.2018	International	30.8.2017

14. Details of Major R&D Projects

S.No	Title of Project	Funding Agency	Grant in lakhs of Rs	Duration		Status
				From	To	Ongoing/ Completed
1	Unified Power Flow Controller (UPFC) for enhanced utilization and control of the existing power transmission system	MHRD, Govt. of India	10.00	1.4.2003	31.3.2007	Completed
2	Development of Power electronics laboratory	National Mission for Power Electronics Technology (NaMPET), Govt. of India Phase I	33.90	1.4.2008	31.7.2009	Completed
3	Development of DC – DC converter and Bi-directional converter for SPV applications by NIT, Trichy.	National Mission for Power Electronics Technology (NaMPET), Govt. of India. (Phase II)	19.64	10/10/ 2012	10.9.2014	Completed
4	Dynamic loading of motors for open cast mines	NLC India Limited, Neyveli	63.67	May 2015	October 2016	Completed
5	Development of Modular Multilevel Converter for Enhancing Power Quality and PV Output Power under Partial Shading Conditions in Grid Connected PV System (Co-PI)	SERB, Govt. of India,	48.47	2018	2021	On-going
6	Electronification of Ground Water Control and Conveyor Systems in Mines	Ministry of Coal, Govt. of India	179.53	2018	2019	On-going

12. Details of Consultancy Projects.

Sl. No.	Title of the Project	Name of Organization	Duration		Status (Completed/ Ongoing)
			From	To	
1.	Electrification work & design of circuit systems in new go-downs in Punalkulam	TNCSC, Thanjavur	2014		completed
2.	Electrical design and drawing for Indian Naval Academy (Phase-II works)	Indian Naval Academy, Ezhimala, Kerala	2015		completed
3	Development of WBG devices based Electronic Circuits	CDAC, Vellayambalam Thiruvananthapuram	2018 and 2019		On-going

15. Number of PhDs guided : 9

Name of the PhD Scholar	**Title of PhD Thesis**	**Role(Supervisor/ Co-Supervisor)**	**Year of Award**
G.Saravana Ilango	'Investigation of internal control strategies for effective power control with UPFC in a power transmission system'	Sole supervisor	March 2009
S.Arungalai Vendan	'Magnetically impelled arc butt welding of ally steel tubes in boilers'	Main supervisor	March 2010
A.Karthikeyan	'Investigation of power control strategies for the driven induction generators'.	Sole supervisor	January 2013
Venkata Ramaraju Rudraraju	Certain control strategies for wind driven induction generators at low speeds	Main Supervisor	May 2016
M.A.Asha Rani	Power Control of DFIG under Unbalanced Grid Voltage	Sole supervisor	August 2016
S.Priyavarthini	Improved control strategies for a dvr in a grid-connected fixed speed wind generation system	Sole supervisor	Submitted on 30th January 2019
Habibullah Sait	Control strategies for inverters integrated to the utility network and fed from renewable sources	Co supervisor	December 2010
B.Indurani	Investigation of control techniques for effective utilization of solar PV systems	Co supervisor	March 2013

C.K.Aravind	Investigation of control strategies for autonomous and non-autonomous operation of wind energy conversion systems	Co supervisor	June 2015

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

Organised at NIT Trichy:

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role(Participant/ Speaker/Chairperson, Paper presenter,Any other)	Event Organized by	Venue
24.10.'88 - 16.12.'88	Real time simulation and 32 bit microprocessor software development	International	Participated	Central Power Research Institute, Bangalore and ()	Centro Elettrotechnico Sperimentale Italiano (CESI), ITALY
Nov.1995 to April 1996	Wind Energy - Generators and Controllers,	International	Participated	As part of U.K. - India R.E.C.s project on Energy	UMIST, Manchester, U.K.
December 8 & 9, 2005	Creation and Management of Infrastructure Facilities in Educational Institutions,	National	Participated	IIT Madras	IIT Madras, Chennai
January 5-7, 2006	Preparing for Challenges Ahead	National	Participated	ASCI, Hyderabad	Tiruchirappalli
July 28 & 29, 2005)	Embedded Systems-DSP	National	Participated	IISc., Bangalore	Bangalore
July 23-27, 2007	Developing Emotionally Intelligent Leadership	National	Participated	ASCI, Hyd	Hyderabad
Jan 7 - 11, 2013)	Managing Technology Value Chains for Directors and Division Heads'	National	Participated	Administrative Staff College of India, Hyd.	Hyderabad
2-4 October 2008	7 Habits of Highly Effective People (Franklin Covey)	National	Participated	NITT/ TEQIP	Munnar, Kerala

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
National Power System Conference NPSC-2018	National	14th to 16th Dec 2018	General chair	NIT Tiruchirappalli
MHRD-GIAN program on "SiC Devices Enabled Power-Converter Applications, Opportunities and Challenges	National	11th to 15th Dec 2017	Co-ordinator	NIT Tiruchirappalli
Short Term Course on 'Application of Power Electronics to Renewable Energy Systems and Micro Grids'	National	8th – 10th February 2015 under NaMPET	Co-ordinator	NIT Tiruchirappalli
Industrial Workshop on 'PLC & VSD' by SIEMENS Ltd	National	7th November 2014	Co-ordinator	NIT Tiruchirappalli
Workshop on 'Facts controllers'	National	25th – 26th July 2014	Co-ordinator	NIT Tiruchirappalli
Workshop on Power Electronics Education 2009	National	22nd – 23rd January 2009	Co-ordinator	NIT Tiruchirappalli
National workshop on power electronics	National	12th-14th November 2008	Co-ordinator	NIT Tiruchirappalli
Recent Trends in Wind Power Generation & Facts" under TEQIP Services to Community & Economy	National	28th and 29th August 2007	Co-ordinator	NIT Tiruchirappalli
Personality Development" for the Students of Our Institute under TEQIP Tribal development plan scheme	National	19th& 20th January 2007	Co-ordinator	NIT Tiruchirappalli
Power electronics for polytechnic college teachers	National	24th and 25th June 2006	Co-ordinator	NIT Tiruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Resource person, Guest lecture on 'Power Controllers for Induction Generators'	19th December 2013	NIT Warangal
Resource person, Short term course on Power Electronics in Distributed Generation	07th 09th February 2014	NIT Surathkal, National Mission on Power Electronics (NAMPET), DIT, Govt. of India
Resource person, UGC sponsored three week refresher course on 'Emerging trends in renewable energy sources and	16th June 2014	UGC-Academic staff college, JNTUH, Kukatpally, Hyderabad (16th June 2014)

management'		
Resource person, Key note speech on "Trends and Challenges in Renewable Energy – Indian Scenario",	22nd August 2015	Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Senior member IEEE	IEEE	February 2016
Member	IEEE	2009 onwards

20. Academic Foreign Visits

Country	Duration of Visit	Programme (topic)
Italy	Oct. 1988 to Dec. 1988	Real time simulation and 32 bit microprocessor software development
United Kingdom	Nov. 1995 to April 1996	Wind Energy - Generators and Controllers

21. Publications

A. Books/ book chapters authored/ co-authored

Book Title	Handbook of Distribute Generation-Electric Power Technologies, Economics and Environmental Impacts
Book/Book Chapter	Chapter-5 Sensor-Less Estimation Of Rotor Position In a Doubly Fed Induction Machine
Publisher Name	Springer International Publishing
National/International	
ISBN	978-3-319-51343-0, Edition: 1,2017
Year of Publication & Revised Edition	2017
Text Book/Reference Book	Reference book

(B) Refereed Research Journals: Given in Annexure 1.

(C) Conferences Proceedings: Given in Annexure 2.

ANNEXURE -1

Journal Papers in SCI/Scopus

S. No	Title of the Paper	Name of the Author(s)	*Journal Name*	Vol, No, Page No	Year
1	Enhanced power output from the PV with low input ripple dc-dc converter	Chandrasekar Venkatesan, **C.Nagamani** C.Manickam, M.J.Reddy, G. S Ilango	*Electric Power Components and Systems, published online on 29th January 2019*	0(0): 1-12 https://doi.org/10.1080/15325008.2018.1466214	2019
2	PV-fed DVR for simultaneous real power injection and sag/swell mitigation in a wind farm	S Priyavarthini, Aravind C. K **C. Nagamani**, G. S Ilango	*IET Power Electronics*	Vol.11, issue 14, 2385–2395	2018
3	An improved control for simultaneous sag/swell mitigation and reactive power support in a grid-connected wind farm with DVR	S. Priyavarthini, **C.Nagamani**, G.S.Ilango, M.A. Asha Rani	*Electrical Power and Energy Systems, Elsevier*	vol.101, pp. 38-49	2018
4	A Linear Extrapolation - Based MPPT Algorithm for Thermo electric Generators Under Dynamically Varying Temperature Conditions	B.Bijukaumar, A.G.K. Raam , G.S. Ilango, **C. Nagamani**	*IEEE Transactions on Energy Conversion*	Vol: 33 , Issue: 4, 1641 - 1649	2018
5	Online Fault Detection and Diagnosis in Photovoltaic Systems Using Wavelet Packets	B. Pradeep Kumar, G.S. Ilango, M. Jaya Bharatha Reddy, **C. Nagamani**	*IEEE Journal of Photovoltaics,*	vol.8, no.1, pp. 257-265	2018.
6	MPPT algorithm for Thermo electric generators based on parabolic extrapolation	B. Bijukumar, A.G.K. Raam, G.S. Ilango, **C. Nagamani**, M. J. Reddy	*IET Generation, Transmission & Distribution*	1751-8687	2018
7	Fireworks enriched P&O algorithm for GMPPT and detection of partial shading in PV systems	C Manickam, GP Raman, GR Raman, G.S. Ilango, **C. Nagamani**	*IEEE Transactions on Power Electronics*	32 (6), 4432-4443	2017
8	A control Strategy to enhance the Life Time of the Battery in a Stand-alone PV System with DC Loads	M Lakshmanan, S Rao, N Sivakumaran, G.S. Ilango, **C. Nagamani**	*IET Power Electronics*	Vol.10, issue 9, 28 July 2017, pp. 1087 – 1094	2017
9	Performance evaluation of Type-3 PLLs under wide variation in input voltage and frequency	B.Indu Rani, CK Aravind, C Manickam, J Guerrero, G.S. Ilango, **C. Nagamani**	*IEEE Journal of Emerging and Selected Topics in Power Electronics*	vol.5, no.3, pp. 4971-981	2017

10	An improved algorithm for direct computation of optimal voltage and frequency for induction motors	M.P. Sruthi, **C. Nagamani** G. S Ilango	*Engineering Science and Technology, International Journal, Elsevier*	vol. 20, , pp. 1439-1449.	2017
11	Compensation of Magnetizing Current for Enhanced Operation of DFIG Under Grid Unbalance	MAA Rani, **C Nagamani**, G. S Ilango	*IEEE Transactions on Power Electronics*	32 (7), 5214-5226	2017
12	A Control Strategy for Reliable Power Output From a Stand-alone WRIG With Battery-Supported DC Link	VRR Rudraraju, **C Nagamani,** G. S Ilango	*IEEE Transactions on Power Electronics*	32 (6), 4334-4343	2017
13	An improved rotor PLL (R-PLL) for enhanced operation of doubly fed induction machine	MAA Rani, **C Nagamani,** G.S Ilango	*IEEE Transactions on Sustainable Energy*	8 (1), 117-125	2016
14	A Natural Flux Minimization Technique for Enhanced Operation of DFIG	M. A. Asha Rani, **C. Nagamani**, G. S Ilango	*IET Electric Power Applications,*	10 (6), 467-476	2016
15	A Versatile Method for Computation of Power pulsations in DFIG under Grid Imperfections	M. A. Asha Rani, **C. Nagamani**, G. S Ilango.	*Elsevier, Renewable Energy,*	88, 143-153	2016
16	A Simple Copper Loss Minimization Control Algorithm for a Grid Connected SCIG through Indirect Flux Optimization	Venkata Rama Raju Rudraraju **C. Nagamani**, G. S Ilango	*Taylor & Francis, Electric Power Components and Systems,*	44 (3), 324-335.	2016
17	Efficient global maximum power point tracking technique for a partially shaded photovoltaic string	C Manickam, GP Raman, GR Raman, G.S. Ilango, **C. Nagamani**	*IET Power Electronics*	9 (14), 2637-2644	2016
18	A hybrid algorithm for tracking of GMPP based on P&O and PSO with reduced power oscillation in string inverters	C Manickam, GR Raman, GP Raman, G.S. Ilango, **C. Nagamani**	*IEEE Transactions on Industrial Electronics*	63 (10), 6097-6106	2016
19	A method to detect photovoltaic array faults and partial shading in PV systems	R Hariharan, M.Chakkarapani, G.S. Ilango, **C. Nagamani**	*IEEE Journal of Photovoltaics*	6 (5), 1278-1285	2016
20	Control scheme for a bidirectional converter in a self-sustaining low-voltage dc nanogrid	G.S. Ilango, D Pattabiraman, RK Govindarajan, M Rajan, **C. Nagamani**	*IEEE Transactions on Industrial Electronics*	62 (10), 6317-6326	2015
21	A control strategy for Hybrid Autonomous Power System (HAPS)with a Battery Management Scheme (BMS)"	C.K.Aravind, G.S. Ilango, **C. Nagamani,** M. Jaya Bharata Reddy	*Taylor & Francis, Electric Power Components and Systems*	*43*(8-10), 1159-1172..	2015
22	A smooth coordination control for a Hybrid Autonomous Power System (HAPS) with Battery Energy Storage (BES)	C.K.Aravind, G.S. Ilango, **C. Nagamani**	*Frontiers in Energy, Springer publication,*	9.1 31-42	2015

23	Optimal Su-Do-Ku based Interconnection Scheme for Increased Power output from PV array under Partial Shading Conditions	Srinivasa Rao.P, G.S. Ilango, **C. Nagamani**	*Frontiers in Energy, Springer publication,*	1-12.	2015
24	A Stator voltage switching strategy for efficient low speed operation of DFIG Using Fractional Rated Converters	Venkata Rama Raju Rudraraju , **C. Nagamani** , G. S Ilango	*Elsevier, Renewable Energy*	81 389-399	2015
25	A control scheme for improving the efficiency of DFIG at low wind speeds with fractional rated converters	Venkata Rama Raju Rudraraju **C.Nagamani** , G. S Ilango	*International Journal of Electrical Power & Energy Systems*	vol. 70, p.p. 61–69	2015
26	Renewable Power Generation Indian Scenario - A Review	**C. Nagamani,** G. S Ilango , M. J. B. Reddy, M. A. A. Rani, Z. V. Lakaparampil	*Taylor & Francis, Electric Power Components and Systems*	43(8-10), 1205-1213	2015
27	A Novel Self-Consistent Model Based Optimal Filter Design for the Improved Dynamic Performance of 3-phase PLLs for Phase Tracking Under Grid Imperfections Part 1: Theory and Mathematical Basis	Sambhav R Jain, Pradhyumna Ravikirthi **C. Nagamani**	*J Control AutomElectrSyst , June 2014.*	DOI 10.1007/$403 13-014-0137-3	2014
28	A Novel Self-Consistent Model Based Optimal Filter Designfor the Improved Dynamic Performance of 3-phase PLLs for PhaseTracking Under Grid Imperfections Part 2: Analysis and Verification	Sambhav R Jain, Pradhyumna Ravikirthi **C. Nagamani**	*J Control AutomElectrSyst , June 2014.*	DOI 10.1007/$403 13-014-0136-4	2014
29	An Effective Reference Generation Scheme for DFIG With Unbalanced Grid Voltage	M. A. Asha Rani, **C. Nagamani,**. G. S Ilango Karthikeyan, A.	*IEEE Transactions on Sustainable Energy July 2014*	**vol.5 no.3, pp.1010-1018**	2014
30	An energy efficient switching scheme with reduced switching transients for a Wind Driven Induction Generator	C. K. Aravind, G.S. Ilango, **C. Nagamani**	*Taylor and Francis, Electric Power Components and Systems*	42(16), 1826-1838.	2014
31	Maximum Power from PV Arrays Using Fixed Configuration Under Different Shading Conditions.	P. Srinivasa Rao, G.S. Ilango, **C. Nagamani**	*IEEE Journal of Photovoltaics*	Issue: 2, Pg. No. 679 – 686	2014
32	An active islanding detection technique for current controlled inverter	B.Indu Rani, M.Srikanth, G.S. Ilango, **C. Nagamani**	*Elsevier Renewable Energy,*	vol 51, pp. 189-196.	2013
33	Enhanced Power Generation from PV Array under Partial Shading Conditions by Shade Dispersion Using Su Do Ku	B.Indu Rani, G.S. Ilango, **C. Nagamani**	*IEEE Transactions on Sustainable Energy*	vol.4no.3,pp.594-601.	2013

	Configuration				
34	A power flow management system for photovoltaic systems feeding DC/AC loads	B.InduRani G.S. Ilango, **C. Nagamani**	*Elsevier Renewable Energy*	vol 43, pp. 267-275.	2013
35	Control Strategy for power flow management in a PV system supplying DC loads	B.Indu Rani, G.S. Ilango, **C. Nagamani**	*IEEE Transactions On Industrial Electronics,*	Vol. 60, No. 8, August 2013	2013
36	An Implicit position and speed estimation algorithm without the flux computation for the rotor side control of Doubly-Fed Induction Motor Drive	Karthikeyan, AritraBasu Ray Chaudhury, **C. Nagamani** G. S Ilango	*IET Electric Power Applications July 30 2012,*	vol.6 no.4,pp.243-252	2012
37	A Versatile Rotor Position Computation Algorithm for the Power Control of a Grid-Connected Doubly Fed Induction Generator	Karthikeyan, A**, C.Nagamani,** G. S Ilango	*IEEE Transactions on Energy Conversion,*	vol 27, no.3, pp.697-706.	2012
38	Strength Assessment Using Destructive Testing On MIAB Welded Alloy Steel Tubes And Subsequent Techno-Economical Evaluation	ArungalaiVendan, S, Manoharan, S,Buvanashekaran, G, **Nagamani, C**	*Journal of Manufacturing Processes, January 2012.*		2012
39	MIAB welding of alloy steel tubes in pressure parts: Metallurgical characterization and non destructive testing	ArungalaiVendan, S, Manoharan S. , **Nagamani C.**	*Journal of Manufacturing Processes Jan 2012,*	vol 14, Issue 1,Pages 82-88	2012
40	A three phase PLL with a dynamic feed forward frequency estimator for synchronization of grid connected converters under wide frequency variations	B. Indu Rani, C.K. Aravind, G.S. Ilango, **C. Nagamani**	*Elsevier Electrical Power and Energy Systems*	Vol 41 pp. 63–70, 2012.	2012
41	Hybrid, open-loop excitation system for a wind turbine-driven stand-alone induction generator	Karthikeyan, A, **Nagamani. C,** G**.** SaravanaIlango, Sreenivasulu.A	*Renewable Power Generation, IET,*	vol.5,no.2, pp.184-193, March 2011	2011
42	Decoupled power control of Doubly fed Induction Geneartors based on implicit position and speed estimation algorithm without the flux computation	A.Karthikeyan, **C. Nagamani**.	*Wind Engineering,*	Vol. 35, 6,2011. pp. 757-776.	2011
43	Magnetically Impelled Arc Butt Welding of alloy steel tubes in boilers – Establishment of parameter window	S.ArungalaiVendanS. Manoharan, G.Buvanashekaran, **C. Nagamani**	*Mechatronics, Jan 2011*	vol. 21, Issue 1, Pages 30-37.	2011
44	Single stage sine-wave inverter for an autonomous operation of solar photovoltaic energy conversion system	G.S. Ilango, P. SrinivasaRao, A. Karthikeyan **C. Nagamani**	*Renewable energy*	Vol.35, No.1, Jan 2010, pp.275-282	2010
45	Control algorithms for control of real and reactive power flows and power oscillation	G. S. Ilango, **C. Nagamani,** A.V.S.S.R. Sai,	*Electric Power Systems Research,*	Vol. 79, Issue 4, April 2009, pp- 595-605.	2009

	damping using UPFC	D. Aravindan			
46	velopment of a MIAB welding module and experimental analysis of rotational behavior of arc –Simulation of electromagnetic force distribution during MIAB welding of Steel pipes using Finite Element Analysis	S.Arungalai Vendan, S. Manoharan, G.Buvanashekaran, **C.Nagamani**,	*The International Journal of Advanced Manufacturing Technology*	April 2009, vol. 43,11-12, 1144-1156, DOI:10.1007/s00170-008-1793-2009	2009
47	A Non Linear Control Technique for Unified Power Flow Controller Based on Feed-Back Linearization	G.S. Ilango, **C.Nagamani**	*Electric Power Components and Systems, April 2008,*	Vol: 36, Isssue: 4, pp-432-447	2008
48	Laboratory Implementation of Feed-Back Linearization Controller for Independent Control of Real and Reactive power	G.S. Ilango, **C.Nagamani** A.V.S.S.R.Sai	*Australian Journal of Electrical and Electronics Engineering, Australia.,*	Vol 5,No 1,pp 43-53.	2008
49	Magnetic Flux Distribution modeling of Magnetically Impelled Arc Butt Welding of Steel tubes using Finite Element Analysis	S.ArungalaiVendan S. Manoharan, G.Buvanashekaran **C. Nagamani**	*Journal of Mechanical Engineering Science,*	Vol. 222,pp. 1783-1790(8).	2008
50	Power Engineering Education-A description of current academic developments in India	**C.Nagamani**, M.Venkata Kirthiga, Mini Shaji Thomas	*IEEE Power & Energy Magazine*	Sept. – Oct. 2018	2018
51	"Performance evaluation of a doubly fed twin stator induction machine drive using voltage and current space vector control schemes",	**C. Nagamani , V.S.** Ramsden, V. Ramaswamy	*IET, Electrical Power Applications*	Vol. 148, no.3, pp. 287-292 May 2001.	2001
52	Studies on the use of conventional induction motors as self excited induction generators	**C.Nagamani ,** S.S.Murthy, B.P.Singh and K.V.V. Sathyanarayana	*IEEE Transactions on Energy Conversion*	vol.3, no.4, , pp. 842-848, Dec.191988.	1988
53	"A sinusoidal pulse width modulated three phase ac to dc converter fed dc motor drive",	**C.Nagamani,** S.R.Doradla Subhankar Sanyal	*IEEE Transactions on Industry Applications,*	vol. IA - 21, no.6, pp. 1394-1408, Nov./Dec.1985.	1985

LIST OF NATIONAL JOURNALS

S. No.	Title	Authors	*Journal Details*	Year
1	DSP Based Laboratory Implementation of SVPWM for Shunt Active Filter	J. Chelladurai, G.Saravanallango, **C.Nagamani** and D. Aravindan	*National Journal of Technology*	2011
2	A New control Approach for UPFC Based on State Feedback Technique	G.Saravanallango, **C.Nagamani,** M.Lalitkumar	*The Journal of Central Power Research Institute" in March 2008,Vol. 4, No. 1, pp. 35-41.*	2008

3	Field oriented control of synchronous machines using a novel feedback system	**C. Nagamani**, V. N. Nandakumar, M. Ramamoorty	*Journal of Electronics and Telecommunications Engineers (India), vol.37, no.1.*	1991
4	A study on voltage fed high frequency inverters for induction heating	V.N. Nandakumar, **C. Nagamani**	*Journal of Institution of Engineers (India), EL, vol. 71.*	1990

ANNEXURE -II

LIST OF INTERNATIONAL CONFERENCES

Sl. No.	Title	Authors	International Conference Details	Year
1	An Investigation on the Suitability of Grid Connected Inverters for Thermoelectric Generator Systems in Industrial Application	B. Bijukumar, A. G. Kaushik Raam ,G. Saravana Ilango **C. Nagamani**	IEEE International Conference on Emerging Trends in Engineering, Science and Technology (ICETEST)PICC	2018
2	Dynamic Load Sharing in Multi-Machine Conveyor Belt Systems	Sruthi M.P. **C. Nagamani,** G. Saravana Ilango	9th IEEE PES Asia Pacific Power and Energy Conference	2017
3	On the issues in MPPT implementation for PV systems	M. Chakkarapani, R. Guru Praanesh R. Guru Raghav, G. Saravana Ilango, **C. Nagamani**	21st Century Energy Needs - Materials, Systems and Applications (ICTFCEN)	2016
4	A simple speed computation method for DFIM without measurements on rotor side	M. A. Asha Rani, **C. Nagamani,** G. Saravana Ilango	21st Century Energy Needs - Materials, Systems and Applications (ICTFCEN)	2016
5	An effective reference generation and control of DVR using DSOGI-prefilter based PLL	MS Kasyap, A Karthikeyan, BV Perumal, **C Nagamani**	Circuit, Power and Computing Technologies (ICCPCT)	2016
6	Performance analysis of MVAC and MVDC offshore wind farm distribution system using direct load flow method	B Ravi, S Raval, VRR Rudraraju, **C Nagamani**	2nd International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB)	2016
7	Direct Load Flow Algorithm To Evaluate Performance Of Offshore Wind Farm Distribution Systems	Botta Ravi, Venkata Rama Raju Rudraraju, **C. Nagamani**, G. SaravanaIlango	IEEE International Conference on Energy Systems and Application, DYPIET Pimpri, Pune India, ICESA	2015
8	C2000 Launch Pad base Generic Motor Control System	**C. Nagamani,** Nikhilesh Prasannakumar	IEEE International Conference on CAS – Texas India Educators Conference (TIIEC),	2014
9	Analysis of the performance of an MRAS based Sensorless Speed Estimation Scheme for Induction Motors Under Fluctuating Inputs	**C. Nagamani,** NikhileshPrasannakumar, Venkata Rama Raju	IEEE International Conference on Green Computing, Communication and Electrical Engineering(ICGCCEE)	2014

10	A simplified Sensorless Speed Computation Algorithm for Squirrel Cage-Induction Motor	**C. Nagamani,** NikhileshPrasannakumar, Venkata Rama Raju	IEEE International Conference on Electrical Energy (ICCPCT) (**Received best paper award**)	2014
11	Reference Current Generation Schemes for DFIG with unbalanced grid voltage	**C. Nagamani,** M. A. AshaRani, NikhileshPrasannakumar, Karthikeyan, A.	IEEE International Conference on Electrical Energy (ICEES)	2014
12	Laboratory course on Solar Photovoltaic Systems based on Low cost equipment	P.Srinivasa Rao, P.Dinesh, G.SaravanaIlango, **C.Nagamani**	IEEE International Conference on Innovation and Technology in Education (MITE) IEEE International Conference in MOOC	2013
13	Decoupled control of doubly-fed-induction generator under unbalanced grid voltage with modified reference generation	M. A. AshaRani, Karthikeyan, A,. **NagamaniC.**	IEEE International Conference on Power, Energy and Control (ICPEC)	2013
14	Optimal Sizing of Reactive Power Support in a Stand-AloneHybrid Excited Induction Generator System	M. VivekSundar, P. Sai AravindaKarthik, **C. Nagamani** A. Karthikeyan	IEEE International Conference on Emerging Electronics (Jointly organized by IIT Bombay &IISc Bangalore)	2012
15	A Versatile open loop rotor position computation algorithm or the wound rotor induction machine	A. Karthikeyan and **C. Nagamani**	11thIEEE International Conference on Environment and Electrical Engineering EEEIC, Italy	2012
16	A simple and effective control scheme for improved power quality in a standalone Wound Rotor Induction Generator feeding non-linear and unbalanced loads.	Girish G., **Nagamani C**, Karthikeyan, A.	International Conference, on Environment and Electrical Engineering (EEEIC)	2012
17	Enhanced decoupled power control of wind turbine driven DFIG using DVR under unbalanced grid voltage.	VenkataRamaRaju R. KarthikeyanA, **Nagamani C**	International Conference on Advances in Power Conversion and Energy Technologies (APCET),	2012
18	A three phase reference current generator for power electronic converters under distorted utility conditions	B.Indu Rani, G.SaravanaIlango, **C.Nagamani**	International Conference on Proceedings of Computing, Electronics and Electrical Technologies (ICCEET)	2012
19	Comparative Study of Power Control of DFIG Using PI Control and Feed Back Linearization Control	Nagasekhara Reddy Naguru,.Karthikeyan , V.Sravan Kumar **C.Nagamani,**	IEEE International Conference	2012
20	Control strategy for a single phase bidirectional converter based UPS system using FPGA	B.Indu Rani, G.S. Ilango, **C.Nagamani,** P.S Rao	International conference on Proceedings of Power, Signals, Controls and Computation (EPSCICON)	2012

21	A stand-alone Wound Rotor Induction Generator with enhanced power quality based on Feedback Linearization Control	Girish G., **Nagamani C,** Karthikeyan, A.	International Conference on Advances in Engineering, Science and Management (ICAESM)	2012
22	Power control of grid connected Doubly Fed Induction Generator using Adaptive Back Stepping approach	A.Karthikeyan, Sujan Kumar Kummara, **C. Nagamani,** G.Saravanallango	International Conference on Proc 10th IEEE Environment and Electrical Engineering EEEIC, Rome	2011
23	Feedback Linearization control based power control of grid connected DFIG with grid synchronization	Karthikeyan, A. Naguru, N.R. **Nagamani C.** G. Saravanallango	th International Conference on Environment and Electrical Engineering (EEEIC)	2011
24	An Implicit Sensorless Position/Speed Estimator for the speed control of a Doubly Fed Induction Motor	Karthikeyan, A**. Nagamani C** AritraBasu Ray Chaudhury	IEEE international conference on PES Innovative Smart Grid Technologies – India,	2011
25	Laboratory implementation of Feedback Linearization Control Based Power Control of Grid Connected DFIG'	Karthikeyan, A. Nagasekhara Reddy Naguru. **Nagamani, C**	International conference on Proc IEEE INDICON Engineering Sustainable Solutions – India, Hyderabad, [**Received Best paper award**]	2011
26	A constant frequency Hybrid Exciter for an autonomous wind energy conversion system	A.Karthikeyan, **C.Nagamani**, G.Saravanallango M.JayaBharata Reddy	International Conference on Proc 9th IEEE–EEEIC ,Prague	2010
27	Development of a 2-Dimensional Finite Element Model to Study the Magnetic Flux Distribution for Magnetically Impelled Arc Butt Welding	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran **C. Nagamani**	International Conference on Proc Advances in Manufacturing Technology (ICAMT) for young Engineers, organized by Department of Atomic Energy and Indian National Academy of Engineering, at IIT Chennai	2008
28	Analysis of Boundaries of Controllable Power Flow with PFC Considering Line Loss	A.Karthikeyan, **C.Nagamani** S.Srividhya	International Conference on Proc IEEE Conference on Industrial Electronics and Applications ICIEA-2008 Singapore	2008
29	Power oscillation damping using UPFC in automatic power flow control mode with constant power reference	G.Saravanailango, **C.Nagamani** D.Aravindan	International conference on Proc power and energy (PES) Baltimore, USA	2008
30	Independent control of real and reactive power flows using UPFC based on Adaptive Back Stepping	G. Saravanallango, **C. Nagamani** D. Aravindan	ernational conference on Proc IEEE TENCON, Hyderabad.	2008
31	Line Current Shaping using Shunt Active Filter without Sensing Input Voltage and Load Current	P.Srinivasarao G.Saravanallango **C. Nagamani**	ernational conference on Proc IEEE .TENCON, Hyderabad	2008
32	Investigation of Various PWM Techniques for Shunt Active Filter	J.Chelladurai, G.Saravanallango, **C.Nagamani**	International conference on Proc Electrical Engineering WASET Bangkok, Thailand	2008

		S.Senthilkumar		
33	Magnetically Impelled Arc Butt Welding - Design Particulars and Parameter Investigation	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran, **C.Nagamani**	International conference on Proc All India Manufacturing Technology, Design and Research Conference" organized by IIT Chennai.	2008
34	Techno Economical Evaluation Of Automatic Tube Welding Systems For Boiler Application – Introduction to MIAB Welding Process Employed For Tube Welding	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran **C. Nagamani**	International Conference on Digital Factory, organized jointly by CIT Coimbatore and Business innovation Research Centre (BIRC), USA., [**Received Best Paper Award**]	2008
35	An interdisciplinary approach to investigate parameters of MIAB welding process on carbon steel	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran **C. Nagamani**	International Conference on Presented at 62nd Annual Technical Meeting. Organized by Indian Institute of Metals, Noida, New Delhi	2008
36	Experimentation, FEM and statistical analysis for parameter optimization in MIAB welding process	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran **C. Nagamani**	International Conference on Presented at the International Symposium for Research Scholars on metallurgy, Materials Science and Engineering" organized by IIT Chennai. [**Received Best Paper Award and AWS India International Endowment Award**].	2008
37	Design and Development of MIAB welding module - investigation and validation of electromagnetic force using Finite Element Analysis	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran **C. Nagamani**	International Conference on Proc Sixth Manufacturing Research (ICMR), Brunel University, London,	2008
38	Design and Development of Magnetically Impelled Arc Butt Welding System	S. ArungalaiVendan, S. Manoharan, G. Buvanashekaran **C. Nagamani**	International Conference on Proc Emerging Challenges in Design and Manufacturing Technologies" organized by CVRD (DRDO) in association with Sathyabama university, **(Received Best Paper Award).**	2007
39	Investigations on Boundaries of Controllable Power Flow with Unified Power Flow Controller	S.Srividhya, **C.Nagamani,** A.Karthikeyan	IEEE International Conference on 'Power Electronics, Drives and Energy Systems', PEDES I.I.T., Delhi	2006
40	Performance of UPFC on System Behavior Under Fault Conditions	KumaraDeepak, G.SaravanaIlango, **C.Nagamani** K. Shanti Swarup	IEEE International conference on Proc proceedings INDICON, IIT Madras	2005
41	Unified Power Flow Controller with Dynamic Decoupling Compensator for Independent Active and Reactive Power Control	KumaraDeepak, G.SaravanaIlango and **C.Nagamani**	International conference on Proc CERA (Computer application in Electrical Engineering Recent Advances); IIT Roorkee	2005
42	Unified Power Flow Controller With Dynamic	D. Kumaradeepak, **C. Nagamani**,	International conference on Computer application in	2005

	Decoupling for Independent Active and Reactive Power Control	G. Saravanallango	Electrical Engineering Recent Advances (CERA), IIT Roorkee	
43	Terminal Voltage Regulation of Self Excited Induction Generator using an SVC	V.Vijay Kumar, **C.Nagamani** M.V. Hanumantha Rao	International Conference on Proc Emerging Technologies (ICET)	2004
44	Performance Analysis Of Unified Power Flow Controller	KR Shanker, K. Shanti Swarup, **C.Nagamani**	International Conference on Proc Power Systems ICPS-, Khatmandu.	2004
45	Current Space Vector Control for Improved Performance of A Doubly Fed T win Stator Induction Machine Drive	**C.Nagamani**, V.S. Ramsden, V. Ramaswamy, J.G. Zhu	International Conference on Proc IEEE Conference on Power System Technology POWERCON, Perth.	2000
46	Comparison of Closed-loop Speed Control Schemes for a Doubly Fed T win Stator Induction Motor Drive	**C.Nagamani**, V.S. Ramsden, V. Ramaswamy, J.G. Zhu	International Conference on Proc Power Electronics and Motion Control IPEMC, Beijing.	2000
47	Investigation of Doubly Fed T win Stator Induction Motor as a Variable Speed Drive	**C.Nagamani**, V.S. Ramsden, V. Ramaswamy J.G. Zhu	International Conference on Proc Power Electronics Drives and Energy Systems for Industrial Growth, PEDES, Perth.	1998
48	Twin stator induction motor as a variable speed drive	**C.Nagamani** V.S. Ramsden J.G. Zhu V. Ramaswamy	ernational Conference on Proc Electrical Machines ICEM, Istanbul.	1998
49	An active electro-dynamic braking circuit for wind turbines	**C.Nagamani** Nicholas Jenkins L.M. Craig	International Conference on Proc Annual Conference of British Wind Energy Association, UK.	1996
50	A study on unsymmetrically fired phase controlled rectifier as a static VAR generator	V.N. Nandakumar, **C.Nagamani,** M. Ramamoorty	International Conference on Proc, IEEE Region TENCON, New Delhi.	1991
51	Some studies on design and voltage regulation of capacitor self excited induction generators	**SS Murthy, CS Jha, BP Singh, CR Vidyashankar, C Nagamani,** A K Tandon	International Conference on Proc, 2nd Electrical Machines - Design and Applications, IEE, London.	1985

LIST OF NATIONAL CONFERENCES

Sl. No.	Title	Authors	International Conference Details	Year
1	A Buck-Boost Converter with DC Link Voltage Boost for Minimizing Torque Ripple in Brushless DC Motor	Rajesh, K., Sunkara Durga Prasad **Nagamani, C**., Saravana Ilango, G	20th National Power Systems Conference (NPSC), NIT Trichy, Dec. 14-16, 2018	2018
2	Identification of Faults in PV Array using Maximal Overlap	Sreelakshmy J, B. Pradeep Kumar, G. Saravana Ilango,	20th National Power Systems Conference (NPSC), NIT Trichy, Dec. 14-16, 2018	2018

	Discrete Wavelet Transform	**C. Nagamani**		
3	Degradation detection of PV arrays using extremum-seeking control based MPPT	R Hariharan, M Chakkarapani, GS Ilango, **C Nagamani**	19th National Power Systems Conference (NPSC), IIT Bhubaneswar, Dec. 19-21, 2016	2016
4	Computation of rotor position of DFIM using Rotor side Phase Locked Loop	**C Nagamani,** GS Ilango, MAA Rani, A Prasanthini	19th National Power Systems Conference (NPSC), IIT Bhubaneswar, Dec. 19-21, 2016	2016
5	An implicit rotor speed computation algorithm for squirrel cage induction motor	**C Nagamani**, MAA Rani, GS Ilango, NP Kumar	19th National Power Systems Conference (NPSC), IIT Bhubaneswar, Dec. 19-21, 2016	2016