<u>Bio Data</u>

1. Name	:	Dr. ELANGO M K
2. Designation	:	Professor and Head
3. Institution	:	K.S.Rangasamy College of Technology, Tiruchengode.
4. Father's Name	:	Karuppannan M
5. Date of Birth & Age	:	21.05.1976 & 42
6. Address for communication	:	Professor and Head Department of EEE K.S.Rangasamy College of Technology, Tiruchengode-637 215. Namakkal Dist.
7. Residential Address	:	2/214 P, KSR Kalvi Nagar, Varapalayam, Thokkavadi Post, Tiruchengode 637 215.
8. Permanent Address	:	37 A/2 PerumapalayamPudur, Komarapalayam 638183, Namakkal (Dt), Tamil Nadu
9. Email	:	hodeee@ksrct.ac.in elango@ksrct.ac.in erodeelangophd@gmail.com,
10. Mobile	:	99524 93666
11. Land line	:	04288 274741



12. Fax

13. Academic Profile

Degree	Institution	University	Specialization	% of	Class	Year of
				Marks /	obtained	completion
Ph.D	Anna	Anna	Power System		-	
	University	University		-		2012
	Chennai	Chennai				
M.E	Faculty of	Annamalai	Power System	8.98	First class	
	Engg&	University		(CGPA)	with	2004
	Technology			First Rank	Distinction	
B.E.	Adhiyamaan	Madras	Electrical and		First Class	
	College of	University	Electronics	60.9%		1997
	Engineering		Engineering			

14. Experience:

Teaching:UG -22 years & 4 MonthsPG - 16 years & 4 MonthsResearch:12 years

15. Post-Doctoral Experience: 07 years

16.Detailed Experience:

S.No	Institution	Post held	Pe	Period	
			From	То	Total
1	K.S.Rangasamy College of Technology, Tiruchengode	Professor and Head	05.07.2018	Till Date	1.3
2	K.S.Rangasamy College of Technology, Tiruchengode	Professor	01.10.2012	04.07.2018	5.9
3	K.S.Rangasamy College of Technology, Tiruchengode	Associate Professor	01.07.2008	30.09.2012	4.2
4	K.S.Rangasamy College of Technology, Tiruchengode	Assistant Professor	01.07.2004	30.06.2008	4.0
5	K.S.Rangasamy College of Technology, Tiruchengode	Lecturer	23.06.1997	30.06.2004	5.11

Journal I	Journal Publications		Conferences	No. of	f
			ended	Workshop/Sem	inar/STTP
National	International	National International		Attended/Lecture	Organized
				delivered	_
-	15	12	16	49	14

17. Journal Publications/Conferences/Workshops

Publications List

(a) International Journal

- 1. M. K. Elango, M. Rajkumar, "Enhancement of Power Quality Using UPQC", *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, Vol 8, Issue 1, 2019, pp 42-28.
- **2.** M. K. Elango, M. Rajkumar, "A Comparsion of Power Quality Improvement based on Control of UPQC", *International Research Journal of Engineering and Techonology*, Vol 6, Issue 3, 2019, pp 1859-1863.
- **3.** M. K. Elango, S. Sangeetha, "Design and Development of Grey Wolf Optimization Algorithm to Solve Economic Dispatch Problem", *International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering Vol 07, 2018, No, 3, pp 1379-1387.*
- 4. M. K. Elango, A. Jagadeesan, K. Mohana Sundaram, "Power Quality Disturbance Classification Using Wavelet Packet Transform and Back Propagation Algorithm", *Journal of Computational and Theoritical Nanoscience Vol 13, 2016, pp 7099-7109.*
- **5.** M. K. Elango, S. Manoj Arun, "A Time Frequency Analysis and Classification of Real Time Power Quality Disturbances via Signal Processing Techniques and Back-Propagation Algorithm", *Asian Journal of Research in Social Sciences and Humanities, Vol 6, No 11, 2016, pp 550 564.*
- **6. M. K. Elango**, T. Tamilarasi, "A Review on FACTS Devices in Power System for Stability Analysis", *International Journal of Trend in Research and Development, Vol 3, No 2, 2016, pp 38-42.*
- 7. M.K. Elango, K. Jayakumar and S. Thangavel, "Back Propagation Algorithm for Bearing Fault Detection of Induction Motor Drive Using Wavelet Pocket Decomposition", *International Journal of Applied Engineering Research, Vol 10, No 10, 2015, pp 26191-26208*

- 8. M.K. Elango and Manoj Arun S, "Effectiveness of Wavelet families for Power Quality Event Quantization", ARPN Journal of Engineering and Applied Sciences, Vol 10, No. 8, May 2015, pp3766-3771
- **9.** M.K. Elango and Laxmi lata, "Voltage Sag Mitigation in Utility Distribution System Using STATCOM with Hysteresis Current Controller", *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol 4, No 3, March 2015, pp 1261-1268, 2015*
- **10. M.K. Elango** and C. Vengatesh, "Improvement of Power Quality Using a Hybrid Interline UPQC", *International Journal of Engineering and Technology (IJET), Vol 6, No.2 Apr-May* 2014, pp 992-1000
- **11. M.K. Elango** and A. Sindhuja, "Power Quality Improvement using STATCOM in Wind Farms with Constant Speed Induction Generator under Unbalanced Grid Faults", *International Journal of Advances in Electrical and Electronics Engineering*", Vol 3, No. 1 pp 18-24, 2014
- **12. M.K.Elango**, and V Govindaraju, "Cascade H-Bridge converter based Statcom for Reactive power compensation", *International Journal of Archives Des Sciences, Vol 66, No.1, January 2013.*
- **13. M.K.Elango**, and Dr. A. Nirmal Kumar, "Application of Hilbert Huang Transform with Locally Weighted Projection Regression Method for Power Quality Problems", *International Review of Electrical Engineering*, Vol 5, Issue 5, pp- 2405-2412, Sep-Oct 2010.
- 14. M.K.Elango and Dr. A. Nirmal Kumar, "Application of Neural Networks for Power Quality Disturbance classification using Hilbert Huang Transform", *European Journal of Scientific Research*, Vol 47, Issue 3, pp- 442-454, 2010.
- **15. M.K.Elango**, and Dr. A. Nirmal Kumar, "Intelligent Contextual Algorithm for Harmonics Classification", *International journal of Engineering Science and Technology*, Vol 2(6), Issue 3, pp-2113-2129, 2010

(b) International Conference

- **1. M. K. Elango,** S. Sangeetha, "PSO-ANFIS Technique in Solving Economic Dispatch Problem", *International Conference on Recent Trends in Science and Technology (ICRTST 2018), GKM College of Engineering and Technology, 20th April 2018.*
- 2. M. K. Elango, K. Loganathan, "Classification of Power Quality Disturbances Using Stockwell Transform and Back Propagation Algorithm", *International Conference on Emerging Technological Trends [ICETT]*, 2016.
- **3.** M. K. Elango, T. Tamilarasi, "Improvement of Power Quality Using a Hybrid UPQC with Distributed Generator", *International Conference on Circuit, Power and Computing Technologies (ICCPCT), 2016.*
- **4. M. K. Elango,** T. Tamilarasi, "Location of Inter Line Power Flow Controller Using Genetic Algorithm for System Stability Analysis", *ICEECE 2016, 2nd International Conference on Electrical, Electronics & Computer Engineering.*
- 5. M. K. Elango, and T. Tamilarasi, "Analysis of Impact on Rotor Angle Stability of DFIG Wind Turbines Employing STATCOM", *ICACCS*, 2016, Paper ID: 182.
- 6. M.K. Elango, and S. Manoj Arun. S, "Effectiveness of Wavelet Families for Power Quality Even Quantization", *IEEE sponsored* 2nd International Conference on Innovations in Information Embedded and Communication Systems ICIIECS 15, pp. 1043-1048, 2015.
- **7. M.K. Elango**, and Laxmilata, "Hysteresis Current Controller For STATCOM Under Voltage Sag", 2nd International Conference on Advanced Computing & Communication Systems, Sri Eshwar College of Engineering, Coimbatire, 2015.
- 8. M.K. Elango, and C. Vengatesh, "Improvement of Power Quality Using a Hybrid UPQC in Renewable Energy", *International Conference on Renewable Energy and Sustainable Energy* [ICRESE 13], pp.166-169, 2013 IEEE Explorer
- 9. **M.K.Elango**, and K. Poovaraju, "Power Quality Improvement using Grid Interfacing Inverter in Distributed Generation", *International Conference on Engineering and Technology*, 18-19, April2013in Sri Venkateswara college of Engineering and Technology, India. Pp. 57-61

- M.K.Elango, and V Govindaraju, "Modular Multilevel Cascade Converter based Statcom for Reactive power compensation", 2013 International Conference on Circuits, power and Computing Technologies (ICCPCT-2013), 21st& 22nd, March 2013 inNoorul Islam University, India. DOI:10.1109/ICCPCT.2013.6528912
- M.K.Elango, and B. Prabhakar, "Optimal Unit Commitment problem solved with Particle Swarm Optimizer", *International Conference on Emerging Trends in Communication* (*ICETC12*), 8th& 9th March 2012 in Maria College of Engineering and Technology, *Attor*, India.
- **12. M.K.Elango,** Dr. A. Nirmal Kumar, and Dr. K. Duraiswamy, "Identification of Power Quality Disturbances using Artificial Neural Networks", 4th International Conference on Power and Energy Systems (ICPS-2011), 22nd to 24th December 2011, in Indian Institute of Technology Madras, Chennai. DOI: 1109/ICPES2011.6156676
- **13. M.K.Elango,** and V. Sabarivelu, "Harmonic Mitigation in 3phase 4 wire Distributed System", 5th International Conference on Intelligent Systems and Control, 7th& 8th January 2011 in Karpagam College of Engineering and Louisiana State University (LSU), Lousiana, USA. PP-161.
- 14. M.K.Elango, and V. Sabarivelu, "Elimination of Neutral Current Four Wire Distribution System", International Conference on Sunrise Technologies I-COST 2011, 13th to 15th January 2011 in Shri Shivaji vidya prasarak sanstha's Bapusaheb Shivajiro Deore College of Engineering & polytechnic, Dhule. PP-33
- **15. M.K.Elango**, and Dr. A. Nirmal Kumar, "Introduction of Fuzzy Logic in Discrete Wavelet Transform in Harmonic Analysis for Power Quality Improvement", *International Conference on Innovative Computing Technologies ICICT-2010*, 12th & 13th Feb 2010 in M.Kumarasamy College of Engineering, Karur. PP-28
- 16. M.K.Elango, and Dr. A. Nirmal Kumar, "Application of Neuro Contextual Harmonic Suppression For Power Quality Improvement using BPA", *International Conference on Intelligent Science and Technology IIST-2009*, 18th & 19th June 2009, in Sun College of Engineering and Technology, Nagercoil. PP-428-434

(c) National Conference

- 1. M. K. Elango, S. Sangeetha, "Solving the Economic Dispatch Problem by Using GWO Algorithm", *Emerging Scenario in Power Engineering and Electrical Drives (eSpeed'2018), Department of EEE, K.S. Rangasamy College of Technology, April 2018.*
- M.K.Elango, and Dr. A. Nirmal Kumar, "Hilbert Huang Transform with Back Propagation Algorithm for Power Quality Disturbance Classification", *Recent Advances in Power Electronics and Industrial Drives (PEID-2012)*, 25th 2012, Department of Electrical and Electronics Engineering, INFO Institute of Engineering, Coimbatore.
- **3. M.K.Elango** and V. Sabarivelu, "Reduction of Neutral Current Harmonics in 3 phase 4 wire Distribution system using series Active Filter", 5th National Conference on Power Electronics and Drives, 9th march 2011, Alagappa Chettiar college of Engineering and Technology, Karaikudi, India, PP 249 254.
- **4. M.K.Elango**, and Dr. A. Nirmal Kumar and Dr. K. Duraiswamy "Design and Development of Intelligent System for Power Quality Disturbance Classification", *Micro Grids in Indian Power System*, June 6 to 7 2011, The institution of engineers(pune) local centre, PP29.
- M.K.Elango and P.Geetha andDr. A. Nirmal Kumar, "Application of Neural Network and Discrete Wavelet Transform in Harmonic Analysis for Power Quality Improvement", 5th National Conference on Cutting Edge Technologies in Power Conversion and Industrial Drives, March 12 - 13 2010, Bannari Amman Institute of Technology, Sathiyamangalm, PP 47.
- M.K.Elango and P.Geetha andDr. A. Nirmal Kumar, "Introduction of Fuzzy Logic in Discrete Wavelet Transform in Harmonic Analysis for Power Quality Improvement" 5th National Conference on Cutting Edge Technologies in Power Conversion and Industrial Drives, March 12 - 13 2010, Bannari Amman Institute of Technology, Sathiyamangalm, PP 53.
- **7. M.K.Elango and** Dr. A. Nirmal Kumar, "Application of Wavelet Transform in Harmonic analysis for power Quality improvement", *National Conference on Emerging Trends in Power Systems*, 10th Oct 2009, Sasurie College of Engineering, Tirupur.
- 8. M.K.Elango and Dr. A. Nirmal Kumar, "PWM GTO Current source Inverter Converter system with sinusoidal input-output", *National Conference on Recent Trends in Electrical, Electronics, Instrumentation and Communication Engineering (RETEEICOM- 06),* 17th April 2006, Mahendra Engineering College, Namakkal.

- **9. M.K.Elango** and Dr. A. Nirmal Kumar, "Performance Improvement of Induation Generator Using exciting capacitor", *Application of Electrical & Electronics Engineering National Conference*, 25th Feb 2005, Vivekanandha College of Engineering for Women, Tiruchengode.
- M.K.Elango, "Variable Voltage & Variable frequency speed drive system of an Induction Motor", *Recent Trends in Electrical Engineering (RTEE – 05)*, 29th& 30th August 2005, K.S. Rangasamy College of Technology, Tiruchengode.
- **11. M.K.Elango**, "Automation of Coil Winding Machine", *KSR TECH FETE 2003*,16th Feb 2003,K.S. Rangasamy College of Technology, Tiruchengode.
- **12. M.K.Elango**, "Performance of 1phase Induction Generator", *KSR TECH FETE* 2003,16th Feb 2003,K.S. Rangasamy College of Technology, Tiruchengode.

Consultancy Activities Power Quality Condition monitoring at KSR Spinning Mills Tiruchengode.

S.	Name of the Workshop / FDP	Date	Organization
No			
1	NBA Accreditation	22.04.2019 to	NITTTR, Kolkata
		26.04.2019	
2	J Gate - An Electronic Gateway for Research	10.07.2019	Central Library KSRCE
3.	Intellectual Property Rights	24.01.19 to	Teaching Learning Centre,
		25.01.19	Coimbatore Institute of
			Technology, Coimbatore.
4.	How to write a Successful Project Proposal to	21 st July 2018	Library & Readers Club, K.S.
	Funding Agencies		Rangasamy College of
			Technology
5.	Deliberations on AICTE Model Curriculum-	16 th July 2018	Teaching Learning Centre,
	2018		Coimbatore Institute of
			Technology, Coimbatore.
6.	Solar Energy Conversion and Storage	11 th to 15 th June	Centre for Continuing
		2018	Education, IISc, Bengaluru
7.	One Week ISTE STTP for Coordinators on	1 st May to 5 th	IIT Kharagpur
	Electric Power System	May 2017	
8.	Mi-Power Level I Training	14^{th} Nov to 18^{th}	PRDC Bangalore.
		Nov 2016	
9.	Two- Week ISTE STTP on Technical	8 th Oct to 5 th Dec	IIT Bombay
	Communication	2015	
10.	Two- Week ISTE Short Term Training	Jan 5 2015 – Jan	IIT Karagpur
	Programme (STTP) on Pedagogy for Effective	30 2015	

WORKSHOP / FDP – ATTENDED

	use of ICT in Engineering Education		
11.	Control Systems	Dec 5- Dec 15	IIT Bombay
12.	Integrated Circuits And Micro Controllers	8 th & 9 th Dec 2005	K.S. Rangasamy College of Technology, Tiruchengode
13.	Power System Management And Economics	26 TH & 28 TH Oct 2006	PSG College of Technology, Coimbatore
14.	Power Electronics Application In Power System	6 th & 7 th March 2009	VIT University
15.	Electronic Circuit Design and Simulation	10 th April 2004	Annamalai University
16.	Technology Information Facilitation	12 th Dec2007	Bannari Amman Institute of Technology, Sathy.
17.	Building Competitiveness in Higher Education	22 nd Jan 2010	Confideration of Indian Industry, Southern Region.
18.	Renewable Energy – Energy of the Future	19 th Aug 2005	Mahendra Engineering College, Namakkal
19.	Emerging Trends in Engineering Education – Indian Perspective	29 th & 30 th Oct 2010	ISTE &K.S. Rangasamy College of Technology, Tiruchengode.
20.	Recent Advances in Testing and Design of Electrical Insulation	17 th to 23 rd December 2007	IIT Kanpur.
21.	Re- Engineer Teaching Skills	7 th & 8 th Sep 2001	K.S. Rangasamy College of Technology, Tiruchengode.
22.	Effective Teaching; Cooperative Learning; Effective Faculty Development, Outcomes Based Education	June 29 to July 3 2009	Indo-US Collaboration for Engineering Education.
23.	Mission 10X	Feb 1 st to 5 th Feb 2011	K.S. Rangasamy College of Technology, Tiruchengode.
24.	High Impact Teaching Skills	1 st & 2 nd Feb 2011	K.S. Rangasamy College of Technology, Tiruchengode.
25.	MiPower	28 th to 30 th July 2008	K.S. Rangasamy College of Technology, Tiruchengode.
26.	Power Quality Problems and Its Solutions	16 th and 17 th December 2011	Jansons Institute of Technology, Coimbatore.
27.	Smart Grid for Distributed Energy Resources	18 th &19 th November 2011	Department of EEE, KSRCT
28.	Modelling and control of Renewable Energy Power Plant for Efficient and Quality Power Generation	19 th to 21 st August 2010	Department of EEE, KSRCT
29.	Nano-Dielectric Materials in Electrical Insulation Application	16 th & 17 th November 2012	Department of EEE, KSRCT
30.	All India Seminar on Micro Grids in Indian Power System	June 6 th and 7 th 2011	The Institute of Engineers (India)Pune Local Centre

Guest Lecture:

S. No.	Name of the Program	Guest Lecture Title	Date	Organized by
1	Anna University approved FDP on Power System Analysis	Assumptions in short circuit analysis – Symmetrical short circuit analysis	15.05.2019	Department of EEE, Sona College of Technology
2	Guest Lecture	Circuit Analysis	30 th April 2019	Sri Shanmugha College of Engineering and Technology.
3.	Anna University approved Seven Days FDTP on Power System Analysis	Need for System planning and operational studies	04 th June 2018	Department of EEE, KSRCE
4.	Guest Lecture	Basic Electrical Electronics and Instrumentation Engineering	5 th May 2018	Sri Shanmugha College of Engineering and Technology.
5.	Anna University approved Seven Days FDP on Electric Energy Generation Utilization and Conservation	Energy Conservation	20 th Dec 2016	Department of EEE, KSRCT
6.	Guest Lecture	Electrical Engineering and Instrumentation	17 th Sep 2016	Excel Engineering College
7.	AICTE Sponsored two weeks FDP on Nanotechnology for sustainability energy conversion and storage	Electrical Energy Efficiency Improvement using Nano Materials	16 th May 2013	Department of EEE, KSRCT
8.	FDP on Electrical Machines I Period: 3 rd to 9 th December 2012	Testing and Efficiency of DC Machines	4 th Dec 2012	Dept of EEE and Center for Faculty Development, Anna University Chennai. Vivekanandha College of Engineering for Women
9.	Department Association Valedictory function	Power Quality	10 th April 2010	Dept of EEE, PGP college of Engineering and Technology
10	Peer Committee Audit the Institution as per UGC	Peer Committee Audit the Institution as per UGC	16/02/2019	Sethu Institute of Technology
11.	Guest Lecture	Technological Progress and	01/02/2019 & 02/02/2019	Department of EEE, KSRCT

		Challenges in Smart Grid Integration with Distributed Generation		
12.	AICTE Sponsored Guest Lecture	Recent Trends in Power System	04/12/2013	Vidya Vikaas College of Engineering and Technology
13.	Guest Lecture	Energy Efficiency Improvement	06.09.2013	M. Kumarasamy College of Engineering
14.	Project Review	Project Contest	19.03.2012	M.P. Nachimuthu Jaganathan Engineering College
15	Key Note Speaker	GRID2K10	23.09.2010& 24.09.2010	Department of EEE, KSRCE
16	Guest Lecture	Energy Auditing & Conservation	04.09.2019	NDL, Dept of Library, KSRCT
17.	Jury Paper Presentation	Technical Symposium	26.02.2010	SSM College of Engineering
18	Jury Paper Presentation	CURIO -2K9	18.09.2009 & 19.09.2009	Velalar College of Engineering and Technology
19	External Judge	SYMPOMKCE 09	10.09.2009	M. Kumarasamy College of Engineering

100% Result Achievements:

S. No	Name of the Subject	Sem / Year	Exam Date
1.	Flexible AC Transmission System	II/ I	April / May 2006
2.	Flexible AC Transmission System	III/ II	Nov/ Dec 2006
3.	Design of Electrical Apparatus	V / III	Nov / Dec 2009
4.	Power Quality Engineering	III /II	Nov / Dec 2010
5.	Flexible AC Transmission System	II/ I	April / May 2010
6.	Electrical Energy Generation Utilization and	VIII /IV	April / May 2010
	Conservation		
7.	High Voltage DC Transmission	I/I (PED)	Nov/Dec 2012
8.	High Voltage DC Transmission	I/I (PSE)	Nov/Dec 2012
9.	High Voltage DC Transmission	I/I (PED)	Nov/Dec 2011-2012
10.	High Voltage DC Transmission	I/I (PSE)	Nov/Dec 2011-2012
11.	Basics of Electrical Engineering	III/II B.Tech	Nov/Dec 2015
		IT	
12.	Microcontroller and DSP Based System Design	II/I ME PED	Apr/May 2015
13.	Advanced Power System Protection	I/I ME. PSE	Nov/Dec 2016
14	Power System Operation and Control	VII/IV	Nov/Dec 2016
15	Total Quality Management	VI/III	Apr/May 2018
16	Flexible AC Transmission System	I/II	Apr/May 2018
17	Energy Conservation and Auditing	Open Elect	Nov/Dec 2018

18. Reviewer Details: -No.of projects Guided UG: 17 PG: 15 Ph.D: 07 (Pursuing) No of Journal Reviewer: 04

19. No. of sponsored projects Handled: 01

S.No	Title of Project	Students Name	Date	Amount	Sanctioned
				Sanction	by
1.	Real time monitoring	1. N Poornalakshmi	20.05.2013	10,000	TamilNadu
	of voltage and current	2. V.	2012 Passed		State council
	in electrical drives	Prabhuvenkatraman	out students		for science
	using LABVIEW	3. R. Sangeetha			and
		4. S. Velmani			technology

20. Professional recognition, awards, fellowships received:

- Best Techno Faculty Award Finalist 2016
- Best Techno Faculty Award Finalist 2015
- Best Teacher Award 2011
- University First Rank holder at Annamalai University PG Degree
- Received Cash award for producing 100% results.

21. Responsibilities Handled:

- NBA Coordinator Tier1
- Programme Coordinator BE Electrical and Electronics Engineering
- Aakash Project Coordinator IIT Bombay
- Programme Coordinator Blended MOOCs IIT Bombay
- Coordinator Higher Education Cell Institute Level
- Indiscipline Enquiry Committee Member Institute Level
- Module Coordinator Basic Electrical Engineering
- Class Advisor
- Report preparation Member
- ISO Coordinator
- Chief Examiner EEE Board Central Valuation
- Question paper setter Various Autonomous and Universities

22. Subject Handled:

- Microprocessors and Microcontroller
- DC Machines and Transformers
- AC machines
- Power System Operation and Control

- Electrical Circuits
- Basic Electrical Engineering
- Power System Protection and Switch Gear
- High Voltage Direct Current Transmission
- Flexible AC Transmission System
- Microcontroller and DSP based system Design

23. Professional Society Membership Details

S. No.	Professional Society	Duration	Membership ID
1.	Indian Society for Technical Education (ISTE)	Life Member	LM41982
2.	International Society for Research and Development (ISRED)	Life Member	F3140901166
3.	Institute of Research Engineers and Doctors (IRED)	Fellow Member Valid till 02 nd August 2021	SM10100059804
4.	IEEE	Life Member	95348354

Dr. M. K. Elango