Curriculum Vitae

Dr. Sundareswaran K was born in Pallassana, Kerala, India, in 1966. He had recieved his B.Tech. (Hons.) and M.Tech. (Hons.) degrees from the University of Calicut, Kerala, India, in 1988 and 1991 respectively. He received his PhD from Bharathidasan University, Tiruchirappalli, India, in 2001. From 2005 to 2006, he was a Professor with the Department of Electrical Engineering, National Institute of Technology, Calicut, India. He is currently working as a Professor (HAG) with the Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India. He has recently published a book titled "Elementary Concepts of Power Electronic Drives" with CRC press in March 2019. His research interests include power electronics, renewable energy systems, and biologically inspired optimization techniques.

1. Name: Dr. Sundareswaran K.

2. Designation: Professor (HAG)

3. Office Address: Department of Electrical and Electronics Engineering,

   National Institute of Technology, Tiruchirappalli,

   Tamil Nadu 620 015

4. Telephone (Direct) (Optional):

   Telephone : 04312503255   Extn (Optional):

   Mobile (Optional):

5. Email (Primary): kse@nitt.edu   Email (Secondary) :

6. Field(s) of Specialization: Power Electronics, Renewable energy systems, and Biologically Inspired Optimization Techniques.

7. Employment Profile

Job Title	Employer	From	To
Professor (HAG)	NIT, Trichy	29-04-2019	Till date
Professor	NIT, Trichy	23-04-2007	28-04-2019
Assistant Professor	NIT, Trichy	31-03-2006	22-04-2007

Professor (on lien)	NIT, Calicut	28-09-2005	30-03-2006
Lecturer (SS)	NIT, Trichy	20-02-1997	23-06-1998
Lecturer	NIT, Trichy	08-11-1990	19-02-1997

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D. Degree	Bharathidasan University	2001	-	Electrical and Electronics Engineering
Master's Degree	University Of Calicut	1991	First Class (Honours)	Power Electronics
Bachelor's Degree	University Of Calicut	1988	First Class (Honours)	Electrical Engineering
Pre-degree	University Of Calicut	1983		
SSLC	Kerala State Board	1981		

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Chairman, DPEC	M.Tech, Power Electronics, EEE	2021	2022
Chairman, DPEC	M.Tech, Power Electronics, EEE	2020	2021
Chairman, DPEC	M.Tech, Power Electronics, EEE	2019	2020
H.O.D	Electrical and Electronics Engineering	Jan 2015	Jan 2018
Chairman, DPEC	M.Tech, Power Electronics, EEE	2014	2015
Chairman, DPEC	M.Tech, Power Electronics, EEE	2012	2013
Chairman, DPEC	M.Tech, Power Electronics, EEE	2010	2011
Chairman, DPEC	M.Tech, Power Electronics, EEE	2009	2010
Member, SENATE	NITT	2007	Till date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
External Examiner	NIT, Calicut,	01-02-2019	

Academic Expert	NIT, Puducherry	02-04-2016	
Selection committee member for the recruitment of faculty positions	NIT, Puducherry	30-08-2014	
Examiner	Anna University	04-07-2014	
Resource person	Sastra University	06-06-2008	
Resource person	Government Engineering College, Thrissur	25-02-2008	
Academic Expert	Coimbatore Institute of Technology, Coimbatore	27-01-2008	
Interaction and experimentation	NUS, Singapore	16-06-2007	13-07-2007
Doctoral committee member	Anna University		

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2021	Top 2 percent scientist in world in 2021	Stanford University, USA
2020	Top 2 percent scientist in world in 2020	Stanford University, USA
2018	Certificate of Appreciation in recognition for significant contribution to the growth of the Institution through Citations(Web of Science)	National Institute of Technology, Tiruchirappalli
2007	Best Teacher Award	National Institute of Technology, Tiruchirappalli

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
   (ii) Courses taught at Postgraduate and Undergraduate levels

S.No.	Subject	Course	Year
1	Power Electronic drives	PG	January 2022
2	Power Electronics	UG	July 2021
3	Power Electronics Lab	UG	July 2021

4	Power Electronics	UG	January 2021
5	Power Converters	PG	July 2020
6	Power Electronics	UG	January 2020
7	Power Converters	PG	July 2019
8	DC Machines and Transformers Lab	UG	July 2019
9	Introduction to Electrical & Electronics Engg.	UG	2018
10	DC Machines and Transformers Lab	UG	2018
11	Power Electronic drives	PG	2018
12	Fuzzy systems and Genetic Algorithm	UG	

(iii)Projects guided at Postgraduate level

Number of Students Guided	
Title of the Dissertation	Year
DDR routing interface in high frequency PCB design	2022
Firefly assisted Kalman filter for the SOC estimation of Lithium ion battery.	2022
Battery state of charge estimation using deep learning techniques.	2021
Maximum power point tracking using particle swarm optimization (PSO).	2021
Real time identification of feedback controller for boost converter using optimization algorithms.	2020
Design and Control of PV Fed 12 W LED Light System	2018
MPPT in PV Systems Through Fruit Fly Algorithm	2018
Investigations on the Effect of Current Ripple in DC-DC Converters Employed for MPPT in PV System	2017
Modified ACO based MPPT in PV systems under Partially Shaded Conditions	2017
MPPT of PV Systems Under Partially Shaded Conditions – Investigations on PSO Based Approach.	2017
PV fed LED Lighting System: Artificial Immune System Based PI Controller Design	2017
PV fed LED Lighting System: HS based PI Controller Design	2017
MPPT in PV Systems Employing Firefly Algorithm	2016
Gravitational Search Algorithm (GSA) Assisted Sliding Mode Control Scheme for Maximum Power Point Tracking in PV Systems	2015
Power Management in Dual Input DC-DC Converter System	2015
PV fed Sine Wave Inverter with Particle Swarm Optimization	2015

based Maximum Power Point Tracking	
PSO Assisted Sliding Mode Control Scheme for Maximum Power Point Tracking in PV Systems.	2015
Output Voltage Regulation and Power Management of a Dual Input Buck-Boost Converter Using P&O Algorithm	2014
A Particle swarm Optimization Based Control Scheme for Output Voltage Regulation in a Dual Input Buck-Boost DC-DC Converter.	2014
Investigation on the Effect of PSO Based MPPT in a Partially Shaded PV system Connected to Grid.	2014
Firefly Based Harmonic Elimination in a Multilevel Inverter.	2014
Real Time Inverter Harmonic Elimination using Particle Swarm Optimization technique	2014
Induction Motor Starting Torque Profile Enhancement Using Firefly Algorithm Based Switching.	2013
Induction Motor Starting Torque Profile Enhancement Using Clonal selection based Switching	2012
Design and Implementation of Induction Motor Soft Starting Using Small Signal Model.	2012
Design, Development and Analysis of Single Phase Hybrid Passive Filter for D.C. Power Supplies Employing Particle Swarm Optimization.	2012
Optimal Placement of FACTS Devices on IEEE 30 Bus System Using GA	2012
Design, Development and Analysis of Passive LC Filter for D.C. Power Supplies Employing Queen BEE Assisted GA.	2011
Artificial Immune System Based Soft Starting Scheme for Induction Motor Drives	2011
Design, and Implementation of Artificial Immune System Tuned PID Controller for Induction Motor Starting.	2011
Design, Optimization and Implementation of Feedback Controllers for Buck-Boost Converter using Genetic Algorithm	2011

(iv) Other contribution(s)

14. Details of Major R&D Projects

S.No.	Title of Project	Funding Agency	Duration		Status
			From	To	Ongoing/ Completed
1	A 10 kW pilot Plant Based on Single Axis Solar Tracking System Using Second lever Principle	DST	08/2021	-	Ongoing
2	Design and Optimization of Feedback	C.P.R.I	01-01-	30-	Completed

			2015	06-2017	
	Controller for Boost type DC-DC Converters using Artificial Immune System				
3	Design and Development of Multi Input 10 KVA Online UPS (Solar+Grid+Battery)	B.H.E.L.	16-09-2014	04-03-2015	Completed
4	Development of Solar Powered LED Street Lights for Cconversion of Conventional Sodium Vapour Lights under Corporate Sustainable Development Plan 2013-2014	B.H.E.L.	09-04-2013	30-11-2014	Completed
5	Modelling of Environmental Emission and Design and Development of Fuzzy Controlled Fume Extraction System for Electric Discharge Machining Process	Ministry of Environment & Forests	04-11-2009	03-11-2012	Completed
6	Application of Genetic Algorithm for High Performance Power Converters	M.H.R.D	12-05-2003	11-11-2006	Completed
7	Development of Neuro-fuzzy controller for high performance voltage controlled induction motor drive	M.H.R.D.	09-04-2002	08-04-2004	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor / Co-Supervisor)	Year of Award
Satheesh Krishnan G.	Development, implementation and analysis of modified swarm intelligent techniques towards maximum power point tracking in photovoltaic systems.	Supervisor	2021
Sathiyanarayanan J.	Development and Analysis of Enhanced Schemes in Traction Network of Railway Workshop	Co- Supervisor	2018
Sunila M.S.	Optimized Sliding Mode Control Of Uncertain Nonlinear Systems	Co- Supervisor	2018
C.H. Ram Jethmalani	Investigations on Transmission Loss Estimation in Power System Scheduling Problems.	Co Supervisor	2017
Vignesh Kumar V.	Design and optimization of few population-based optimization algorithms combined with perturb and observe	Supervisor	2017

	method towards MPPT in PV systems.		
Kevin A. K.	Design, development and testing of solar photovoltaic power conversion systems for industrial applications.	Supervisor	2016
Sankar Peddapati	Design, implementation, and analysis of a few optimization algorithms for maximum power point tracking in pv systems under partial shaded conditions.	Supervisor	2015
P. Srinivasa Rao Nayak	Design, Implementation and Analysis of a Few Recently Developed Optimization Algorithms for Induction Motor Soft Starting.	Sole Supervisor	2014
Devi V.	Application of Biologically Inspired Optimization Algorithms Towards Feedback Controller Design for Buck and Boost Type DC-DC Converters.	Sole Supervisor	2012
V.T. Sreedevi	Performance Enhancement of Certain Power Electronic Systems Using Optimization Algorithms Based on a Colony of Honey Bees.	Sole Supervisor	2009
Bos Mathew Jos	Development and Analysis of Novel Starting Methods for A.C. Voltage controller Fed Induction Motors.	Sole Supervisor	2009
N. Rajasekar	Development and Analysis of Energy Efficient Speed Control Techniques for Capacitor-Run Induction Motor Drives.	Sole Supervisor	2007

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

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

RECENT ADVANCES IN E-MOBILITY AND CHARGING	National	19-07-2021 to 23-07-2021	Co-Ordinator	EEE Department, NIT, Trichy
Recent developments in Electrical Power Engineering	National	29-08-2016 to 03-09-2016	Co-Ordinator	EEE Department, NIT, Trichy
Implementation of Firefly Algorithm in SCILAB and µ-Controller	National	10-10-2014 to 11-10-2014	Co-Ordinator	EEE Department, NIT, Trichy
Particle Swarm Optimization, Applications and Implementation on a Microcontroller	National	08-03-2014	Co-Ordinator	EEE Department, NIT, Trichy
Academic Enhancements in Electrical Engineering	National	08-11-2013 to 10-11-2013	Co-Ordinator	EEE Department, NIT, Trichy
Fuzzy Systems and Applications	National	13-07-2013	Co-Ordinator	EEE Department, NIT, Trichy
Application of Biologically Inspired Algorithms for Power System and Power Electronics Engineering	National	28-07-2012	Co-Ordinator	EEE Department, NIT, Trichy

18. Invited Talks delivered

Topic	Date	Inviting Organization

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	2008	International conference
Singapore (NUS)	16/06/2007 to 13/07/2007	Interaction and experimentation

21. Publications

 (A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year
G Satheesh Krishnan, K Sundareswaran, Sishaj P Simon	Increased Energy Harvesting from shaded PV power plant using a fast converging Fruit fly Algorithm	Journal of The Institution of Engineers (India): Series B		Pg 1-11	2022
R Muhammad Ehsan, Sishaj P Simon, K Sundareswaran, Kevin Ark Kumar, T Sriharsha	Effect of soiling on photovoltaic modules and its mitigation using hydrophobic nanocoatings	IEEE Journal of Photovoltaics	11	742-749	2021
T Manikandan, P Nayak, Srinivasa Rao, K Sundareswaran	A new technique for power transmission and full duplex communication employing SN IPT system	INTERNATIONAL JOURNAL OF CIRCUIT THEORY AND APPLICATIONS			2021
Sishaj P Simon, Kevin Ark Kumar, Kinattingal Sundareswaran, P Srinivasa Rao Nayak, Narayana Prasad Padhy	Impact and economic assessment on solar PV mirroring system–A feasibility report	Energy Conversion and Management	203	112222	2020

Satheesh Krishnan G, Sundareswaran Kinattingal, Sishaj P Simon, Panugothu Srinivasa Rao Nayak	MPPT in PV systems using ant colony optimisation with dwindling population	IET Renewable Power Generation	14	1105-1112	2020
Satheesh Krishnan Gopalakrishnan, Sundareswaran Kinattingal, Sishaj Pulikottil Simon, Kevin Ark Kumar	Enhanced energy harvesting from shaded PV systems using an improved particle swarm optimisation	IET Renewable Power Generation	14	1471-1480	2020
Mohammed Mansoor Odungat, Sishaj Pulikottil Simon, Kevin Ark Kumar, Kinattingal Sundareswaran, Panugothu Srinivasarao Nayak, Narayana Prasad Padhy	Estimation of system efficiency and utilisation factor of a mirror integrated solar PV system	IET Renewable Power Generation	14	1677-1687	2020
J Sathiyanarayanan, Sishaj P Simon, K Sundareswaran	Energy audit in a railway traction substation (a real case study)	Journal of The Institution of Engineers (India): Series B	101	411-416	2020
Satheesh Krishnan Gopalakrishnan, Sundareswaran Kinattingal, Sishaj Pulikottil Simon	MPPT in PV Systems Using PSO Appended with Centripetal Instinct Attribute	Electric Power Components and Systems	48	881-891	2020
Venkateswarlu Gundu, Sishaj Pulikottil Simon, Kinattingal Sundareswaran, Srinivasa Rao Nayak Panugothu	Gated recurrent unit based demand response for preventing voltage collapse in a distribution system	Turkish Journal of Electrical Engineering & Computer Sciences	28	3319-3334	2020
Rohit Rajan	User centric	IET Renewable	13	834-846	2019

Eapen, Sishaj Pulikottil Simon, Kinattingal Sundareswaran, Panugothu Srinivasarao Nayak	economic demand response management in a secondary distribution system in India	Power Generation			
Senthil Kumar Murugan, Sishaj Pulikottil Simon, Kinattingal Sundareswaran, Srinivasa Rao Nayak Panugothu, Narayana Prasad Padhy	Hardware-in-the loop testing of power transformer differential relay using RTDS and DSP	Electric Power Components and Systems	47	1090-1100	2019
MS Sunila, V Sankaranarayanan, K Sundereswaran	Optimised sliding mode control for MIMO uncertain non-linear system with mismatched disturbances	Electronics Letters	54	290-291	2018
P Srinivasa Rao Nayak, Kishan Dharavath, Radhakrushna Dey, Kinattingal Sundareswaran, Sishaj P Simon	Performance Evaluation of Square Coupled Coils at Different Misalignments for Electric Vehicle Battery Charging.	VEHITS		290-297	2018
Ram Jethmalani C Hemparuva, Sishaj P Simon, Sundareswaran Kinattingal, Narayana Prasad Padhy	Geographic information system and weather based dynamic line rating for generation scheduling	Engineering Science and Technology, an International Journal	21	564-573	2018
CH Ram Jethmalani, Sishaj P Simon, K	Real coded genetic algorithm based	Alexandria engineering journal	57	3535-3547	2018

Sundareswaran, P Srinivasa Rao Nayak, Narayana Prasad Padhy	transmission system loss estimation in dynamic economic dispatch problem				
Ram Jethmalani CH, SP Simon, K Sundareswaran, P Srinivasa Rao Nayak, Narayana Prasad Padhy	Auxiliary hybrid PSO-BPNN-based transmission system loss estimation in generation scheduling	IEEE Transactions on Industrial Informatics			2017
Anilkumar Thalamttathu Thankappan, Sishaj Pulikottil Simon, Panugothu Srinivasa Rao Nayak, Kinattingal Sundareswaran, Narayana Prasad Padhy	Pico-hydel hybrid power generation system with an open well energy storage	IET Generation, Transmission & Distribution	11	740-749	2017
MS Sunila, V Sankaranarayanan, K Sundareswaran	Comparative analysis of optimized output regulation of a SISO nonlinear system using different sliding manifolds	International Journal of Automation and Computing	14	450-462	2017
CH Ram Jethmalani, Poornima Dumpa, Sishaj P Simon, K Sundareswaran	Transmission loss calculation using a and b loss coefficients in dynamic economic dispatch problem	International Journal of Emerging Electric Power Systems	17	205-216	2016
Senthil Kumar Murugan, Sishaj P Simon,	An empirical Fourier transform-based	IEEE Transactions on Power Delivery	32	209-218	2016

Kinattingal Sundareswaran, P Srinivasa Rao Nayak, Narayana Prasad Padhy	power transformer differential protection				
RAM JETHMALANI CHINASAMY HEMPARUVA, Sishaj Pulikottil Simon, Sundareswaran Kinattingal, Srinivasa Rao Nayak Panugothu	Gravitational search algorithm-based dynamic economic dispatch by estimating transmission system losses using A-loss coefficients	Turkish Journal of Electrical Engineering & Computer Sciences	24	3769-3781	2016
Senthil Kumar Murugan, Sishaj Pulikottil Simon, Panugothu Srinivasa Rao Nayak, Kinattingal Sundareswaran, Narayana Prasad Padhy	Power transformer protection using chirplet transform	IET Generation, Transmission & Distribution	10	2520-2530	2016
Kinattingal Sundareswaran, Kevin Ark Kumar, Payyalore Raman Venkateswaran, Sankaran Palani	Solar photovoltaic fed dual input LED lighting system with constant illumination control	Frontiers in Energy	10	473 - 478	2016
K Sundareswaran, KA Kumar, PR Venkateswaran	Dual input autonomous solar photovoltaic powered motor drive system for industrial applications	Journal of Renewable and Sustainable Energy	7 (1)	13128	2015
K Sundareswaran, S Palani	Application of a combined particle swarm	Renewable Energy	75	308-317	2015

	optimization and perturb and observe method for MPPT in PV systems under partial shading conditions				
Kinattingal Sundareswaran, Vethanayagam Vigneshkumar, Sankaran Palani	Development of a hybrid genetic algorithm/perturb and observe algorithm for maximum power point tracking in photovoltaic systems under non-uniform insolation	IET Renewable Power Generation	9	757-765	2015
Kinattingal Sundareswaran, Vethanayagam Vigneshkumar, Peddapati Sankar, Sishaj P Simon, P Srinivasa Rao Nayak, Sankaran Palani	Development of an improved P&O algorithm assisted through a colony of foraging ants for MPPT in PV system	IEEE transactions on industrial informatics	12	187-200	2015
K. Sundareswaran, P.S. R. Nayak	Particle Swarm Optimization Based Feedback Controller Design for Induction Motor Soft-starting	Australian Journal of electrical & Electronics Engineering	Vol.11, Issue 1,	55-63	2014
K. Sundareswaran, P.Srinivasa Rao Nayak	Design of feedback Controller for Soft-Starting Induction Motor Drive system using Genetic Algorithm	Int. Journal of Industrial Electronics and Drives	Vol.1,No.2,	111-120	2014

K. Sundareswaran, P.Srinivasa Rao Nayak, A. Chandra Sekar	Development of an Improved Particle Swarm Optimization (PSO) and its Application to Induction Motor Soft-starting	International review of Automatic Control	Vol.5,No.2,	156-165	2014
Kinattingal Sundareswaran, Sankar Peddapati, Sankaran Palani	MPPT of PV Systems Under Partial Shaded Conditions Through a Colony of Flashing Fireflies	IEEE/Energy Conversion	Vol. 29, No. 2,	463-472	2014
Kinattingal Sundareswaran, Sankar Peddapati, S. Palani	Application of Random Search Method for Maximum Power point Tracking in Partially Shaded Photovoltaic Systems	IET Renewable Power Generation	Vol.8,Issue 6,	670-678	2014
Kinattingal Sundareswaran, Vadakke Devi, Selvakumar Sankar, Panugothu Srinivasa Rao Nayak, Sankar Peddapati	Feedback controller design for a Boost Converter Through Evolutionary Algorithms	IET Power Electronics	Vol. 7,Issue 4	(903-913)	2014
Kevin Ark Kumar, K. Sundareswaran, P.R. Venkateswaran	Performance study on a grid connected 20 kW_p solar photovoltaic installation in an industry in Tiruchirappalli (India)	Energy for Sustainable Devolpment	23(2014),	294-304	2014
Rameth Sheeba, Madhavan Jayaraju,	Performance Enhancement of Power System	Electric Power Components and	Vol. 42, Issue 10,	1016-1028	2014

Kinattingal Sundareswaran	Stabilizer Through Colony of Foraging Ants	Systems			
K. Sundareswaran, P. Sankar	Development of two Novel Power Electronic Circuits For Dynamic Braking of Motors	Electric Power Components and Systems	Vol.41, No. 12,	1188-1204	2013
K. Sundareswaran, P.Srinivasa	Ant Colony based Feedback Controller Design for Soft-Starter Fed Induction	Elsevier/Applied Soft Computing	Vol.12, Iss. 5,	(1566	2012
K. Sundareswaran, V. Devi	Feedback controller Design for a boost converter through a Colony of Foraging Ants	Electric Power Components and Systems	Vol. 40, No.6,	672-690	2012
K. Sundareswaran, S. Sankar	Buck-Boost Converter Controller Design Using Queen-Bee Assisted GA	International Journal of Power Electronics	Vol.4,Issue 5,	447-462	2012
K. Sundareswaran, V. Devi, Shrivastava, Nitin Anand	Design and development of a Feedback Controller for boost converter Using Artificial immune system	Electric Power Components and Systems	Vol.39,Issue 10,	1007-1018	2011
K. Sundareswaran, V. Devi	Application of a Modified Particle Swarm Optimization Technique for Output	Electric Power Components and	Vol.39, No.3,	288-	2011

K. Sundareswaran, V. Devi, S.K. Nadeem, V.T. Sreedevi, S. Palani	Buck-Boost Converter feedback Controller design via Evolutionary Search	International Journal of Electronics	vol.97, issue. 1,	1317-1327	2010
K. Sundareswaran, N. Rajasekar, S. Palani	Peformance evaluation of energy effecient speed control techniques for capacitor-run single-phase induction motor driving domestic fans	Electric Power Components and Systems .	Vol.39, No.4,	331-345	2010
Kinattingal Sundareswaran, V.T. Sreedevi	Boost converter controller design using Queen-Bee-assisted GA	IEEE/Industrial Electronics	Vol 56, No. 3,	778-783	2009
K. Sundareswaran, V.T. Sreedevi	Inverter Harmonic Elimination Using Honey Bee Intelligence	Australian Journal of electrical & Electronics Engineering	Vol. 6,Issue 2,	153-164	2009
K. Sundareswaran, V.T. Sreedevi	Design and Development of Feed-Back Controller for a Boost Converter Using a Colony of Foraging Bees	Electric Power Components and Systems	Vol. 37,Issue 5,	465-477	2009
K. Sundareswaran, V. Devi, Shashikant Kaul, N. Rajasekar, S. Palani	Optimal Feedback Controller Design for a Buck Converter using Gaussian Type Pheromone Profile	European Transactions on Electric Power	20,	979-993	2009

Kinattingal Sundareswaran, Krishna Jayant, T.N. Shanavas	Inverter harmonic Elimination through a colony of continuously exploring ants	IEEE Transactions on Industrial Electronics	Vol.54, No. 5,	pp. 2558-2565	2007
K Sundareswaran	Line current harmonic elimination and voltage control of PWM AC/DC converter using a hybrid genetic algorithm	Electric Power Components and Systems	35	119-133	2007
Kinattingal Sundareswaran, N Rajasekar, VT Sreedevi	Performance comparison of capacitor-run induction motors supplied from AC voltage regulator and SPWM AC chopper	IEEE transactions on industrial electronics	53	990-993	2006
K Sundareswaran, Bos Mathew Jos	Analysis, Simulation and Performance Comparison of AC Voltage Controller Fed Three Wire and Four Wire Connected Induction Motor Drives	2005 Annual IEEE India Conference-Indicon		133-136	2005
K Sundareswaran, BM Jos	Development and analysis of novel soft-starter/energy-saver topology for delta-connected	IEE Proceedings-Electric Power Applications	152	922-932	2005

	induction motors				
K Sundareswaran, A Pavan Kumar	Performance enhancement of PWM ac chopper using random search method	JOURNAL-INSTITUTION OF ENGINEERS INDIA PART EL ELECTRICAL ENGINEERING DIVISION	85	228	2005
K Sundareswaran, PS Manujith	Analysis and performance evaluation of triac-voltage controlled capacitor run induction motor	Electric Power Components and Systems	32	913-925	2004
K Sundareswaran, S Razia Begum	Genetic tuning of a power system stabilizer	European Transactions on Electrical Power	14	151-160	2004
K Sundareswaran, A Pavan Kumar	Voltage harmonic elimination in PWM AC chopper using genetic algorithm	IEE Proceedings-Electric Power Applications	151	26-31	2004
K Sundareswaran	A simplified model for speed control of ac voltage controller fed induction motor drives	IETE journal of research	49	247-250	2003
K Sundareswaran, D Laxminarayana	An evolutionary approach for speed controller design of AC voltage controller fed-induction motor drive	Electric Power Components and Systems	30	1001-1014	2002
K Sundareswaran, Mullangi Chandra	Evolutionary approach for line	IEEE Transactions on	49	716-719	2002

	current harmonic reduction in AC/DC converters	Industrial Electronics			
K Sundareswaran, PS Manujith	Analysis and Simulation of Phase Controlled Capacitor Run Induction Motors	JOURNAL-INSTITUTION OF ENGINEERS INDIA PART EL ELECTRICAL ENGINEERING DIVISION		110-112	2002
K Sundareswaran	Steady state analysis and simulation of PWM inverter fed capacitor run induction motor	IETE journal of research	51	441-445	2001
K Sundareswaran, PS Manujith	Steady state analysis and simulation of AC chopper fed capacitor-run induction motors	IETE journal of research	47	311-314	2001
K Sundareswaran	An improved energy-saving scheme for capacitor-run induction motor	IEEE Transactions on Industrial Electronics	48	238-240	2001
K Sundareswaran, Merugu Vasu	Genetic tuning of PI controller for speed control of DC motor drive	Proceedings of IEEE International Conference on Industrial Technology 2000 (IEEE Cat. No. 00TH8482)	1	521-525	2000
K Sundareswaran, S Palani	Performance enhancement of AC voltage	Proceedings of IEEE	1	735-740	2000

	controller-fed induction motor drive using neural networks	International Conference on Industrial Technology 2000 (IEEE Cat. No. 00TH8482)			
K Sundareswaran, S Palani	Fuzzy logic approach for energy efficient voltage controlled induction motor drive	Proceedings of the IEEE 1999 International Conference on Power Electronics and Drive Systems. PEDS'99 (Cat. No. 99TH8475)	1	552-554	1999
K Sundareswaran, S Palani	Design of high gain controller for part-load performance optimization of variable voltage induction motor drive	Proceedings of the IEEE 1999 International Conference on Power Electronics and Drive Systems. PEDS'99 (Cat. No. 99TH8475)	1	273-275	1999
K Sundareswaran, S Palani	Optimal efficiency control of induction motor drive using neural networks	ADVANCES IN MODELLING AND ANALYSIS- B-	41	9 to 22	1999
K Sundareswaran, S Palani	Artificial neural network based voltage controller for energy efficient induction motor drive	Proceedings of IEEE TENCON'98. IEEE Region 10 International Conference on Global Connectivity in	2	410-413	1998

Author(s)	Title	Theme			
		Energy, Computer, Communication and Control (Cat. No. 98CH36229)			
K Sundareswaran, S Palani	A novel technique for sensor-less speed estimation of variable voltage induction motor drive via neural networks	ADVANCES IN MODELLING AND ANALYSIS- B-	40	19II-30II	1998

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Page numbers	Conference Theme	Venue	Year
A Annamalai, K Sundareswaran, SP Simon, Kevin Ark Kumar	Experimental Evaluation of Electric Driven Butter Extraction System	1- 6	2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT)		2019
Kinattingal Sundareswaran, Arnab Bhattacharjee	A novel stochastic optimization algorithm inspired from the biology of Plant Reproduction	1-6	2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT)		2019
A Annamalai, Kinattingal Sundareswaran, SP Simon, Kevin Ark Kumar	A Design Proposal for Butter Extraction System	1-4	2018 IEEE International Conference on Power Electronics, Drives and Energy		2018

			Systems (PEDES)		
Kinattingal Sundareswaran, Kevin Ark Kumar, PR Venkateswaran, Baiju Naina, Sarang Sharan, Sunit Gopal	Fuzzy based controller for solar photovoltaic powered butter extraction system	1-5	2016 Biennial International Conference on Power and Energy Systems: Towards Sustainable Energy (PESTSE)		2016
Sishaj P Simon, M Senthil Kumar, K Sundareswaran, C Christopher Columbus	Performance analysis of empirical Fourier transform based power transformer differential protection	1-5	2016 IEEE International Conference on the Science of Electrical Engineering (ICSEE)		2016
K Sundareswaran, V Vignesh Kumar, Sishaj P Simon, P Srinivasa Rao Nayak	Cascaded simulated annealing/perturb and observe method for MPPT in PV systems	1-5	2016 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)		2016
K Sundareswaran, V Vigneshkumar, Sishaj P Simon, P Srinivasa Rao Nayak	Gravitational search algorithm combined with P&O method for MPPT in PV systems	1-5	2016 IEEE Annual India Conference (INDICON)		2016
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Kinattingal Sundareswaran, Kevin Ark Kumar, PR Venkateswaran, Dasaratha Sahu	A real-time implementation of solar photovoltaic powered LED interior lighting systems	263-267	2015 IEEE Power, Communication and Information Technology Conference (PCITC)		2015
Tousif Khan N , K. Sundareswaran	Voltage regulation enhancement in a Buck type DC-DC converter using queen bee evolution based Genetic Algorithm	1 - 6	(IICPE)	Kurukshetra, India	8-10 Dec. 2014
K. Sundareswaran , Kiran Kuruvinashetti , P.S. Nayak	Application of Particle Swarm Optimization for output voltage regulation of dual input buck-boost converter		2014 International Conference on Green Computing Communication and Electrical Engineering	6-8 March 2014	6-8 March 2014
K. Sundareswaran, B. Hariprasad, Kiran. S. Kuruvinashetti, P. Sankar, P. Srinivasrao Nayak	Output voltage control of dual input buck-boost converter		2013 IEEE Innovative Smart Grid Technologies-Asia	10-13 Nov. 2013	10-13 Nov. 2013

K. Sundareswaran, Kuruvinashetti Kiran Varsha Padhee, P Sankar , P. Srinivasa Rao Nayak Abhilash Mahadevan	Buck-Boost converter controller design using bacterial foraging		2013 IEEE International Conference on Control Applications	28-30 Aug. 2013	28-30 Aug. 2013
K. Sundareswaran , P. Sankar, P. Srinivasa Rao Nayak	Analysis on the failure of dynamic braking of capacitor-run induction motor supplied from half-controlled converter	1-5	2012 IEEE International Conference on Power Electronics, Drives and Energy Systems	16-19 Dec. 2012	16-19 Dec. 2012
K. Sundareswaran , S. Sankar , P. Srinivasa Rao Nayak	Feedback controller design for a buck-boost converter through evolutionary algorithms	1 - 7	2012 IEEE International Conference on Power Electronics, Drives and Energy Systems	16-19 Dec. 2012	16-19 Dec. 2012
K. Sundareswaran , P. Srinivasarao Nayak , Ch Durga Venkatesh , Hariharan B.	Optimal placement of FACTS devices using probabilistic Particle Swarm Optimization	53 - 58	2011 IEEE PES Innovative Smart Grid Technologies – India	1-3 Dec. 2011	1-3 Dec. 2011
R. Sheeba , M. Jayaraju , Muhammed Mansoor.O , T.N. Shanavas , K. Sundareswaran	Identification of optimal location of SVC through artificial intelligence techniques	149 - 154	ISGT2011-India	Kollam, Kerala, India	1-3 Dec. 2011

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K. Sundareswaran , P. Bharathram , M. Siddharth , G Vaishnavi , Nitin Anand Shrivastava , Harish Sarma	Voltage profile enhancement through optimal placement of FACTS devices using Queen-Bee-Assisted GA	1-5	International Conference on Power Systems	27-29 Dec. 2009	27-29 Dec. 2009
K. Sundareswaran , V.T. Sreedevi	Development of novel optimization procedure based on honey bee foraging behavior	1220 - 1225	IEEE International Conference on Systems, Man and Cybernetics	12-15 Oct. 2008	12-15 Oct. 2008
K. Sundareswaran , H.N. Shyam , S. Palani , Joby James	Induction motor Parameter Estimation using Hybrid Genetic Algorithm		IEEE Region 10 colloquium and the Third international Conference on Industrial and Information Systems	8-10 Dec. 2008	8-10 Dec. 2008
K. Sundareswaran , K.V.S. Manoj Kumar Vadali , Shaik Khaled Nadeem , H.N. Shyam	Robust Controller Identification for a Boost Type DC-DC Converter Using Genetic Algorithm	1 - 5	IEEE Region 10 colloquium and the Third international Conference on Industrial and Information Systems	8-10 Dec. 2008	8-10 Dec. 2008

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K. Sundareswaran , V.T. Sreedevi	D.C. motor speed controller design through a colony of honey bees	1 - 6	IEEE Region 10 Conference	19-21 Nov. 2008	19-21 Nov. 2008
K Sundareswaran, Bos Mathew Jos	Analysis, Simulation and Performance Comparison of AC Voltage Controller Fed Three Wire and Four Wire Connected Induction Motor Drives	133-136	Annual IEEE India Conference-Indicon		2005
K Sundareswaran, Merugu Vasu	Genetic tuning of PI controller for speed control of DC motor drive	521-525	Proceedings of IEEE International Conference on Industrial Technology 2000 (IEEE Cat. No. 00TH8482)		2000
K Sundareswaran, S Palani	Performance enhancement of AC voltage controller-fed induction motor drive using neural networks	735-740	Proceedings of IEEE International Conference on Industrial Technology 2000 (IEEE Cat. No. 00TH8482)		2000

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K Sundareswaran, S Palani	Fuzzy logic approach for energy efficient voltage controlled induction motor drive	552-554	Proceedings of the IEEE 1999 International Conference on Power Electronics and Drive Systems. PEDS'99 (Cat. No. 99TH8475)		1999
K Sundareswaran, S Palani	Design of high gain controller for part-load performance optimization of variable voltage induction motor drive	273-275	Proceedings of the IEEE 1999 International Conference on Power Electronics and Drive Systems. PEDS'99 (Cat. No. 99TH8475)		1999

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Kinattingal Sundareswaran	Elementary Concepts of Power Electronic Drives	CRC Press, Publication date 2019/3/18	2019	9780367731397
Kinattingal Sundareswaran	A Leaner's Guide to Fuzzy Logic Systems	CRC Press, Publication date 2019/3/18	2019	9780367254438