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

Curriculum Vitae

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

1. Name: Dr. N. Sivakumaran

2. Designation: Professor

3. Office Address: Department of Instrumentation and Control Engineering,
   National Institute of Technology,
   Tiruchirappalli 620015, India

4. Telephone (Direct) (Optional):

   Telephone : 91-431-2503362
   Extn (Optional):

   Mobile (Optional): 9944101705

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

6. Field(s) of Specialization:
   1.Process Control
   2.Biomedical Instrumentation
   3.Physiological Control System
   4.Intelligent Systems

7. Employment Profile

Institution	Position	From	To
National Institute of Technology, Trichy	Professor	March 2018	Present
National Institute of Technology, Trichy	Assoc. Professor	Nov.2011	March 2018
National Institute of Technology, Trichy	Assistant Professor	Nov.2008	Nov.2011
National Institute of Technology, Trichy	Lecturer	March 2006	Nov.2008

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

Degree	Specialization	University
Ph.D.	Process Control and Instrumentation	National Institute of Technology, Trichy
M.E	Process Control and Instrumentation	Annamalai University
B.E	Electronics and Instrumentation	Bharathidasan University

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Professor	National Institute of Technology, Trichy	March 2018	Present
Assoc. Professor	National Institute of Technology, Trichy	Nov.2011	March 2018
Assistant Professor	National Institute of Technology, Trichy	Nov.2008	Nov.2011
Lecturer	National Institute of Technology, Trichy	March 2006	Nov.2008

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2019	Best performer award in the category of Professor (Engineering)	NIT Trichy
2018	Certificate of Appreciation	NIT Trichy
2007	Young Scientist Award	DST

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
	Young Faculty Research Fellowship	Ministry of electronics and IT (MEITY) GoI	2017	2022
	NATIONAL DOCTORAL FELLOWSHIP	NDF-AICTE	2004	2006

13. Details of Academic Work
   (i)   Curriculum Development
   (ii)   Courses taught at Postgraduate and Undergraduate levels

1.Industrial Automation Systems
2..Networked Control System
3. ICLR17 Industrial Automation and Process Control Laboratory
4.Process Control
5.Biomedical Instrumentation
6.Logic and Distributed Control Systems
7.Industrial Communication Systems
8.Product Design & Development - (2014) (2015)

Projects guided at UG level

B.Tech Students

TITLE	YEAR
Iot Based Automation Of Nitt Entrance Gate	2022
Low-Cost Home Automation With Cloud Server Integrated Solutions	2022
Elephant Intrusion Detection, Repulsion And Notification System (To Prevent Train Accidents)	2022
Wi-Fi Based Energy Metering System	2017
Climate Control of Greenhouse Environment	2017
LED to LED Bidirectional Visible Light Communication With Software Based Synchronization	2016
System Identification and Control of Level Process	2016
Development of Machine Vision System for Automatic Grading and Segregation of Turmeric	2015
Noninvasive Determination of Fracture Healing Using Pressure Gauges	2015
Movement Triggered Switch Access Sytem for People With Disabilities	2015
Patient Monitoring System	2013
Analog Realization of Fractional Order PID Controller	2012
Brain Tumor Segmentation Based on Modified Self-Organizing Map	2012

Identification and Control of Single Board Heater System	2011
Development of Stewart Platiorm for Position Control	2010
Modelling and Control of Blood Glucose in Type II Diabetis	2009
Modelling and Control of Non-Linear Process	2008
Control of Pressure Using Micro Controller	2007
Modelling and Control of Level Process Using ADAM-5000 Module	2007

(iii)   Projects guided at Postgraduate level

M.Tech Students

Title	Student Name	Year
Iot Based Smart Water Distribution and Monitoring System	Shanu Sharma	2022
Real Time Pulverised Coal Flow Soft Sensor For Thermal Power Plants Using Evolutionary Computation Techniques	Amit Kumar Soni	2022
Development Of An Automated System For The Recognition Of Movements	Amit Kumar Soni	2022
Design and Development of RF Proximity Fuze for Smart Ammunition	Sunil Kumar Giri	2017
Super Heater Steam Temperature Control	Sunil Kumar Giri	2017
Slip and Slide Identification and Controlling for Railway Locomotive	Vaibhav Kumar Agarwal	2016
Study and Implementation of Different Control Schemes in Lateral Control of Car	R Adithya Chandrasekar	2016
Target Tracking Using Gimbaled Camera	Vaibhav Kumar Agarwal	2016
Position Control of Robotic Arm Using Vision Feedback	R Adithya Chandrasekar	2016
Real Time Implementation of Gimbaled Camera	Indhu B	2015

Control for on-Point Target Tracking

Intelligent Control of Secondary Super Heater	Hemanta Kumar Brahma	2015
Control of Magnetic Levitation	Hemanta Kumar Brahma	2015
Gimbaled Camera Control for on-Point Target Tracking	Indhu B	2015
Studies on Explicit Model Predictive Control Applied to Building Heating, Ventilation and Air Conditioning Systems	Chinmay Sahu	2015
Design and Implementation of Controller for Hybrid system	S.Prabhu Priya	2014
Unified Method of Designing Controller for Power Electronics Converters	S.Prabhu Priya	2013
Modeling and Stabilization Control of a Slosh Inverted Pendulum System.	Navin John Mathew	2013
Implementation of MP-MPC With Smith Predictor in Heat Exchanger System	S.P.Subashini	2013
Simultaneous Recording of EEG-fMRI to Detect Epileptic Foci	Asish Gupta	2012
Swinging Up and Stabilization Control of a Rotary Inverted Pendulum System	Navin John Mathew	2012
Design of Multi Parametric Model Predictive Controller for Heat Exchanger System	S.P.Subashini	2012
Modelling and Simulation of a Pulse Duplicator	Rajeev A	2012
Design and Implementation of Fractional Order Controller	V.Jithin	2012
Identification and Control of Preheater for a Supercritical Boiler Test Bed	V.Jithin	2012
Modelling and Simulation of a Pulse Duplicator	Rajeev A	2012
Design and Implementation of Controllers for Nonlinear Process	Jaspreet Kaur Sadana	2011
Design of Fractional Order Controller Using Particle Swarm Optimization for Heat Exchanger Process	Jaspreet Kaur Sadana	2011
Design and Implementation of Fractional Order Controller for Heat Exchanger	Kiran Kumar	2010
Control System Design for Type-1 Diabetic Patients.	P.Sathish Kumar	2010
Modelling and Control of Multivariable Process Using	Sati Babu Nagotu	2009

LABview

Control of Multivariable Process Using Recurrent Neuro Fuzzy Networks	Sati Babu Nagotu	2009
Design of Fuzzy Controllers for Nonlinear Systems	Rajni Jain	2008
Modeling and Control of Multivariable Process Using Labview.	Abhay Singh Gour	2008
Modelling and Control of Chemical Processes Using So_ Computing Techniques	Abhay Singh Gour	2007
Implementation of DSP Techniques for Analysis of Sensor Data	SVB Suresh Vasabhaktula	2007
Control of Neutralization Process Using Artificial Neural Networks	D.Kesavan	2007
Control of Neutralization Process	D.Kesavan	2007
Obstructionless Flow Measurement and Control Using Infineon Microcontroller.	Srikanth Paida	2007
Investigation of Fractional Order Systems	P. Satheesh Kumar	2010

M.S. (By Research) guided/co-guided:

S.No.	Name	Thesis Title	Year of Completion
1.	Rajendra Singh Thakur	Quality Categorization of Agricultural Produce	2018
2.	Bimal Kanta Sethi	Super heater Stream Temperature Control for 125MW Circulating Fluidized Bed Combustion	2018
3.	Chinmay Sahu	Studies on Explicit Model Predictive Control Applied to building heating, Ventilation and Air Conditioning Systems - Interdisciplinary research with Chemical Engg.	2015
4.	Asish Gupta	Simultaneous Recording of EEG-fMRI to detect Epileptic foci.	2013
5.	Rajni Jain	Design of Self Tuning Fuzzy Controllers for Nonlinear Systems - Interdisciplinary research with Chemical Engg.	2009

(iv)   Other contribution(s)

Prototype Designed and Implemented:

Solar Photovoltaic Powered Cold Storage System, Pilot test rigs on SISO (Heat Exchanger, Conical, Spherical, Cylindrical) and MIMO (Quadruple tank system, Hybrid Tank system, Heater Mixer system)

14. Details of Major R&D Projects

| Title of Project | Funding Agency | Duration | | Status |
		From	To	Ongoing/ Completed
A Versatile Portable Framework for Economic & Skill Empowerment of Women's Sustainable Livelihoods through Digital Literacy (COPI)	WIT-DST	2021	2024	Ongoing
Development of post-harvest handling and sensor based smart packaging methods for the export of traditional banana varieties and nano-strip based digital health monitoring of banana (COPI)	ICAR-NRCB	2020	2022	Ongoing
Development of an Integrated Health Monitoring	SERB-IMPRINT II	2019	2021	Ongoing

System for Large Engineering Structures (COPI)				
Networking of Institution (PI)	AICTE Margadharshan Scheme	2019	2022	Ongoing
Energy Efficient Management System (PI)	Under Young Faculty Research Fellowship & Research Grant Ministry of electronics and IT under GoI	2017	2022	Ongoing
Design and Development of Solar Photovoltaic Powered Cold Storage System (Co PI)	DST-IPHEE	2016	2019	Completed
Online Control of Multivariable Process Using Soft Computing. (PI)	DST-Fast Track Scheme	2007	2010	Completed
Design and Development of Embedded System for Rate of Change of Pressure Measurement Using IEEE P1451.4. (PI)	MHRD (R&D)	2004	2007	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
Rajesh Konda Reddy	Development and Experimental Investigation of Solar Dryer Integrated with Latent Heat Storage for Value Addition to	Supervisor	2022

	Under-Utilized Agro Produces of NER India		
Dhevendra Alagan Palanivel	Multifractal-Based Medical Image Analysis	Supervisor	2021
C.Sudalaimani	Analysis of Intracranial EEG Signals to Predict Epileptic Seizure using Sub-Frequency Band Features and Machine Learning Models	Supervisor	2021
S.Revathi	Modeling and Control of Greenhouse Environment using Soft Computing Techniques	Supervisor	2020
G.Ganapathy MBBS.,MD.	Applications of Machine Learning Algorithms in Health Care	Supervisor	2020
L.Maheswari	Investigation of Control Strategy for Battery Life Improvement and Power Converters for Photovoltaic System	Supervisor	2020
Hemalatha Karnan	Decision Support system for classification of Cardiac Arrhythmias using Supervisory algorithms	Supervisor	2019
S.Sankaranarayanan	Parameter optimization and missing data estimation for water distribution system with inherent disturbances: Simulation and Experimental Validation	Supervisor	2019
E.Sathish	Characterization of Temporal Lobe Epileptic Seizures and Psychogenic Non-Epileptic Spells using Electroencephalography and Optimized Machine Learning methods.	Supervisor	2016
V.Kirubhakaran	Studies on Explicit Model Predictive	Co-Supervisor	2015

	Control Applied to Chemical and Biochemical Processes - Interdisciplinary research with Chemical Engg.		
T.Vinoprabha	Design and Implementation of Fractional Order Controllers SISO Systems.	Supervisor	2013
C.Ahilan	Investigation on Energy Conservation Efforts in Industrial System - Interdisciplinary research with Production Engg.	Co-Supervisor	2012

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	Date(s)	Role	Venue
Graduate employability & startup activity workshop	24-03-2018	Coordinator	NIT Trichy
Modelling &Simulation of Engineering systems	23-03-2018 to 24-03-2018	Coordinator	NIT Trichy
Graduate employability & startup activity workshop	16-02-2018 to 18-03-2018	Coordinator	NIT Trichy

National Workshop on Technical Education	05-10-2017 to 07-10-2017	Coordinator	NIT, Trichy
Process Instrumentation and Control	04-07-2016 to 09-07-2016	Coordinator	NIT, Trichy
Computer Control of Processes	04-01-2010 to 09-01-2010	Coordinator	NIT, Trichy
Recent Trends in Biomedical Systems	28-06-2010 to 07-07-2010	Coordinator	FDP
Introduction to Intelligent System Engineering	13-06-2009 to 17-06-2009	Coordinator	STTP
Product Designing and Entrepreneurial Workshop	15-03-2015	Coordinator	NIT, Trichy
Trends in Biomedical Engineering	22-02-2014 to 23-02-2014	Coordinator	NIT, Trichy
Cancer Perspectives - Then and Now	28-12-2013	Coordinator	NIT, Trichy
Telemedicine	12-07-2013 to 14-07-2013	Coordinator	NIT, Trichy
Advanced Process Control	24-06-2013 to 26-06-2013	Coordinator	NIT, Trichy
Fascinating and Challenging Applications of Estimation	10-11-2011 to 11-11-2011	Coordinator	NIT, Trichy
Biomedical Equipment -Testing and Calibration	16-11-2013	Coordinator	NIT, Trichy
National Workshop on Technical Education in National Context Challenges and Strategies	05-10-2017 to 07-10-2017	Coordinator	NIT, Trichy
National Workshop on Intelligent Systems Engineering	27-07-2017 to 28-07-2017	Coordinator	NIT, Trichy
Challenges in Control Engineering	08-01-2009 to 10-01-2009	Coordinator	NIT, Trichy
Telemedicine workshop	27-09-2008	Coordinator	NIT, Trichy
Fault Diagnosis and Applications	22-04-2008	Coordinator	NIT, Trichy
Multivariable Control Systems	29-02-2008	Coordinator	NIT, Trichy
Control Engineering -Trends and Practices	23-11-2007 to 24-11-2007	Coordinator	NIT, Trichy
Integrated Process Design and Control	02-02-2017 to 04-02-2017	Coordinator	NIT, Trichy
Advanced Control Engineering 2015	09-10-2015 to 10-10-2015	Coordinator	NIT, Trichy
Emerging Avenues in Advanced Control	17-10-2015	Coordinator	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
Member	Institution of Engineers and Committee Member for Electronics and Telecommunication Engg. Division, Tiruchirappalli Local Centre From 2010 to till date.	(No.M-140948-9) From 2010 to till date.
Life Member	ISTE, New Delhi.	(LM81793)
Joint secretary and founder member	Automatic Control and Dynamic Optimization Society, IISc, Bangalore.	
Life Member	Administrative Staff College of India, Hyderabad.	(Prg./12-13/1/8/50352),

20. Academic Foreign Visits

Country	Duration of Visit		Programme
	Period of visit		Purpose of visit
	From	To	
Malaysia	3 April 2006	5 April 2006	International Conference on Modeling and Simulation (MS06)

			Received Travel Grant from CSIR, New Delhi
Singapore	12 December 2007	12 January 2008	Internship Training under TEQIP
U.S.A	20 October 2010	22 October 2010	International Conference on World Congress on Engineering and Computer science (WCECS 010),UCB,USA Received Travel Grant and registration fees from DST, New Delhi under Young Scientist Scheme
	14 March 2011	16 March 2011	IEEE International Conference on Industrial Technology, AUBURN University,USA

21. Publications

(A) Refereed Research Journals:

International Journals

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
K Nimmi, B Janet, A Kalai Selvan, N Sivakumaran	Pre-trained ensemble model for identification of emotion during COVID-19 based on emergency response support system dataset	Applied Soft Computing	122	108842	2022	
R. Kondareddy, N. Sivakumaran, K. Radha Krishnan et.al.	Performance evaluation and economic analysis of	Journal of Food Processing and	46	e15653	2021	

	modified solar dryer with thermal energy storage for drying of blood fruit (Haematocarpus Validus	Preservation				
R. Kondareddy, N. Sivakumaran, K. Radha krishnan et.al.	`Performance evaluation of modified forced convection solar dryer with energy storage unit for drying of Elephant apple (Dillenia Indica)	Journal of Food Processing Engineering	45	e13974	2021	
R. Kondareddy, N. Sivakumaran and P.K. Nayak	Drying kinetics of black turmeric (Curcuma caesia) with optimal controller assisted low cost solar dryer	Food Research	3(4)	373-379	2019	
Joseph Mathew, N Sivakumaran, PA Karthick	Detection of Seizure Types from the Wavelet Energy of Scalp EEG	Biomedical Sciences Instrumentation	57(2)		2021	
I Camarillo, JS Thulasidas, G Kalavathy, N Sivakumaran, et. al	Male Breast Cancer: Another look.	G Med Sci. 2021.	2(2)	015-029	2021	
C.Sudalaimani, N Sivakumaran, P Devanand, G	SVM Classifier for Epileptic Seizure Prediction using Sub-Banding of IEEG Signals	Biomedical Engineering: Applications, Basis and Communications			2021	

Alexander and S. Rominus Valsalam						
S.Revathi, N.Sivakumaran, T.K. Radhakrishnan	Design of solar-powered forced ventilation system and energy-efficient thermal comfort operation of greenhouse	Materials Today: Proceedings,2021			2021	
G. Ganapathy; N. Sivakumaran; M. Punniyamoorthy; Tryambak Chatterjee; Monisha Ravi	Improving the prediction accuracy of low back pain using machine learning through data pre-processing techniques	International Journal of Medical Engineering and Informatics (IJMEI)			2021	
S Sankaranarayanan, N Sivakumaran, TK Radhakrishnan, G Swaminathan	Dynamic soft sensor based parameters and demand curve estimation for Water Distribution System: Theoretical and Experimental cross validation.	Control Engineering Practice 102,2020			2020	
Dhevendra Alagan, P., Sivakumaran, N. and Sainarayanan G.	Retinal vessel segmentation using multifractal characterization	Applied Soft Computing (Elsevier)	94	106439	2020	
Dhevendra Alagan P, Sivakumaran N, Sainarayanan G, Rachid J	Multifractal-based lacunarity analysis of trabecular bone in radiography	Computers in Biology and Medicine (Elsevier	116	103559	2020	
L. Maheswari, N. Sivakumaran, K. R. Balasubramanian, G. Saravana Ilango	A unique control strategy to improve the life cycle of the battery and to reduce the thermal runaway for electric vehicle applications	Journal of Thermal Analysis and Calorimetry			2020	

G.Ganapathy, N. Sivakumaran, Murugesan Punniyamoorthy, Tryambak Chatterjee and Monisha Ravi	Improving the Prediction Accuracy of Low Back Pain using Machine Learning through Data Pre-Processing techniques	Int. J. of Medical Engineering and Informatics			2021	
L Maheswari and N. Sivakumaran	An Isolated Single Switch High Step-Up DC / DC Converter with Three-Winding Transformer for Solar Photovoltaic Applications	Journal of Electrical Engineering	102	1383–1392	2020	
N Sivakumaran, G Swaminathan, S Sankaranarayanan , TK Radhakrishnan	Unforeseen data estimation in water distribution system	CSI Transactions on ICT, Springer	7	153-159	2019	
S Sankaranarayanan , N Sivakumaran, TK Radhakrishnan, G Swaminathan	Missing data estimation and IoT based flyby monitoring of a Water Distribution System: Conceptual and experimental validation	International Journal of Communication Systems 2019			2019	
S. Revathi, N. Sivakumaran, D. Ramajayam, M.S. Saraswathi, S. Backiyarani, S.Uma	Growth estimation during hardening phase of tissue cultured banana plantlets under greenhouse	Journal of Environmental Biology, 2019			2019	

	environment using Bootstrapped Artificial Neural Network					
Kondareddy, R., Sivakumaran, N. and Nayak, P.K.	Drying kinetics of black turmeric (Curcuma caesia) with optimal controller assisted low cost solar dryer	Food Research,	3(4)	373-379	2019	
Dhevendra Alagan Palanivel, Sivakumaran Natarajan, Sainarayanan Gopalakrishnan	Mutifractals based multimodal 3D image registration	Biomedical Signal Processing and Control	47	126-136	2019	
G.Ganapathy,N. Sivakumaran,Murugesan Punniyamoorthy, R. Surendheran and Srijan Thokala	Comparative study of machine learning techniques for breast cancer identification/diagnosis	Int. J. Enterprise Network Management	10		2019	
C.Sudalaimani, N. Sivakumaran, Thomas T. Elizabeth, Valsalam S. Rominus	Automated detection of the preseizure state in EEG signal using neural networks	Biocybernetics and Biomedical Engineering	39	160-175	2019	
Revathi Soundiran, T. K. Radhakrishnan, Sivakumaran Natarajan	Modeling of greenhouse agro-ecosystem using optimally designed bootstrapping	Neural Computing and Applications		1-16	2018	

	artificial neural network					
Karnan H, Natarajan S, Manivel R.	Human machine interfacing technique for diagnosis of ventricular arrhythmia using supervisory machine learning algorithms.	Concurrency Computat Pract Exper. 2018	33	e5001	2018	
Sankaranarayanan S, Sivakumaran N, Radhakrishnan TK, Swaminathan G.	Metaheuristic-based approach for state and process parameter prediction using hybrid grey wolf optimization.	J. Chem. Eng.	13(4)	1-27	2018	
L.Maheswari, R.Srinivas ,N.Sivakumaran, G.Saravanailango, C.Nagamani	A control Strategy to enhance the Life Time of the Battery in a Stand-alone PV System with DC Loads	IET Power Electronics	10 (9)	1087-1094	2017	
E.Sathish, N.Sivakumaran, S.Sankaranarayan an	Grey wolf optimization based parameter selection for support vector machines	International Journal for Computation and Mathematics in Electrical and Electronic Engineering	35(5	1513-1523	2016	
E.Sathish, N.Sivakumaran, Sishaj P Simon, S.Raghavan	Genetic algorithm based feature selection for classification of focal and non-focal intracranial Electroencephalog raphic signals	Journal of Scientific and Industrial Research	76	614 - 619	2017	

Authors	Title	Journal	Vol	Pages	Year	
E.Sathish, N.Sivakumaran, K.Radhakrishnan, S.Raghavan, T.K.Radhakrishnan	Importance of classification algorithms in epileptic seizure detection	Journal of Bioengineering and Biomedical	6(3)	1-2	2016	
Chinmay Sahu,V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran	Closed loop building data based estimation and Energy Efficient Model Predictive Control of Heating Ventilation and Air Conditioning System	Ecotoxicology and Environmental Safety,.	121	236-243	2015	
Chinmay Sahu,V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran	Explicit Model Predictive Control of Split-type Air Conditioning System	Transactions of the Institute of Measurement and Control	32 (3)	1-9	2015	
V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran	A Metaheuristic Patient Estimation Based Patient Specific Fuzzy Aggregated Artificial Pancreas Design	Industrial & Engineering Chemistry Research I&EC Res (ACS	53(39)	15052–15070	2014	
V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran	"Distributed Multiparametric Model Predictive Control Design for a Quadruple tank process"	Measurement	47	841-854	2014	
V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran	Multiparametric Model Predictive Control based regulation of Blood Glucose in type 1 Diabetics under unmeasured meal Disturbances: A Simulation Study",	Int. J. Biomedical Engineering and Technology, Inderscience.			2014	
AAB Raj, JAV Selvi, D Kumar, N Sivakumaran	Mitigation of beam fluctuation due to atmospheric turbulence and prediction of control quality using	Applied optics	53 (17)	3796-3806	2014	

	intelligent decision-making tools					
C.Ahilan, S.Kumanan, N.Sivakumaran, J.Edwin Raja Dhasd	Modeling and prediction of machining quality in CNC turning process using intelligent hybrid decision making tools	Journal on Applied Soft computing	13	1543–1551	2013.	
T.Vinopraba, N.Sivakumaran, S.Narayanan, T.K.Radhakrishnan	Design of internal model control based fractional order PID controller	Journal of Control Theory and Applications	10 (3)	297-302	2012	
Rajni Jain, T.Vinopraba, T.K.Radhakrishnan, N.Sivakumaran	Design of Fuzzy-PI Controllers for MIMO Process	Control and Intelligent Systems	40 (4)	1-9	2012	
Rajni Jain, N. Sivakumaran, T.K Radhakrishnan	Design of self tuning fuzzy controllers for nonlinear systems	Expert Systems with Applications	38	4466–4476	2011	
P.Satheeshkumar, T.Vinopraba, N.Sivakumaran, S.Raghavan	Design and implementation of Model Predictive controller for Type I diabetics	Int. J. Biomedical Engineering and Technology	6(4)	422-430	2011	
S.Nithya, N.Sivakumaran, T.Balasubramanian, N.Anantharaman	Intelligent controller Design for Nonlinear Processes using Genetic Algorithm	IUP Journal of Mechanical Engineering	IV(1)	7-24	2011	
C.Ahilan, S.Kumanan, N.Sivakumaran	Optimization of CNC turning of AISI 304 Austenitic stainless steel using Grey based fuzzy logic with multiple performance characteristics	Journal of Machining and Forming Technologies	3	1–19	2011	
C.Ahilan, S.Kumanan, N.Sivakumaran	Online performance assessment of Heat Exchanger using Artificial Neural Network	Int. Journal of Energy and Environment	2(5)	829-844	2011	
T.Vinopraba, N.Sivakumaran, T.K.Radhakrishnan, S.Raghavan	Modelling and Control of blood glucose regulation in Type I Diabetic Mellitus	Measurement and Control, AMSE	83(1)	17-32	2010	
C.Ahilan, S Kumanan, and N.Sivakumaran	Design and implementation of an intelligent controller for a split air conditioner with energy saving	Journal of Advances in Modeling,AMSE	65(1).	,21-40	2010	
C.Ahilan, S.Kumanan, N.Sivakumaran	Application of Grey based Taguchi method in multi response of	Advances in Production Engineering and Management,	5(3)	171-180	2010	

	optimization of turning process					
S.C.Lee, Q.G. Wang, W.X. Zheng, N. Sivakumaran	Stabilization and Control of Unstable Processes with Large Dead Time	Transactions of the Institute of Measurement and Control	32(3)	286-306	2010	
C.Ahilan, S.Kumanan, N.Sivakumaran	Optimizing Power Consumption for CNC turning process using grey based fuzzy logic	Int.J.Machining and Machinability of Materials	5(4)		2009	
S.Narayanan, N.Sivakumaran, T.Vinopraba, N.Selvaganesan	IMC Based PIλDδ Controller Design for Gas Turbine Plant	Modeling and Simulation, AMSE	10(1)	63-72	2009	
S.Nithya, N.Sivakumaran, T.Balasubramanian, N.Anantharaman	Design of Controller for Nonlinear process using Soft Computing Instrumentation Science and Technology, Taylor and Francis ,36(2), pp. 437-450,2008	Instrumentation Science and Technology, Taylor and Francis	36(2)	437-450	2008	
N.Sivakumaran and T.K.Radhakrishnan	Modeling and Control of Multivariable Processes using Recurrent Neural Networks	International Journal of Modeling and Simulation	28(1)	20-26	2008	
S.Nithya, N.Sivakumaran, T.Balasubramanian, N.Anantharaman,	Intelligent control of interacting nonlinear process in real time	International Journal of Applied Engineering Research	3(4)	491-503	2008	
S.Nithya, Abhay Singh Gour , N.Sivakumaran, and N.Anantharaman	Measurement and control of Process using soft computing	Instrumentation Science and Technology	36(2)	194-208	2008	
G.Balasubramanian, N.Sivakumaran, T.K.Radhakrishnan	Adaptive Control of Neutralization Process using Neural Networks	Instrumentation Science & Technology	36	146-160	2008	
S.Nithya, Abhay Singh Gour, N.Sivakumaran, T.K.Radhakrishnan, T.Balasubramanian and N.Anantharaman	Design of Controller Implementation for non-linear processes using Intelligent Controller	Asian Journal of Applied Sciences		1-13	2008	
S.Nithya, Abhay Singh Gour, N.Sivakumaran, T. K.Radhakrishnan and N.Anantharaman	Model based Controller design of shell and tube Heat exchanger	Sensors & Transducers Journal	84(10)	1677-1686	2007	
A.Siddique, M.R.Jayashree, O.Muthukumar, R.Maheswari and N.Sivakumaran	Control of Pressure Process using Infineon Microcontroller	Sensors & Transducers Journal	81(7)	1373-1380	2007	

N.Sivakumaran, J.Sarat Chandra, T.K.Radhakrishnan	Identification and Control of Bioreactor using Recurrent Networks	Instrumentation Science & Technology	34(6)	635-652	2006	
S.Nagammai, N.Sivakumaran, T.K.Radhakrishnan	Control System Design for a Neutralization Process using Block Oriented Models	Instrumentation Science & Technology	34(6)	653-668	2006	
R.Viknesh, N.Sivakumaran, J.Sarat chandra babu, T.KRadhakrishnan	A Critical study of Decentralized controllers for Multivariable system	Chemical Engineering and Technology (Wiley-VCH)	27(8)	880-889	2004	

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Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
1. V.Sridevi, D.Rathikarani, K.K.Anilkumar, **N.Sivakumaran**	1. "Minimum variance controller using Recursive Least Determinant algorithm	Journal of Instrument society of India			2009	
2. **N.Sivakumaran** and T.K.Radhakrishnan,.	2. "Predictive controller Design for Nonlinear Chemical Processes"	Indian Journal of Chemical Technology	14	341-349	2007	
3. Boopathy, **N.Sivakumaran**, J. Sarat chandra babu and T.K Radhakrishnan	3. "Identification and Control of Four tank system using Neural Networks plant	Journal of Instrument Society of India	35(2)	179-185	2005	

	inverse controller"					
4. **N.Sivakumaran**, E.V.Kanakasabai, P.S.Raja	4. Process Monitoring and Control using SCADA Software	Instrumentation and Control Journal			2004	

(B) Conferences/Workshops/Symposia Proceedings

Interanational Conferences

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Venue	Year
Rajesh Kondareddy, N. Sivakumaran, Prakash Kumar Nayak,	Design and analysis of optimal controlled solar dryer for humid sub-tropical region	International Conference on Recent Advances in Food Processing Technology (iCRAFPT), IIFPT		Thanjavur	2018
Rajesh Kondareddy, N. Sivakumaran, Prakash Kumar Nayak	Drying kinetics of black turmeric (Curcuma caesia) with optimal controller assisted low cost solar dryer.	International conference on Agriculture and Food Engineering (CAFEi2018)		UPM Kuala Lumpur, Malaysia,	2018
Revathi S, Kranthi kumar V, N. Sivakumaran, T. K. Radhakrishnan, S. Uma, D. Ramajayam,.	Greenhouse environmental control usingPSO based fractional order PID controller	Advances in Control and Optimization of Dynamical Systems (ACODS 2018).	.	Dr. APJAbdul Kalam Missile Complex, Hyderabad	2018
Revathi S, Maheswari L, Sivakumaran N	Energy efficient controller design for solar powered cold storage	International Conference on Recent Advances in food Processing Technology		Indian Institute of Food Processing Technology	2018
Bimal Kanta Sethi, S Revathi and N.Sivakumaran	Artificial neural network-based modeling of super heater unit for a CFBC boiler	Thirty-third National Convention of Electrical Engineers 2017.			

Bimal Kanta Sethi, J Ramanuja Vinayak, N.Sivakumaran	Internal Model Controller for CFBC Boiler using Neural Networks	Indian Control Conference (ICC) 2017.			2017
S.Sankaranarayanan,**N.Sivakumaran**, G.Swaminathan,T.K.Radhakrishnan	SA Novel Hybridized Grey Wolf Optimization for a cost optimal design of Water Distribution Network	Computing Conference, IEEE		London.	July 2017,
S.Sankaranarayanan,**N.Sivakumaran**,G.Swaminathan,T.K.Radhakrishnan	Soft sensor based estimation of process parameters and states with Hybridized Grey Wolf Optimizer	American Control Conference (ACC),IEEE	pp. 1892-1897	USA	2017
S.Revathi, TK Radhakrishnan, **N.Sivakumaran**,	Climate control in greenhouse using intelligent control algorithms	American Control Conference (ACC),IEEE.	pp. 887-892	USA	2017
Rajendra Singh Thakur and **N.Sivakumaran**	Segmentation and Colour Thresholding Based Growth Rate Estimation for Arabidopsis plant	MEMSEP,NIT, Trichy.		NIT,Trichy.	2017
Bimal Kanta Sethi, J Ramanuja Vinayak, **N.Sivakumaran**	Implementation of IMC based Controller for CFBC Boiler	MEMSEP,NIT, Trichy.		NIT,Trichy.	2017
S.Sankaranarayanan,**N.Sivakumaran**,G.Swaminathan	Water hammer in pressurized water Distribution system: conceptual development of dynamic model and validation	TIMA	.	MIT,Chennai	2017
C Sudalaimani, **N.Sivakumaran**,Sasi Pilacheri Meethal, T Elizabeth Thomas, S Rominus Valsalam, E Sathish,.	Seizure Prediction using General Regression Neural Network	TIMA.		MIT,Chennai	2017
K. Rajkumar, S. Narayanan, **N. Sivakumaran**	"Design of Centralized Controller based on Inverted Decoupling Structure for non-square systems with time delay	TIMA,		MIT,Chennai	2017
S.Revathi, **N.Sivakumaran**,	Fuzzy based temperature control of greenhouse	4th IFAC Conference on Advances in Control and Optimization of Dynamical Systems(ACDOS),	Vol. 49.No. 1, pp.549-554		2016
S.Revathi, **N.Sivakumaran**, V.R.Sinija	Intelligent Controller Based Forced ventilation for Greenhouse Using Speed Control of DC Motor	International Conference on Emerging technologies in Agricultural		IIT Kharagpur	2016

		Engineering, ETAE2016			
Rajendra Singh Takur, E.Sathish, **N.Sivakumaran**	Machine Learning Based Categorization of fruits for big basket grocery store	International Conference on Human Computer Interactions 2016 (IEEE**.**		Saveetha University	2016
Rajendra Singh Thakur, E.Sathish N.Sivakumaran,	Machine Learning Based Categorization of Fruits For Big Basket Grocery Store	Proceedings of 2nd IEEE International Conference on ICHCI'20	Page. 481-485		2016
Devi C. Arati, S.Narayanan and **N.Sivakumaran**	Decoupling of linear multivariable system using PD output feedback	Proceedings of Indian Control Conference.	pp. 123-127	Hyderabad.	2016
Devi C. Arati, S.Narayanan and **N.Sivakumaran**,	Complete decoupling of multivariable systems by means of dynamic state feedback,	Proceedings of International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM)	.	Chennai	2015
Chinmay Sahu,V.Kirubhakaran, T.K.Radhakrishnan, **N.Sivakumaran**,	Closed loop building data based estimation and Energy Efficient Model Predictive Control of Heating Ventilation and Air Conditioning System.	ICGTEPC 2014.	pp. 239		2014
E.Sathish, **N.Sivakumaran** and Raji Sundararajan	Simulation of electric field distribution and depth of electrodes placed in cancer tissues	Proc. ESA Annual meeting on Electrostatics, Electrostatic society of America, University of Notre Dame.		University of Notre Dame, Notre Dame, USA.	2014
E.Sathish, **N.Sivakumaran**, and Raji Sundararajan	Classification of intracranial EEG signals using adaptive neuro fuzzy inference system	Proc. ESA Annual meeting on Electrostatics,		University of Notre Dame, Notre Dame, USA.	2014

		Electrostatic society of America, University of Notre Dame,			
S.Sankaranarayanan, **N.Sivakumaran**, G.Swaminathan	Optimal Network Design for Flow Process	S.Sankaranaray anan, **N.Sivakumara n**, G.Swaminathan "Optimal Network Design for Flow Process",pp. 270, ICGTEPC 2014.	pp. 270		2016
V.Kirubhakaran, T.K.Radhakrishnan, **N.Sivakumaran**	Insulin on Board Based Aversion of Hypoglycemia in Type I Diabetics using Multi Parametric Model Predictive Control	Int.Conf. on Advances in Chemical Engineering and Technology, ICACE TKMCE	pp. 150-153.		2014
VR.Divyesh,V.Kirubhakaran, T.K.Radhakrishnan, **N.Sivakumaran**	Adaptive explicit Model Predictive Controller for Coupled Continuous Stirred Tank Reactor using Least Squares Support Vector Machines	IEEE Industrial Electronics Society, IES IECON 2014.			2014
V.Kirubhakaran,E.Ravi Teja, T.K.Radhakrishnan, **N.Sivakumaran**	Real Time Control of non Self-Regulating Cylindrical Tank Process using Multiparametric Model Predictive Control	Int.Conf. on TIMA.	pp.30-34.		2013

Navin John Mathew, K.R.Kandula, N. Sivakumaran	Swing up and Stabilization control of a Rotary Inverted Pendulum	DYCOPS		IIT Bombay	2013
V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran	"Blood Glucose Concentration Regulation in Type1 Diabetics using Multi Parametric model Predictive Control: An Empirical approach	CAB 2013		IIT Bombay.	2013
T.Vinopraba, N.Sivakumaran, T.K.Radhakrishnan	Design of fractional order controller for Biochemical Reactor	CAB 2013		IIT Bombay.	2013
Ashish Gupta, N.Sivakumaran, Ashalatha R. et al	"Statistical Parametric Mapping of EEG correlated fMRI data to detect Epileptic foci"	BSSI 2012.		,IITM,Chennai	2012
E.Sathish, S.Srinivasan, N.Sivakumaran	"Classification of Normal and Epileptic EEG Signals using Adaptive Neuro Fuzzy Inference System	2nd International conference on Biomedical Engineering and assistive Technologies		NIT Jalandhar	2012
A.Gupta, N. Sivakumaran, E. Sathish	"Effect of modeling hemodynamic response function on statistical value in SPM for EEG correlated fMRI data of epileptic patient",	2nd International conference on Biomedical Engineering and assistive Technologies		NIT Jalandhar	2012
A.Rajeev,S.Sujesh, N.Sivakumaran, C.V.Muraleedharan	"A Linear After-Load Model for a CardioVascular Pulse Duplicator"	ICACCI 12	.493-497		2012
C.Ahilan, S.Kumanan, N.Sivakumaran	"Prediction of Shell and Tube Heat Exchanger Performance using Artificial Neural Networks"	Proc. of the International Conference on Advanced Computing and Communication Technologies ACCT 2011	307-312	Rohtak	2011
C.Ahilan, S.Kumanan, N.Sivakumaran.	Modeling and analysis of cutting parameters influence on power consumption and surface roughness in CNC turning of AISI 304"	2nd International Conference on Production and Industrial Engineering CPIE		Jalandhar.	2010

T.Vinopraba, N.Kiran Kumar, P.Satheesh Kumar	"Design and implementation of Fractional order Controllers"	49th IEEE conference on decision and control			Atlanta, USA	2010
S.Nithya, N.Siva kumaran, T.K.Radhakrishnan	Soft Computing based Controller Implementation for nonlinear process in real time	WCECS 2010	1021-26		Sanfrancisco	2010
C Ahilan, S Kumanan, and N.	"Design and Implementation of Fuzzy Logic Controller for an Air conditioner with Energy saving"	7th Global Conference on Sustainable Manufacturing GCSM	57-62		IITM	2009
Rajini Jain, T.Vinopraba, N. Sivakumaran, T.K.Radhakrishnan	"Design and Implementation of Controllers for MIMO Process"	International Conference on Advances in Recent Technologies in Communication and Computing,	750-75			2009
S.Narayanan, N.Sivakumaran, T.Vinopraba, N.Selvaganesan	"IMC Based PIλDδ Controller Design for Gas Turbine Plant"	International Conference on Modeling and Simulation (MS09)	386-390			2009
T. Vinopraba, N.Sivakumaran, N.Selvaganesan and S.Narayanan	"Stabilization Using Fractional-Order PIDα Controllers for First Order Time Delay System"	International Conference on Advances in Computing, Control, & Telecommunication Technologies	725 – 728			2009
T.Vinopraba, N. Sivakumaran, T.K.Radhakrishnan, S.Raghavan,	"Optimal Control of Blood Glucose Regulation for Type-I Diabetics"	Proc. International Conference on TIMA,			MIT, Anna University	2009
S.C.Lee, Q.G. Wang,W.X. Zheng, N. Sivakumaran	"Stabilization and Control of Unstable Processes with Large Dead Time"	International Conference on Information Management", Innovation Management and Industrial Engineering			Taiwan.	2008
C.Ahilan, S.Kumanan, N.Sivakumaran,	"Optimizing Power Consumption for CNC turning process using grey based Taguchi Method"	Proc. of the 2nd Intl.&23 AIMTDR Conf,.			IIT Madras, Chennai	2008
B.Subathra, K.Harikumar, N. Sivakumaran, T.K.Radhakrishnan	"Multivariable Predictive Control System Design Using a RNF Network"	Proc. of Chemcon				2008.
Rajni Jain, N.Sivakumaran,	"Design of a Multimodel Controller for Heat Exchanger"	Proc. Chemcon				2008

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Abhay Singh Gour, S.Nithya, N.Siva kumaran, T.K.RadhaKrishnan and N.Anantharaman,	"Predictive Controller Design of Shell and Tube Heat Exchanger"	Conference on Intelligent and Advanced Systems, IEEE Sponsored ICIAS 2007	94-99	Malaysia	2007
Abhay Singh Gour, S.Nithya, N.Siva kumaran, T.K.RadhaKrishnan and N.Anantharaman	"Control of Heat Exchanger using Genetic Algorithm"	International Conference on Modeling and Simulation, CITICOMS			2007
D.Kesavan, N.Sivakumaran, G.Balasubramaniam and T.K.Radhakrishnan	Control of Neutralization process using Adaptive Interaction Technique"	CITICOM07, T2ME150			2007
D.Kesavan, N.Sivakumaran, G.Balasubramaniam and T.K.Radhakrishnan	"Fuzzy Controller Design for Nonlinear Neutralization Process"	International Conference on Hydrocarbon flow Measurement, jointly organized by Fluid Control Research Institute (FCRI),	594-602		2007
N.Sivakumaran, V.Kirubakaran, and T.K.Radhakrishnan	"Neural Model Predictive Controller for Multivariable Process"	Proceedings of the IEEE International Conference on Industrial Technology 2006 (ICIT 2006), Paper No. 6327	3072-3077	IIT, Mumbai	2006
N.Sivakumaran, S.Nagammai, P.Karthikeyan and T.K.Radhakrishnan	"Control of Neutralization Process Using Neural Networks"	Proceedings of the International Conference on Modeling and Simulation 2006 (MS 2006)	852-858	Kuala Lumpur, Malaysia.	, 2006
N.Sivakumaran, V.Kirubakaran, and T.K.Radhakrishnan	"Modeling and Robust Controller Design for Multivariable Process"	Proceedings of the International Conference on Modeling and Simulation 2006 (MS 2006	, 863-868	Kuala Lumpur, Malaysia.	, 2006
N.Sivakumaran, B.H. Deepak Kumar, J. Sarat chandra babu, and T.K.Radhakrishnan	"Model Based Predictive Control Using Recurrent Neural Network for Bioreactor Control"	International Conference on Trends in Industrial Measurements and		Chennai, India.	2004

Author(s)	Title of Abstract/Paper	Title of the Proceedings	Page numbers	Venue	Year
		Automation, Dec16-18			
Abhay Singh Gour, S.Nithya, N.Siva kumaran, T.K.RadhaKrishnan and N.Anantharaman	Intelligent Controller Implementation for a Non-linear Process	International Conference IEEE, International Symposium on Industrial Electronics ISIE 2008		United Kingdom	2008
T.Vinopraba, N.Sivakumaran, T.K.Radhakrishnan, S.Raghavan	"Optimal Control of Blood Glucose Regulation in Type I Diabetics"	Proceedings of TIMA 2009	84-92	MIT Campus, Anna University Chennai.	2009
C Ahilan, S Kumanan, and N. Sivakumaran	"Design and implementation of fuzzy logic controller for an air conditioner with energy saving"	7th Global Conference on Sustainable Manufacturing GCSM	57-62		2009
Abhay Singh Gour, S.Nithya, N.Siva kumaran, T.K.RadhaKrishnan and N.Anantharaman	Predictive Controller Design of Shell and Tube Heat Exchanger	International Conference on Intelligent and Advanced Systems, IEEE Sponsored ICIAS	94-99	Malaysia	2007
M.Ramesh kumar, G.Balasubramanian, B.Hema Kumar and N.Sivakumaran	"Blood Cell Counting Using Image Processing"	International Symposium on Advanced Materials and Processing ISAMAP2K4		IIT, Kharagpur, India.	2004
N.Sivakumaran, E.V.Kanakasabai and P.S.Raja,	"Process Monitoring and Control using SCADA Software"	International Conference on Hydrocarbon flow Measurement, jointly organized by Fluid Control Research Institute (FCRI) and Petroleum India International (PPI) at FCRI, India		Palakkad, Kerala,	2003

National Conferences

Author(s)	Title of Abstract/Paper	Title of the Proceedings	Page numbers	Venue	Year
Rajendra Singh Thakur and **N.Sivakumaran**	Identification of Rice Quality Using Fuzzy Logic.	Proceedings of National Conference on CISMA-15	Page.185-188.	PEC,Puduchery	Jan 2016.

Devi C. Arati, S. Narayanan and **N.Sivakumaran**	A study on MIMO Control system design	Proceedings of National Conference on Recent Trends in Instrumentation and Control (RTIC-15)		Chennai	March 2015.
A.Gupta, **N.Sivakumaran**, V.Sridevi.	Investigations on EEG Signals using Spectral Analysis	FECIT-2011	pp.63.		FECIT-2011
P.Satheeshkumar, T.Vinopraba, **N.Sivakumaran**, S.Raghavan	Design of H∞ controller for Blood glucose Regulation	Proceedings of National conference on Emerging Medical Instrumentation, (CEMI-2010).		Chandigarh	May 11-12, 2010.
S.Narayanan, **T.Vinopraba**, N.Sivakumaran	Stabilization using Fractional order PID$^\mu$ controllers for First order Unstable Time Delay systems	Proceedings of Chemcon 2009		Andhra university, Vishakapatnam.	2009, December 27- 29
T.Vinopraba, **N.Sivakumaran**, T.K.Radhakrishnan	Implementation of Decentralised Controller for Couple tank system	Proceedings of Chemcon 2009		Andhra university, Vishakapatnam.	2009, December 27- 29
V.S.V.B.Suresh, N.Sivakumaran and T.K.Radhakrishnan	A Comparitive study of De-Noising Methods for sensor data using Filters and Wavelet Transforms	CISMA07	pp. 47-52.	Pondicherry Engineering College	7-8 Feb.2008.
B.Subathra, K.Harikumar, **N.Sivakumaran** and T.K.Radhakrishnan.	Fuzzy Control of A Multivariable System	CISMA07	pp. 133-140.	Pondicherry Engineering College	7-8 Feb.2008
N. Sivakumaran and T. K. Radhakrishnan	Control of Neutralization Process Using Recurrent Neural Networks	CHEMCON 2006	Paper No. 721	Presented at CHEMCON	Dec. 26-29, 2006.
T.Vinopraba, S.Sutha, **N.Sivakumaran**, P.Lakshmi	Modelling of Multi Variable System	National conference on Advance Techniques in Instrumentation.	pp.129-135.		22-24 July, 2009
N.Sivakumaran, J.Sarat chandra babu, and T.K.Radhakrishnan.	Control of Bioreactors using Recurrent Networks	NCPICD05	pp258-334.	MIT	Dec 2005
N.Sivakumaran, V.Kirubakaran, J.Sarat chandra babu, and T.K.Radhakrishnan	Decentralized controller design for Multivariable process	ICECON05	pp 64-70.	ICECON05, NIT	Dec 2005

N.Sivakumaran, T. Venkatesh, S. Nagammai and T.K. Radhakrishnan.	Nonlinear Control of a Neutralization Process	Proc. of NCICCA2005, AKCE.	pp393-399.	AKCE, Krishnankoil	April 2005
N.Sivakumaran,J. Sarat Chandra babu and T.K.Radhakrishnan.	Control of Multivariable Non Minimum Phase system using Recurrent Neural Networks	Proc. of CHEMCON		Mumbai, India.	Dec 2004
R.Hemakumar, R.Arangasamy, G.Balasubramanian and **N.Sivakumaran.**	A Fuzzy Expert system design for Prostate cancer Diagnosis	Proc. of Recent Trends in Electrical Engineering	Paper no: IV(4.6).	K.S.R College of Technology, Tiruchengode	July 2004
N.Sivakumaran and S.Mahesh Anand.	Fuzzy Controlled Insulin Pump for Diabetics	Proc. of National Conference on emerging trends in Engg. Technology and Management by ISTE	Page No: 2.21.	Adhiyamaan Engineering college, Hosur	Sep. 2003
N.Sivakumaran, S.Mahesh Anand and V.Nivashiny	Micro controller based Drips rate Monitoring	Proc. of National Conference on Recent trends in Flow Measuring Techniques	Page No: 60.	Shri Angalamman College of Engineering, Trichy	July 2003
N.Sivakumaran, G.Balasubramanian and Y. Mohamed Junaith	Energy saving through Temperature Controlled Hydraulic System	Proc. of Recent Developments in Design of Hydraulic Machines By ISTE	Page No: 49.	Shri Angalamman College of Engineering, Trichy.	Feb 2003
N.Sivakumaran, V.Gopalraja and V.Dharmalingam	Auto tuning PID Controller using Ideal relay feedback technique	Proc. of National Conference on Intelligent Control	Page No: 38.	Crescent Engineering college, Chennai	Jan. 2003

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Joseph Mathew, N Sivakumaran, PA Karthick, Toshihisa Tanaka	Biomedical Signals Based Computer-Aided Diagnosis for Neurological Disorders	Springer	2022	978-3-030-97845-7-5
K arun Ganesh, N. Sivakumaran, S. Kumaravel , PA Karthick	Biomedical Signals Based Computer-Aided Diagnosis for Neurological Disorders	Springer	2022	978-3-030-97845-7-12

Maheswari Lakshmanan,HemalathaKarnan,SivakumaranNatarajan	Advances in Automation, Signal Processing, Instrumentation, and Control	Elsevier	2020	https://doi.org/10.1016/B978-0-12-817913-0.00014-6
Venkata Lakshmi Narayana Komanapalli, N. Sivakumaran, Santoshkumar Hampannavar	Smart Healthcare for Disease Diagnosis and Prevention,1st Edition	Springer	2020	https://link.springer.com/book/10.1007/978-981-15-8221-9