Publication Details International Journals

- 1. 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, 104544.https://doi.org/10.1016/j.conengprac.2020.104544.
- 2. Dhevendra Alagan, P., Sivakumaran, N. and Sainarayanan G. (2020 September) Retinal vessel segmentation using multifractal characterization, Applied Soft Computing (Elsevier), 94, 2020, 106439. https://doi.org/10.1016/j.asoc.2020.106439.
- 3. 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, 2020, 103559. https://doi.org/10.1016/j.compbiomed.2019.103559
- 4. 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.
- 5. 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. (Accepted)
- 6. 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, https://doi.org/10.1007/s00202-020-00959-y.
- 7. N Sivakumaran, G Swaminathan, S Sankaranarayanan, TK Radhakrishnan, Unforeseen data estimation in water distribution system,1-7, CSI Transactions on ICT, Springer,2019. https://doi.org/10.1007/s40012-019-00241-y.
- 8. 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. doi.org/10.1002/dac.4135.
- 9. 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 environment using Bootstrapped Artificial Neural Network", Journal of Environmental Biology, 2019. doi: 10.22438/jeb/40/4/MRN-948.

- 10. 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.
- 11. Dhevendra Alagan Palanivel, Sivakumaran Natarajan, Sainarayanan Gopalakrishnan, Mutifractals based multimodal 3D image registration. Biomedical Signal Processing and Control,47, pp 126-136, 2019.
- 12. 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, Vol. 10, No. 1, 2019.
- 13. 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, pp160-175, 2019.
- 14. Revathi Soundiran, T. K. Radhakrishnan, Sivakumaran Natarajan, Modeling of greenhouse agro-ecosystem using optimally designed bootstrapping artificial neural network, Neural Computing and Applications, pp 1-16, 2018. doi.org/10.1007/s00521- 018-3598-7.
- 15. 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; e5001. https://doi.org/10.1002/cpe.5001
- 16. Sankaranarayanan S, Sivakumaran N, Radhakrishnan TK, Swaminathan G. Metaheuristic-based approach for state and process parameter prediction using hybrid grey wolf optimization. Asia-Pac. J. Chem. Eng. 13(4);1-27,2018.
- 17. 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),pp.1087-1094, 2017.
- 18. E.Sathish, N.Sivakumaran, S.Sankaranarayanan, Grey wolf optimization based parameter selection for support vector machines, International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 35(5), pp.1513-1523, 2016.
- 19. E.Sathish, N.Sivakumaran, Sishaj P Simon, S.Raghavan, Genetic algorithm based feature selection for classification of focal and non-focal intracranial Electroencephalographic signals, Journal of Scientific and Industrial Research, 76, pp. 614 619, 2017.

- 20. 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), pp. 1-2, 2016.
- 21. 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.
- 22. 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), pp.1-9,2015. (IF 0.736)
- 23. 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. (IF 2.235).
- 24. V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran, "Distributed Multiparametric Model Predictive Control Design for a Quadruple tank process", Measurement, 47, 841- 854, Elsevier, 2014. (IF 1.526)
- 25. 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, 14(2), 2014.
- 26. AAB Raj, JAV Selvi, D Kumar, N Sivakumaran, "Mitigation of beam fluctuation due to atmospheric turbulence and prediction of control quality using intelligent decision-making tools" Applied optics 53 (17), pp.3796-3806,2014
- 27. 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, Elsevier, 13,1543-1551, 2013. (IF 2.679)
- 28. 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.
- 29. 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

- . 30. Rajni Jain, N. Sivakumaran, T.K.Radhakrishnan, "Design of self tuning fuzzy controllers for nonlinear systems", Expert Systems with Applications, Elsevier 38, 4466–4476, 2011. (IF 1.965)
- 31. 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, Inderscience, 6(4), pp. 422-430, 2011.
- 32. 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.
- 33. 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(3-4), 1–19, 2011.
- 34. 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
- 35. 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. (IF 0.76)
- 36. 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.
- 37. C.Ahilan, S.Kumanan, N.Sivakumaran, "Application of Grey based Taguchi method in multi response of optimization of turning process", Advances in Production Engineering and Management, 5(3), 171-180, 2010.
- 38. 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), pp.286-306,2010. (IF 0.736)
- 39. 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.
- 40. S.Narayanan, N.Sivakumaran, T.Vinopraba, N.Selvaganesan, "IMC Based PI λDδ Controller Design for Gas Turbine Plant", Modeling and Simulation, AMSE 10 (1), pp. 63-72, 2009.

- 41. 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. (IF 0.8)
- 42. N.Sivakumaran and T.K.Radhakrishnan, "Modeling and Control of Multivariable Processes using Recurrent Neural Networks", International Journal of Modeling and Simulation, ACTA Press 28(1), pp. 20-26, 2008.
- 43. 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.
- 44. S.Nithya, Abhay Singh Gour , N.Sivakumaran, and N.Anantharaman, "Measurement and control of Process using soft computing", Instrumentation Science and Technology, Taylor and Francis ,36(2), pp. 194-208,2008. (IF 0.8)
- 45. G.Balasubramanian, N.Sivakumaran, T.K.Radhakrishnan, Adaptive Control of Neutralization Process using Neural Networks, Instrumentation Science & Technology, Taylor & Francis, 36, pp. 146-160, 2008. (IF 0.8)
- 46. 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, pp.1-13, ISSN 1996-3343, 2008.
- 47. 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), pp.1677-1686, 2007. (IF 0.705)
- 48. A.Siddique, M.R.Jayashree, O.Muthukumar, R.Maheswari and N.Sivakumaran, "Control of Pressure Process using Infineon Microcontroller", Sensors & Transducers Journal, 81(7), pp. 1373-1380,2007. (IF 0.705)
- 49. N.Sivakumaran, J.Sarat Chandra, T.K.Radhakrishnan, "Identification and Control of Bioreactor using Recurrent Networks", Instrumentation Science & Technology, Taylor & Francis, 34(6), 635-652, 2006. (IF 0.8)
- 50. S.Nagammai, N.Sivakumaran, T.K.Radhakrishnan, "Control System Design for a Neutralization Process using Block Oriented Models", Instrumentation Science & Technology, Taylor & Francis, 34 (6), 653-668, 2006. (IF 0.8)
- 51. 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. (IF 2.175)

International Conference

- 1. 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.
- 2. 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.
- 3. Revathi S, Kranthi kumar V, N. Sivakumaran, T. K. Radhakrishnan, S. Uma, D. Ramajayam, "Greenhouse environmental control using PSO based fractional order PID controller", Advances in Control and Optimization of Dynamical Systems (ACODS 2018). Dr. APJAbdul Kalam Missile Complex, Hyderabad.
- 4. 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
- 5. 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.
- 6. Bimal Kanta Sethi, J Ramanuja Vinayak, N.Sivakumaran," Internal Model Controller for CFBC Boiler using Neural Networks", Indian Control Conference (ICC) 2017.
- 7. S.Sankaranarayanan, N.Sivakumaran, G.Swaminathan, T.K.Radhakrishnan, "A Novel Hybridized Grey Wolf Optimization for a cost optimal design of Water Distribution Network", Computing Conference, IEEE, July 2017, London.
- 8. 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, May 2017, USA.
- 9. S.Revathi, TK Radhakrishnan, N.Sivakumaran, "Climate control in greenhouse using intelligent control algorithms", American Control Conference (ACC), IEEE, pp. 887-892, May 2017, USA.

- 10. Rajendra Singh Thakur and N.Sivakumaran, "Segmentation and Colour Thresholding Based Growth Rate Estimation for Arabidopsis plant", Paper No.2017/2173 Feb 2017, MEMSEP, NIT, Trichy.
- 11. Bimal Kanta Sethi, J Ramanuja Vinayak, N.Sivakumaran, "Implementation of IMC based Controller for CFBC Boiler", Paper No. 2017/2176, Feb 2017, MEMSEP, NIT, Trichy.
- 12. S.Sankaranarayanan, N.Sivakumaran, G.Swaminathan, "Water hammer in pressurized water Distribution system: conceptual development of dynamic model and validation", TIMA, Jan 2017, MIT, Chennai.
- 13. C Sudalaimani, N.Sivakumaran, Sasi Pilacheri Meethal, T Elizabeth Thomas, S Rominus Valsalam, E Sathish, "Seizure Prediction using General Regression Neural Network", TIMA, Jan 2017, MIT, Chennai.
- 14. K. Rajkumar, S. Narayanan, N. Sivakumaran, "Design of Centralized Controller based on Inverted Decoupling Structure for non-square systems with time delay", TIMA, Jan 2017, MIT, Chennai.
- 15. S.Revathi, N.Sivakumaran, "Fuzzy based temperature control of greenhouse", 4 th IFAC Conference on Advances in Control and Optimization of Dynamical Systems(ACDOS), Vol. 49.No. 1, pp.549-554,2016.
- 16. 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 Engineering, ETAE2016, IIT Kharagpur,2016.Best paper Award
- 17. 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, Chennai. Best paper award.
- 18. 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'16, March 2016. Page. 481-485
- 19. 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, January 2016, Hyderabad.
- 20. 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, May 2015.
- 21. 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", pp. 239, ICGTEPC 2014.
- 22. 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, Notre Dame, IN 2014, USA.
- 23. E.Sathish, N.Sivakumaran, and Raji Sundararajan, "Classification of intracranial EEG signals using adaptive neuro fuzzy inference system, Proc. ESA Annual meeting on Electrostatics, Electrostatic society of America, University of Notre Dame, Notre Dame, IN 2014, USA.
- 24. S.Sankaranarayanan, N.Sivakumaran, G.Swaminathan "Optimal Network Design for Flow Process",pp. 270, ICGTEPC 2014.
- 25. 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 14,pp. 150-153, Elsevier Publication.
- 26. 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.
- 27. 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-2013,pp.30-34.
- 28. Navin John Mathew, K.R.Kandula, N.Sivakumaran, "Swing up and Stabilization control of a Rotary Inverted Pendulum", Id.No.128 DYCOPS 2013,IIT Bombay.
- 29. V.Kirubhakaran, T.K.Radhakrishnan, N.Sivakumaran, "Blood Glucose Concentration Regulation in Type1 Diabetics using Multi Parametric model Predictive Control: An Empirical approach, Id.No.68 CAB 2013,IIT Bombay.
- 30. T.Vinopraba, N.Sivakumaran, T.K.Radhakrishnan, "Design of fractional order controller for Biochemical Reactor", Id.No.8 CAB 2013, IIT Bombay.

- 31. Ashish Gupta, N.Sivakumaran, Ashalatha R. et al, "Statistical Parametric Mapping of EEG correlated fMRI data to detect Epileptic foci" BSSI 2012,IITM,Chennai.
- 32. 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, December 6-7, 2012, NIT, Jalandhar.
- 33. 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, December 6-7, 2012, NIT, Jalandhar.
- 34. A.Rajeev, S.Sujesh, N.Sivakumaran, C.V.Muraleedharan, "A Linear After-Load Model for a CardioVascular Pulse Duplicator" ICACCI 12,pp.493-497,2012.
- 35. 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, Rohtak, January 20-22, pp.307-312.
- 36. 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 2010, Jalandhar.
- 37. T.Vinopraba, N.Kiran Kumar, P.Satheesh Kumar, N.Sivakumaran, S.Narayanan, "Design and implementation of Fractional order Controllers", 49 th IEEE conference on decision and control, December 15-17, Atlanta, USA, 2010.
- 38. S.Nithya, N.Sivakumaran, T.K.Radhakrishnan, N.Anantharaman, Soft Computing based Controller Implementation for nonlinear process in real time, WCECS 2010, Sanfrancisco, pp.1021-26, 2010.
- 39. C Ahilan, S Kumanan, and N.Sivakumaran "Design and Implementation of Fuzzy Logic Controller for an Air conditioner with Energy saving", 7 th Global Conference on Sustainable Manufacturing GCSM, IITM,57-62,2009.
- 40. 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, pp.750-752, 2009.

- 41. S.Narayanan, N.Sivakumaran, T.Vinopraba, N.Selvaganesan, "IMC Based PI λDδ Controller Design for Gas Turbine Plant", International Conference on Modeling and Simulation (MS09), Dec 1-3, pp.386-390, 2009.
- 42. 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, pp.725 728, 2009.
- 43. 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.
- 44. 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.
- 45. C.Ahilan, S.Kumanan, N.Sivakumaran, "Optimizing Power Consumption for CNC turning process using grey based Taguchi Method", Proc. of the 2 nd Intl.&23 AIMTDR Conf,2008,IIT Madras, Chennai.
- 46. B.Subathra, K.Harikumar, N.Sivakumaran, T.K.Radhakrishnan, "Multivariable Predictive Control System Design Using a RNF Network", Proc. of Chemcon 2008.
- 47. Rajni Jain, N.Sivakumaran, T.K.Radhakrishnan, "Design of a Multimodel Controller for Heat Exchanger", Proc. Chemcon 2008.
- 48. Abhay Singh Gour, S.Nithya, N.Sivakumaran, 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 2007, Malaysia, November 25 -28, 2007,pp. 94-99.
- 49. Abhay Singh Gour, S.Nithya, N.Sivakumaran, T.K.RadhaKrishnan and N.Anantharaman, "Control of Heat Exchanger using Genetic Algorithm", International Conference on Modeling and Simulation, CITICOMS, August 25-27, 2007.
- 50. D.Kesavan, N.Sivakumaran, G.Balasubramaniam and T.K.Radhakrishnan, "Control of Neutralization process using Adaptive Interaction Technique" CITICOM07, T2ME150, 2007.
- 51. 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), 2007,pp 594-602.
- 52. 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, IIT, Mumbai,pp.3072-3077.
- 53. 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), Paper No. 192, 852-858, 2006, Kuala Lumpur, Malaysia.
- 54. 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), Paper No. 193, 863-868, 3-5 April 2006, Kuala Lumpur, Malaysia.
- 55. 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 Automation, Dec16-18 2004, Chennai, India.
- 56. Abhay Singh Gour, S.Nithya, N.Sivakumaran, 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.
- 57. T.Vinopraba, N.Sivakumaran, T.K.Radhakrishnan, S.Raghavan, "Optimal Control of Blood Glucose Regulation in Type I Diabetics", Proceedings of TIMA 2009, pp.84-92, MIT Campus, Anna University Chennai.
- 58. C.Ahilan, S.Kumanan, and N.Sivakumaran, "Design and implementation of fuzzy logic controller for an air conditioner with energy saving" 7 th Global Conference on Sustainable Manufacturing GCSM 2009 pp.57-62,2009.
- 59. Abhay Singh Gour, S.Nithya, N.Sivakumaran, 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 2007, Malaysia, November 25 -28,pp.94-99,2007.
- 60. 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, 6-8 December 2004, IIT, Kharagpur, India.

61. 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, Palakkad, Kerala, India, Sep 2003, Paper No: F5.

National Journals

- 1. V.Sridevi, D.Rathikarani, K.K.Anilkumar, N.Sivakumaran, "Minimum variance controller using Recursive Least Determinant algorithm", Journal of Instrument society of India, 2009.
- 2. N.Sivakumaran and T.K.Radhakrishnan, "Predictive controller Design for Nonlinear Chemical Processes" Indian Journal of Chemical Technology, 14, 2007, pp.341-349.
- 3. Boopathy, N.Sivakumaran, J. Sarat chandra babu and T.K.Radhakrishnan, "Identification and Control of Four tank system using Neural Networks plant inverse controller", Journal of Instrument Society of India 35(2) 2005,pp179-185.
- 4. N.Sivakumaran, E.V.Kanakasabai, P.S.Raja, Process Monitoring and Control using SCADA Software, Instrumentation and Control Journal, July-Aug 2004.

National Conference

- 1. Rajendra Singh Thakur and N.Sivakumaran, "Identification of Rice Quality Using Fuzzy Logic", Page.185-188, Proceedings of National Conference on CISMA-15,PEC,Puduchery, Jan 2016.
- 2. 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.
- 3. A.Gupta, N.Sivakumaran, V.Sridevi, "Investigations on EEG Signals using Spectral Analysis", FECIT-2011, pp.63.
- 4. 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),May 11-12,CSIO,Chandigarh, May 11-12, 2010.

- 5. S.Narayanan, T.Vinopraba, N.Sivakumaran, "Stabilization using Fractional order PIDμ controllers for First order Unstable Time Delay systems", TS 1057, Proceedings of Chemcon 2009, December 27- 29, Andhra university, Vishakapatnam.
- 6. T.Vinopraba, N.Sivakumaran, T.K.Radhakrishnan, "Implementation of Decentralised Controller for Couple tank system", TS 1212, Proceedings of Chemcon 2009, December 27- 29, Andhra university, Vishakapatnam.
- 7. 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, Pondicherry Engineering College, 7-8 Feb. 2008, pp. 47-52.
- 8. B.Subathra, K.Harikumar, N.Sivakumaran and T.K.Radhakrishnan, 'Fuzzy Control of A Multivariable System', CISMA07, Pondicherry Engineering College,7-8 Feb.2008,pp. 133-140.
- 9. N. Sivakumaran and T. K. Radhakrishnan, 'Control of Neutralization Process Using Recurrent Neural Networks', Paper No. 721, Presented at CHEMCON 2006, Dec. 26-29, 2006.
- 10. T.Vinopraba, S.Sutha, N.Sivakumaran, P.Lakshmi, "Modelling of Multi Variable System", national conference on Advance Techniques in Instrumentation, control and Communication Engineering, 22-24 July, 2009, pp.129-135.
- 11. N.Sivakumaran, J.Sarat chandra babu, and T.K.Radhakrishnan, "Control of Bioreactors using Recurrent Networks", NCPICD05, MIT, Dec 2005,pp258-334.
- 12. N.Sivakumaran, V.Kirubakaran, J.Sarat chandra babu, and T.K.Radhakrishnan, "Decentralized controller design for Multivariable process", ICECON05, NIT, Dec 2005, pp 64-70.
- 13. N.Sivakumaran, T. Venkatesh, S. Nagammai and T.K. Radhakrishnan, "Nonlinear Control of a Neutralization Process", Proc. of NCICCA2005, AKCE, Krishnankoil, April 2005, pp393-399.
- 14. N.Sivakumaran, J. Sarat Chandra babu and T.K.Radhakrishnan, "Control of Multivariable Non Minimum Phase system using Recurrent Neural Networks", Proc. of CHEMCON, Dec 2004, Mumbai, India.
- 15. 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, K.S.R College of Technology, Tiruchengode, July 2004, Paper no: IV(4.6).

- 16. 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 Chapter at Adhiyamaan Engineering college, Hosur, Sep. 2003,Page No: 2.21.
- 17. 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 at Shri Angalamman College of Engineering, Trichy, July 2003, Page No: 60.
- 18. 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 Chapter at Shri Angalamman College of Engineering, Trichy, Feb 2003, Page No: 49.
- 19. N.Sivakumaran, V.Gopalraja and V.Dharmalingam, "Auto tuning PID Controller using Ideal relay feedback technique" Proc. of National Conference on Intelligent Control, Crescent Engineering college, Chennai, Jan. 2003, Page No. 38.