


FACULTY PROFILE

Staff Name	Dr. M. SURESH
Faculty ID	TEC59
VIDWAN ID	523139
Photo	
Publon ID	https://www.webofscience.com/wos/author/record/ABD-1295-2020
Scopus ID	https://www.scopus.com/authid/detail.uri?authorId=57200904184 https://www.scopus.com/authid/detail.uri?authorId=57200904184
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Google Scholar ID	https://scholar.google.com/citations?user=wiEedEUAAAAJ&hl=en
LinkedIn ID	https://www.linkedin.com/in/dr-suresh-m-4456a8a3/
Anna University Supervisor Recognition No.	-
Designation	Associate Professor
Qualification	M.E., Ph.D.
Teaching Experience	24 years and 1 month
Area of Specialization	Softcomputing Techniques and Process Control
Subjects Handled	<ul style="list-style-type: none"> ✓ Control Systems ✓ Sensors and Transducers ✓ Process Dynamics and Control ✓ Digital Control System ✓ Logic and Distributed Control System ✓ Transducer Engineering ✓ Industrial Instrumentation – I & II ✓ Process Control ✓ Digital Logic Circuits ✓ Analytical Instrumentation ✓ Mechanical Measurements – I & II ✓ Electronic Devices and Circuits ✓ Artificial Intelligence and Neural Networks ✓ Process Instrumentation, Dynamics and Control ✓ Automotive Embedded System ✓ Advanced Digital System and Design ✓ Electric Vehicles and Power Management
Journals Published	<ul style="list-style-type: none"> • G Sivagurunathan, R Kotteeswaran, M Suresh, A Kirthini Godweena, 2021, Design of centralized controller for multivariable process using MOPSO algorithm, Indian Journal Of Science And Technology, Volume: 14, Issue: 26, 2021, Pages: 2223-2237, DOI: 10.17485/IJST/v14i26.539. • Divya Perumal, Dr. M. Suresh, 2020, Automated BFT testing in

LABCAR using ECU Test Tool, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 05 | May 2020.

- Palanisamy Boopathi Nevetha, **Maruthai Suresh**, 2016, 'Design of Decoupler and Performance Analysis of Distillation Column', International Journal Of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering Vol. 4, Issue 6, pp 40-43.
- R. Ranjitha, Vijay Ramraj Rangam, **M. Suresh**, 2016, 'Design Of Feed Forward Compensator For A Thermal Process', International Journal of Science, Engineering and Technology Research, Vol 5, Issue 6, pp. 2014-2028, 2016.
- T. Babu, **M. Suresh** and N. Pappa, 2015 'QFT Based Controller Design for Class of Nonlinear Uncertain System', Middle-East Journal of Scientific Research 23 (Sensing, Signal Processing and Security): 249-256, 2015 ISSN 1990-9233, DOI: 10.5829/idosi.mejsr.2015.23.ssps.104.
- **Suresh, M**, Selvakumar, C & Rani Hemamalini, R 2013, 'Active disturbance rejection control of nonlinear thermal process', International review on mechanical engineering, International review of mechanical Engineering, vol. 7, no. 6, pp. 1213 – 1217.
- **Suresh, M**, Selvakumar, C & Rani Hemamalini, R 2012, 'Design of feedforward controller for a FOPDT nonlinear thermal process', International review on modelling and simulations, vol. 5, No. 6, pp. 2507-2511.
- **Suresh, M**, Rani Hemamalini, R & Srinivasan, GJ 2010, 'Limitations of feedback, feedforward and IMC controller for a first order nonlinear process with dead time', Sensors & Transducers Journal, vol. 121, no.10, pp. 77-93.
- **Suresh, M**, Rani Hemamalini, R & Srinivasan, GJ 2009, 'Fuzzy logic based set-point weighted controller for an internal model based PID controller', Sensors & Transducers Journal, vol. 109, No. 10, pp. 29-42.
- **Suresh, M**, Rani Hemamalini, R & Srinivasan, GJ 2009, 'Integrated fuzzy logic based intelligent control of three tank system', Serbian Journal of Electrical Engineering, vol. 6, No. 1, pp.1-14.

Conference Published

International :

- ✓ **Suresh maruthai**, Koteswara Rao, 2023, A Robust Design of Intelligent Healthcare Monitoring and Alert Mechanism using Internet of Things with Learning Assistance, IEEE Sponsored International Conference On Multidisciplinary Research In Technology And Management (MRTM 2023).
- ✓ Rajanish Kumar Kaushal, G.R.Hemalakshmi, N.B.Prakash, **Suresh maruthai**, Keerat Kumar Gupta, Natrayan L, **2023**'Machine Learning and Cloud-based Mobile App for Real Time Skin Cancer Prediction', Proceedings of the 7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC 2023) IEEE Xplore Part Number: CFP23OSV-ART; ISBN: 979-8-3503-4148-5.
- ✓ Nivethitha M, Sornambiga S and **Dr. Suresh**, **2020**, Gesture Controlled Robotic Arm using Kinect, International E-Conference on Recent Trends in Electronics, Computing and Communication Engineering (ICRTECC 2020), p.21. ISBN:9-788190-994811.

- ✓ Sivagurunathan.G, Kotteeswaran.R, Suresh.M, Bat Algorithm based Centralized PI Controller for a Nonsquare Multivariable System with RHP Zeros, International Conference on Instrumentation and Control Engineering (ICECON - 2019), NIT Trichy
 - ✓ **M.Suresh**, C.Selvakumar, Mohamed Rashid, Siddikhan, **2017**, 'The performance analysis of PID Controller with set point filter and anti-integral windup for a FOPDT thermal process', IEEE Third international conference on sensing, signal processing and security (ICSSS 2017), 4 and 5 May 2017, ISBN: 978-1-5090-4929-(Online), ISBN: 978-1-5090-4930-1(Print), DOI: 10.1109/SSPS.2017.8071636.
 - ✓ Rani Hemamalini, R, Sudha, K, **Suresh, M** & Sri Madhavaraja, N, **2008**, 'Intelligent Fuzzy Control For Multi Variable Four Tank System', The 51st Annual POWID Conference, Scottsdale, Arizona, June 8-13.
 - ✓ Rani Hemamalini, & **Suresh, M**, **2003** 'Fuzzy Logic Augmented Feedforward Feedback Control of Processes', Aerospace Industries/Test Measurement Division 49th International Instrumentation Symposium, Orlando, FL, USA
- National :**
- ✓ **Maruthai Suresh** and Rani Hemamalini, 2003, Design of Hydraulic Circuits in a Hydraulic system, One Day Workshop on Recent developments in design of hydraulic machines. Shri Anagalamman College of Engineering & Technology, Trichy, 05.07.03.
 - ✓ **Maruthai Suresh** and Rani Hemamalini, 2003, Measuring Flow Rate Using Flow Imaging Technique, Recent trends in Flow Measuring Techniques. Shri Anagalamman College of Engineering & Technology, Trichy, 05.07.03.
 - ✓ **Maruthai Suresh**, Shanmugavalli and Rani Hemamalini, 2003, Flow Meter Using Cross Correlation, Recent trends in Flow Measuring Techniques. Shri Anagalamman College of Engineering & Technology, Trichy, 05.07.03
 - ✓ Maruthai Suresh and Rani Hemamalini, 2004, Fuzzy Logic application in GIS and Remote Sensing, Applications of GIS and GPS in Civil Engineering, Jaya Engineering College, Thiruninravur, 03.07.04

Conference Workshop/FDP Organised

- ✓ Co – Coordinator, Advanced Techniques in Instrumentation , control and Communication Engineering, Jan 24, 2007, sponsored by **DRDO**.
- ✓ Co – Coordinator, Soft Computing Techniques in Process Control and Instrumentation, Feb 12-14, 2007, sponsored by **AICTE**.
- ✓ Co – Coordinator, Learning system in process control: an appraisal of Fuzzy, neural and genetic algorithm, March 12 -24, 2007, sponsored by **AICTE**.
- ✓ Co – Coordinator, Third National Conference On Advanced Techniques in Instrumentation, control and Communication Engineering, JULY 22-24, 2009, sponsored by **AICTE**.
- ✓ Editor, International Conference on Modeling, Control, Automation and Communication (ICMCAC 2010), **Velammal Engineering College**, Chennai. December 20-21, 2010, 01.02.03.

**Conference
Workshop/FDP
Attended**

- ❖ NPTEL- AICTE FDP July – December 2024 : Reinforcement Learning -FDP
- ❖ NPTEL- AICTE FDP July – December 2024 : Introduction to Machine Learning -FDP
- ❖ NPTEL- AICTE FDP July – December 2024 : Data Science for Engineers-FDP
- ❖ NPTEL- AICTE FDP July – December 2024 : Data Base Management System -FDP
- ❖ AICTE Training and Learning (ATAL) Academy Faculty Development Program on Unlocking the Potential of AI: Journey from Transformer Models to GenAI, Applications from Industry to Space, and the Evolving Threat Landscape at ST.JOSEPH'S COLLEGE OF ENGINEERING from 14/10/2024 to 26/10/2024.
- ❖ AICTE Training and Learning (ATAL) Academy Faculty Development Program on QUANTUM CONNECTIONS: EXPLORING INTERDISCIPLINARY APPLICATIONS AND INSIGHTS at PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE from 19/08/2024 to 24/08/2024.
- ❖ NPTEL- AICTE FDP, Python for Data Science,, Jan-Apr 2024
- ❖ NPTEL- AICTE FDP, Modelling And Simulation Of Dynamic Systems, Jan-Apr 2024
- ❖ NPTEL- AICTE FDP, Industrial Automation And Control, Jan-Apr 2024
- ❖ NPTEL- AICTE FDP, Deep Learning, Jan-Apr 2024
- ❖ FDP on 'Building Advanced Data Analytics Applications With cloud' under Next Gen Employability Program from 18-12-2023 to 22-12-2023, Edunet Foundation.
- ❖ Online Elementary FDP on "Recent Trends in Electric Vehicles" from 05/07/2021 to 09/07/2021 at National Institute of Technology, Arunachal Pradesh .
- ❖ Online Elementary FDP on "Applications of Machine Learning for Autonomous futuristic Electric Vehicles" from 12/07/2021 to 16/07/2021 at National Institute of Technology, Calicut .
- ❖ Online Elementary FDP on "Industry Oriented FDP on Artificial Intelligence" from 07/06/2021 to 11/06/2021 at

MSME-Technology Development Centre (PPDC), Meerut.

❖ *Online Elementary FDP on "Cultivating Excellence in Implementation of Computational Science for Scientific and Technological Innovations" from 14/06/2021 to 18/06/2021 at National Institute of Technology Rourkela .*

❖ *International Webinar on "Design of Wind Tower Cooling System with passive Evaporative cooling", conducted by SRMIST- ENFUSE on 31st July 2020.*

❖ *Webinar "Adaptive Tracker For N-Link Rigid Robotic Manipulators Via Sliding Mode Control" organized by the Department of Electrical Engineering, K. K. Wagh Institute of Engineering Education and Research Nashik on 28th July, 2020.*

❖ *Online Webinar on "IPR and Technology Transfer", Institution's Innovation Council Innovation Ambassadors (IA) Programme, R.M.K. Engineering College, 12-7-2020*

❖ *Webinar on "Research aspects on Medical device development" conducted by EEE department, Nalla Narasimha Reddy Group of Institutions on 8th July 2020*

❖ *Webinar on "Role of language as the ultimate & vital factor for success in*

careers" organized by the Department of Electronics and Instrumentation Engineering, St. Joseph's College of Engineering, Chennai-119 in association with IEEE Control Systems Society on June 11, 2020.

❖ *Webinar on "Role of language as the ultimate & vital factor for success in careers" organized by the Department of Electronics and Instrumentation Engineering, St. Joseph's College of Engineering, Chennai-119 in association with IEEE Control Systems Society on June 11, 2020.*

❖ *Webinar on smart factory automation with digital twin and live demonstration on skillon365, conducted by MTAB TECHNOLOGY CENTER P LTD, Organized by Department of Electronics and Instrumentation Engineering of KCG College of Technology on 10 June 2020.*

❖ *Future Electric Grid Organized by Chennai Institute of Technology on 08-06-2020.*

❖ *Research Trends in VLSI Design from 25-05-20 to 29-05-20 (One Week)*

❖ *Organized by Electronics and Communication Engineering*

	<p><i>Department NITTTR, Chandigarh.</i></p> <p>❖ <i>Strategic Planning for Entrepreneurship Promotion from 04-05-20 to 08-05-20 (One Week) Organized by Entrepreneurship Development and Industrial Coordination Department, NITTTR, Chandigarh</i></p> <p>❖ <i>Scilab Programming from 14-04-20 to 18-04-20 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh</i></p> <p>❖ <i>Cloud, Fog and Edge Computing from 14-04-20 to 18-04-20 (One Week) Organized by Computer Science and Engineering Department, NITTTR, Chandigarh.</i></p> <p>❖ <i>Neural Network and CNN, Conducted by Curriculum Development Centre Department, from 09/04/2020 to 13/04/2020 (One Week) at NITTTR, Chandigarh</i></p> <p>❖ <i>Integrated Approach for Cyber Security in Power Sector, at The Institution of Engineers (India), Tamilnadu State Centre, Chennai by NATIONAL POWER TRAINING INSTITUTE, (Ministry of Power, Govt. of India), Southern Region, Neyveli on 28th November, 2018</i></p> <p>❖ <i>Process Instrumentation Dynamics and Control, Anna University Sponsored FDP, Dhaanish Ahmed College of Engineering – Chennai, 4th Dec 2017 to 10th Dec 2017</i></p> <p>❖ <i>Students Guidance and counseling, St. Peter's Engineering College, Avadi, Chennai, 29.7.05, 30.7.05 & 31.7.05</i></p> <p>❖ <i>Industrial Instrumentation & Process Control, Kongu Engineering College, Perundurai, 30.6.03 to 5.7.03.</i></p> <p>❖ <i>Trends in Industrial Instrumentation, REC, Trichy, 10.8.02 & 11.08.02</i></p>	
Patent Details	<ul style="list-style-type: none"> • <i>Novel Metal-Organic Frameworks For Efficient Gas Storage And Separation - 20/12/2024- Published</i> • <i>AI-Enhanced Continuous Integration And Deployment (CI/CD) Pipeline For Scalable Cloud-Native Applications - 29/11/2024- Published</i> • <i>Quantum Cryptography For Secure Cloud Computing Applications- 14/06/2024- Published</i> • <i>IoT-Based Automation For The Purpose Of Monitoring Temperature And Vibration In Processes And Preventing Accidents - 01/09/2023 – published</i> 	
Awards	➤ NPTEL BELIVER JAN –APR 2024	

		➤ NPTEL BELIVER JUL -DEC 2024
Professional Society Membership: Fello		<ul style="list-style-type: none"> ✓ Fellow Institute of Engineering (F-1234850) ✓ Solar Chartered Engineer (Certificate No. 526737-N, 23/01/2023) ✓ LMISTE
Funded Project Details		-
Consultancy		<ul style="list-style-type: none"> • B2U MUFFLER PROTECTOR INSERT ASSEMBLE SPM MACHINE, (From July 2019 to September 2019)- CDCE Automation: Rs.1,00,000/- (One Lakh Only)