



THAMIRABHARANI ENGINEERING COLLEGE

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Chatthirampudukulam, Chidambaranagar - Vepenkulam Road

Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

FACULTY PROFILE

PERSONAL DETAILS			
Name & Qualification	V. Anusha rani & M.E.,(PhD)		
Designation	Assistant Professor		
Department	EEE		
Total Teaching Experience	1 Year		
Total Research Experience	4 Years 9 Months		
Total Industry Experience	NIL		
Area of Specialization	Control Systems		
Email ID	anusharani151@gmail.com		
EDUCATION DETAILS			
Degree	Branch/ Specialization	University	Year
UG	Electronics and Instrumentation Engineering	Anna University	2014
PG	Control and Instrumentation Engineering	Anna University	2016
Ph.D	Process Dynamics and Control	Anna University	Thesis Submitted
RESEARCH / PUBLICATION DETAILS			



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1. V. Anusha Rani, D. Prabhakaran, M. Thirumarimurugan, “A Novel Optimization of Fractional Order PID Controller using Chaotic Maps Based Atomic Search Optimization for pH Control in Continuous Stirred Tank Reactor” in the Journal titled Journal of Vibration Engineering & Technologies, Springer Publications. 2022. DOI: 10.1007/s42417-022-00538-4.2022 **(Listed In Anna University Annexure, SCIE & Scopus Indexed)**.
2. V. Anusha Rani, D. Prabhakaran, M. Thirumarimurugan, “Temperature Control in an Exothermic Continuous Stirred Tank Reactor”, Journal of National Science Foundation Sri Lanka, 2022. ISSN: 2362-0161. (Acceptance Received). **(Listed In Anna University Annexure, SCIE & Scopus Indexed)**
3. Anusha Rani V, Prabhakaran D, Thirumarimurugan M, “A Novel FOPID²FF² Controller Optimized by a New Opposition Based Learning (OBL)-Black Widow Optimization (BWO) Algorithm: Application To CSTR”, Soft Computing, Springer Publications. **(Under Review)**. **(Listed In Anna University Annexure, SCIE & Scopus Indexed)**
4. V. Anusha Rani, D. Prabhakaran, M. Thirumarimurugan, “State Estimation in a Continuous Stirred Tank Reactor (CSTR) Using Observers”, Journal of Electrical Engineering, Vol 20, Issue 1, 2021. ISSN: 1582-4594. **(UGC, Web of Science Indexed)**
5. V. Anusha Rani, D. Prabhakaran, M. Thirumarimurugan, “Modeling and Control of pH Process Using Various Optimization Algorithms”, Journal of Qualitative Enquiry, Vol 12, Issue 7, 2021. ISSN: 1309-6591. **(Scopus, SCIE Indexed)**
6. V. Anusha Rani, D. Prabhakaran, M. Thirumarimurugan, “Modeling And Control of pH In a Continuous Stirred Tank Reactor (CSTR)”, Journal of Environmental Protection and Ecology, vol 21, Issue 2, 2020. ISSN 1311-5065. **(Listed In Anna University Annexure, SCIE & Scopus Indexed)**.
7. V. Anusha Rani, D. Prabhakaran, M. Thirumarimurugan, “Design of Robust Controllers for a Continuous Stirred Tank Reactor (CSTR)”, Tierärztliche Praxis, Vol 40, 2019. ISSN: 0303- 6286. **(Thomson Reuters & Google Scholar Indexed)**
8. V. Anusha Rani, “Automatic Dual Line Lubrication of 1400 Liter Excavator Machine Using PLC”, International Journal of Innovative Research in Science, Engineering and Technology, Vol 6, Issue 7, 2017. ISSN (online): 2319- 8753 ISSN (print): 2347- 6710. **(Indexed in Web of Science)**
9. V. Anusha Rani, “Sliding Mode Control for Descriptor Systems”, International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering, vol-6, Issue-7, 2017, ISSN No (online): 2278-8875, ISSN No (print): 2320-3765. **(Google Scholar indexed)**
10. V. Anusha Rani, “PID Controller- A Survey”, International journal of Advanced



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Conference Proceedings

1. "A Review on Optimal Control Theory in Biomedical Applications", International Conference on Future Prospects of Biotechnology and Bio-Medical Applications, 18th December 2020, Sri Sakthi Institute of Engineering and Technology, Coimbatore.
2. "Review on modeling and control of a Continuous Stirred Tank Reactor (CSTR) and its application in Waste Water Treatment" presented in National conference titled "Environmental Pollution and control Technologies", August 31 2019.
3. "Performance Analysis of Observers for Fluidized Bed Dryer" presented in National conference titled "Communication, Computing and System design (NC³SD-2019)".
(Received Best Paper Award)
4. "Trajectory Tracking Control of Continuous Stirred Tank Reactor using Sliding Mode Strategy," presented in IEEE Sponsored International Conference on Engineering and Technology, 30-31 August 2018.
5. "Observer based controller design for a Continuous Stirred Tank Reactor (CSTR)", presented in International Conference on Advances and Challenges for Sustainable Ecosystems, 06-08 December 2018.
6. "Sliding mode control for Robust regulation of Chemical Processes" presented in International Conference on Control, Computing and Embedded system (Jan 2016).

CITATIONS

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FACULTY DEVELOPMENT PROGRAMME(FDP) ATTENDED / ORGANIZED

Sl. No.	Name of the FDP	Name and address of the venue	Year
1.	Short-term course on "Learn to design your own solar home system"	Energy Swaraj Foundation in association with Rathinam Technical campus,	2020
2.	Non Linear Dynamical Systems: Concepts and Applications	Coimbatore Institute of Technology (CIT)- Teaching Learning Centre (TLC)	2019
3.	Recent Advances in Chemical, Biological, Energy and Environment	Coimbatore Institute of Technology	2019
4.	Reference Management Tools, Statistical Analysis using R and LATEX	Coimbatore Institute of Technology (CIT)- Teaching Learning Centre (TLC)	2018



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ADDITIONAL RESPONSIBILITIES

Sl. No.	Responsibilities	Description	Year
1.	Mentor File	Maintaining The Mentor-Mentee List	2022
2.	NAAC Criteria 2 Department Incharge	Preparing and collecting Criteria Related Files	2022

AWARDS / ACHIEVEMENTS

Sl. No.	Awards/ Achievements	Description	Year
1.	Reviewer in the Journal of "Soft Computing"	Soft Computing Springer Publications	2022
2.	Certified as "ENERGY LITERATE"	Energy Swaraj Foundation in association with Rathinam Technical campus, Coimbatore	2020
3.	Cleared VANTAGE level	Business English Certification	2016