Dr D Prabhakaran, MTech, MBA, PhD,

Professor

Department of Chemical Engineering Coimbatore Institute of Technology

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# Curriculum Vitae

1 Name Dr. D. PRABHAKARAN

Date of Birth 07.03.1968Present Designation Professor

4 Official Address Department of Chemical Engineering,

Coimbatore Institute of Technology,

Coimbatore - 641 014

Mobile Number: 9787772702

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5 Residential Address 10, 11 ATV Samy Naidu Street,

Peelamedu, Coimbatore - 641 004

# 6. Educational Qualification

Degree	Field of Specialisation	College	% of Marks / Class obtained	University	Year
BTech	Chemical Enginerirng	Coimbatore Institute of Technology	74(First Class)	Bharathiar University	1990
MTech	Chemical Enginerirng	Coimbatore Institute of Technology	82 (First lass)	Bharathiar University	2001
PhD	Chemical Engineering	Coimbatore Institute of Technology	Commended	Anna University Coimbatore	2011

#### 7. Employment Record (starting from present position)

Teaching Experience: 25Years

Institute / College	Designation	Period
	Professor	27.11.2014 onwards
Department of Chemical	Associate Professor	20.5. 2009 to 27.11.2014
Engineering, Coimbatore Institute of Technology,	Lecturer(Selection Grade)	1.4.2001 to 19.5.2009
Coimbatore	Lecturer(Senior Grade)	1.12.1995 to 31.3.2001
	Temporary Lecturer	1.7.1993 to 1.12.1995

# 8. Areas of Teaching Interest

- Process Economics and Industrial Management
- Process Dynamics and Control
- Environmental Engineering

## 9. Courses Taught

## **Undergraduate Level:**

- Process Equipment Design and Drawing
- Chemical Process Industries
- Process Utilities
- Process Instrumentation Dynamics and Control
- Process Economics and Industrial Management
- Environmental Engineering

## **Postgraduate Level:**

- Advanced Process Dynamics and Control
- Fluidization Engineering
- Technology of Composites

## 10. Laboratories Handing

#### **Undergraduate Level:**

- Fluid Mechanics
- Mechanical Operations Laboratory

# **Postgraduate Level:**

 Heat Exchanger Temperature Control module equipment has been created under TEQIP Scheme, 2013

## 11. R&D Projects Received/Completed

S. No	Title of the project	Sponsored by	Amount (Rs)	Status of the project
1	Bioremediation and reuse of spent dye baths (2011-2013)	AICTE	4,00,0000-/-	Completed
2	E-waste disposal and recovery of Noble metals (2013-2016)	AICTE	11,50,000-/-	Completed
3	Modernization of Fluid mechanics and mechanical operations laboratory(2017-19)	AICTE	13,15,000-/-	Completed

#### 12. Research Details

- o PhD
  - 1 full time (completed)
    - Certain Investigation on delay dependant stability of a class of dynamical systems with time delay.
  - 1 part time (completed)
    - Dynamic modeling of E-Waste recycling system and recovery of Noble metals.
  - 3 full time (Pursuing)
    - Performance Analysis of Robust Tracking Control for MIMO systems using various Algorithms.
    - Active Disturbance Rejection Control for MIMO Uncertain Systems.
    - Recycling and recovery of E-waste using Electro-chemical methods: modeling and simulation studies.
  - 2 Part time (Pursuing)
    - Experimental and computational studies on heat transfer and fluid flow in heat exchanger.

- Synthesis and Characterization of quantum dots for biological applications.
- o M. Tech
  - Guided 20 M. Tech Students
- o B. Tech
  - Guided 39 Batches

## 13. Laboratory Development

The following new equipment's for conducting laboratory experiments were purchased under the State Government Grant in the Fluid Mechanics and Mechanical Operations Laboratory and the new experiments were created and administered to students.

#### Undergraduate Level

- Bernoulli's Theorem Apparatus (January 2005)
- Plate and Frame Filter Press (January 2005)
- Jaw Crusher (2008)
- Hammer Mill (2008)
- Frictional loss Coefficient in Annular Pipes (2010)
- Pitot Tube (2011)
- Elutriator(2011)
- Centrifugal pump (2013)
- Reciprocating pump (Jan 2014)
- Venturi and orifice (March 2017)

#### Postgraduate Level

 The new laboratory for Post Graduate Process Dynamics and Control course has been developed and 5 new experiments have been introduced in Process Dynamics and Control Lab during September 2014.

# 14. Summer/Winter Schools, Workshops, and Conferences Coordinated and Organized

Title of the programme	Sponsored by	Amount (Rs)
Recent Trends in Nano Materials and its Applications (2020-2021)	AICTE	4,00,000/-

Recent Trends in Clean Technology for Sustainable Environment(RTICT) 16th - 22nd April 2018	AICTE	5,00,000/-
Recent advancement in Alternative Energy Technology and Management, March 20- 26,2017	AICTE	5,00,000/-
Recent Trends in Energy, Environment and E-waste Management, November 02-08, 2015	AICTE	2,55,000-/-
Contemporary Trends in process system Engineering and Management, November 10-14, 2014	AICTE	2,50,000-/-
Industrial Lubricants and Chemicals: Global Scenario & New Trends, September 21, 2013.	UGC	20,000-/-
Current Challenges in Oil, Gas, and Allied Sector, March 22, 2012	Department of Chemical Engineering, Coimbatore Institute of Technology	20,000-/-
Green Engineering Concepts for Process design and Industrial Operations, November 07-13, 2011	AICTE	3,50,000-/-
Biotechnology for human welfare, July 2007	TNAU & Department of Chemical Engineering, Coimbatore Institute of Technology	20,000-/-
Energy Auditing Conservation and Management in Chemical Industries, July 14, 2006	IIPC and IIChE, Coimbatore Regional Centre & Department of Chemical Engineering, Coimbatore Institute of Technology	20,000-/-
Safety auditing & Disaster Management, March 8, 2004	IIPC, AICTE, IIChE Coimbatore Regional Centre & Department of Chemical Engineering, Coimbatore Institute of Technology	20,000-/-

Treatment of Industrial Effluents, December 18, 2004	IIPC, AICTE, IIChE Coimbatore Regional Centre & Department of Chemical Engineering, Coimbatore Institute of Technology	20,000-/-
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#### 15. List of Conferences, Summer/Winter schools, Short-term Courses attended

- 1. One day workshop on "Open book examination" at Coimbatore Institute of Technology, Coimbatore on 13<sup>th</sup> September 2019 organized by TEQIP (Phase III).
- 2. Design, Develop and Deliver Online courses: Hands on approach Phase 1, Sponsored by MeitY, Govt. of India, organized by Electronics and ICT academy National Institute of Technology Warangal, (T.S.), India and Coimbatore Institute of Technology, Coimbatore during 18<sup>th</sup>-23<sup>rd</sup> May 2019.
- **3.** Recent Trends in Energy, Environment and Solid Waste Management (REESM-2017), Sponsored by AICTE, organized by Department of Chemical Engineering, Coimbatore Institute of Technology, during 13<sup>th</sup>-26<sup>th</sup> Nov 2017.
- **4.** Current Scenario in Advanced Material Science and Engineering (NANO-BIO 2017), Sponsored by AICTE, organized by Department of Chemical Engineering, Coimbatore Institute of Technology, during 30<sup>th</sup> Oct-12<sup>th</sup> Nov 2017.
- **5.** Distribution for present power scenario, sponsored by AICTE, organized by Department of Electrical and Electronics Engineering, Coimbatore Institute of Technology, during February 2-12, 2017
- 6. Outcome Based Education by Centre for Education Technology, IIT Kharagpur, sponsored by TEQIP, organized by Coimbatore Institute of Technology, during November 4-6, 2016
- 7. Blooms Taxonomy of Educational Objectives and construction of Higher order questions, sponsored by TEQIP, organized by Coimbatore Institute of Technology, during October 22, 2016
- 8. Application of Ansys in Heat Transfer, sponsored by TEQIP, organized by department of Chemical Engineering, CIT, Coimbatore, during September 2-3,2016.
- 9. Capacity Management Enhancement for Professors, by Coimbatore Productivity Council, sponsored by TEQIP, organized by Coimbatore Institute of Technology, during August 19-21, 2016

- 10. Modern Trends, Challenges in Waste Water Treatment and Sludge Disposal, sponsored by AICTE, organized by Coimbatore Institute of Technology, during February 8-14, 2016
- 11. Occupational Health, Safety and Security Management in Engineering Industry, sponsored by AICTE, organized by Coimbatore Institute of Technology, during December 7-13, 2015
- 12. Advances in new Engineering Materials, sponsored by AICTE, organized by Coimbatore Institute of Technology, during November 23-29, 2015
- 13. Synthesis, Characterization and Applications of Biomaterials, sponsored by UGC, organized by Coimbatore Institute of Technology, during July 20-24, 2015
- 14. Corporate Information Security and Policies for Chemical and Allied industries, sponsored by TEQIP, organized by Coimbatore Institute of Technology, during December 17-21, 2013
- 15. Management Capacity Enhancement Programme by Indian Institute of Management, Indore, sponsored by TEQIP, organized by Coimbatore Institute of Technology, during August 27-31, 2013
- 16. Recent Design Concept of Heat Transfer Equipment in Refineries, Fertilizers and Allied Industries, sponsored by Department of Chemical Engineering, Coimbatore Institute of Technology, organized by Coimbatore Institute of Technology, during August 17, 2013
- 17. Biomimetic Materials and Industrial Application, sponsored by IIChE, Coimbatore Chapter, organized by Coimbatore Institute of Technology, during July 20, 2013
- 18. Recent Design Concepts of Heat Transfer Equipment's in Refineries, Fertilizers and Allied Industries, sponsored by TEQIP, March 17, 2013.
- 19. Recent trends in Oil, gas and Allied Industries, sponsored by IIChE, Coimbatore Chapter, March 23, 2012.
- 20. Intellectual Property Rights Awareness in E & IT sector, sponsored by the Department of Government of Information Technology, Ministry of Communication &IT, Government of India, March 16, 2012.
- 21. Power Management and energy security initiatives for socio economic development in India, sponsored by AICTE, organized by Coimbatore Institute of Technology, during November 13-27, 2011
- 22. Energy Auditing, Conservation and Management in Chemical and Allied Industries, sponsored by AICTE, organized by Coimbatore Institute of Technology, during May 16-22, 2010.
- 23. Impact of Global warming and Mitigation Opportunities, sponsored by AICTE, organized by PSG College of Technology, Coimbatore, during May 7-20, 2006.

- 24. Communication requirements in Engineering Education, sponsored by DTE approved, organized by PSG College of Technology, Coimbatore, during November 21 to December 4, 2003
- 25. Recent Trends adopted in Domestic and Industrial Effluent treatment, sponsored by AICTE-ISTE, organized by Kongu Engineering College, Perundurai, during October 29 to November 10, 2001
- 26. Staff Development Programme, sponsored by AICTE, organized by PSG College of Technology, Coimbatore, during May 7-26, 2001
- 27. Advanced waste water treatment, sponsored by ISTE, organized by Coimbatore Institute of Technology, during May 16-27, 1994

#### 16. Membership of Scientific and Professional Societies:

- Life member in Indian Institute of Chemical Engineers
- Life member in Indian Society for Technical Education
- Member in Asia- Pacific Chemical, Biological & Environmental Engineering Society-(APCBEES)

# 17. Awards/Merit certificates /prizes:

- Appreciated for sharing his knowledge as guest speaker for B.Tech. (chemical engineering) First year Induction programme on 05<sup>th</sup> August 2019 at Department of Chemical Engineering, Coimbatore Institute of Technology, Coimbatore - 641 014.
- Appreciated for Good Academic performance indicator for the year 2018 by Coimbatore Institute of Technology, Coimbatore 641 014.
- Under my guidance PG student Gayathri M, Sowbagya P received Best paper award for the paper "Performance analysis of observers for Fluidized bed dryers", in National Conference on Communication, Computing and system design , 19<sup>th</sup> March 2019, PSG Institute of Technology and Applied Research, Coimbatore.
- Under my guidance PG student Mr P Sivakumar received the best PG project award from CHEMCON Dec-2014 - (AMBUJA's Young Research's Award for doing post graduate studies).
- Under my Guidance UG students Ms V Bhuvaneswari and Mr S Aravindkumar received the best project award from Entrepreneurship and Development Cell (EDC), Conducted by CIT Research and Development Forum, (CReDeF) Coimbatore Institute of Technology, during the year 2015 and March-2016.

- Under my Guidance UG students Mr P.Varun Prasath received the best project award from ITP publishing India, sponsored by ADITYA BIRLA GROUP manufacturing Today-reinventing the future-Innovation at work. The project title was Preparation of clinker from paper pulp industry wastes, July 2016.
- Venkatachalam V, Prabhakaran D, Thirumarimurugan M, Ramakrishnan K, "Stability analysis of network Controlled DC motor speed control system with constant and time-varying delay" 4<sup>th</sup> International Conference on Advanced computing and communication systems, 1856-1862, 6-7 January, 2017.

# 18. Participation in Institutional / Departmental/Outreach Activities:

#### Institutional / Departmental Activities

- o Department Coordinator for NAAC preparation since Jan 2017
- Member Academic council ,CIT, Coimbatore since 2017
- Staff Advisor, Rotract Club of Coimbatore Institute of Technology since 2016
- Department Coordinator for CBCS UG Curriculum preparation since 2015
- Department Coordinator for Anna University affiliation during 2013-2016
- Department Coordinator for AICTE Course approval during 2013-2016
- o Department Coordinator for NBA-SAR preparation during 2013-2016
- Member Implementation Committee TEQIP Phase II during 2013-16
- Member Anti-ragging Committee, Coimbatore Institute of Technology since 2013
- Honorary Secretary, IIChE, Coimbatore Regional Centre during 2003 -2006 and 2015 onwards
- College General Time Table Convener for the academic year 2008-2009
- Treasurer, OSAN, Coimbatore Institute of Technology, during 2003 2006
- Staff Advisor, Chemical Engineering Association, Coimbatore Institute of Technology during 2003-2006
- Department Time Table Convener during 1999 to 2005
- General Convener, College Time Table Committee for the academic year 2002-2003
- Member, Board of Studies, Coimbatore Institute of Technology

#### **Extension/Outreach Activities**

- Honorary Secretary, IIChE Coimbatore Regional Centre during 2003 -2006 and 2015 onwards
- o Examiner PhD Viva Voce, Anna University Chennai

- o External Examiner, Anna University, AC College of Technology, Chennai
- o Member Affiliation Inspection Committee, Anna University Chennai
- Member UG and PG Board Question Paper Scrutiny, Controller of Examinations, Anna University Chennai
- Technical Session Chair, National Level Symposium Sri Venkateswara College of Engineering, Kongu College of Engineering and actively involved in other colleges as Resource Person
- Offered consultancy services to the nearby industries for the product development and analytical services. Recently consultancy services offered to EICL Ltd., Shimoga plant in the areas of waste water treatment and Energy conservation.

# 19. Paper Presentations and Publications

## Papers Published in referred International & National Journals:

- 1. Anusha Rani V, **Prabhakaran D,** Thirumarimurugan M, Modelling and Control of pH in a Continuous Stirred Tank Reactor (CSTR), Journal Of Environmental Protection and Ecology, Volume 21(2020), Issue 2, Pages 413-422.
- 2. Guna G, **Prabhakaran D**, Thirumarimurugan M, Active Disturbance Rejection Control(ADRC) for a pilot scale Reverse osmosis system, Journal of Environmental protection and Ecology, Book 4, Vol 20(2019), December 2019.
- 3. Venkatachalam V, **Prabhakaran D**, Ramakrishnan K, Delay dependant stability analysis for nonlinearly perturbed and parametric uncertain heatexchanger system with time varying delay, Journal of applied research and technology,17(2019) 313-325.
- Venkatachalam V, Prabhakaran D, Thirumarimurugan M, Ramakrishnan K, LMI based Stability analysis of Non-linearly perturbed DC Motor Speed Control System with Constant and Time-varying Delays", International Journal of power Electronics, Inderscience, Vol 10, Nos.1/2, July 2019. IF:0.32
- 5. Sivakumar, P.; **Prabhakaran, D.** and Thirumarimurugan M, "Optimization studies on Recovery of metals from Printed Circuit Board waste", Bio-organic chemistry and applications, Volume 2018, 10 pages.
- Venkatachalam V & Prabhakaran D, "Stability Analysis of Network Controlled Temperature Control System with Additive Delays", Computer Modeling in Engineering and Science, Vol. 114(3), pp.321-334, 2018. IF:1.06
- 7. Venkatachalam V, **Prabhakaran D**, Thirumarimurugan M, Ramakrishnan K, "Stability of networked based thermal control system with time-invariant delay" International Research Journal of Pharmacy, vol.8(10), 2017. IF:0.33
- 8. Venkatachalam V, **Prabhakaran D**, Thirumarimurugan M, Ramakrishnan K, "Stability analysis of uncertain temperature control system with two

- additive delays and nonlinear perturbation", Journal of Advances in Chemistry, vol. 13(10), pp. 5927-5934, Feb 2017. IF:1.152
- 9. Jagadesh R, Magesh R, Mukesh Kumar A, **Prabhakaran D**, "Heat transfer analysis of MgO nanofluids of varying concentrations using Plate Type Heat Exchanger" International Journal of Engineering, 14<sup>th</sup> International conference on Development in Science, Management and Engineering (ICDSME 17), 14 & 15 April 2017.
- Saranya, SN.; Sivalingam, A.; Prabhakaran, D. and Thirumarimurugan, M. Moral Dilemma-An Impact on Moral Autonomy, International Journal of Research in Social Sciences, Vol. 6, No. 1, pp. 123-134, ISSN: 2249-2496, January 2016. IF:7.081
- 11. Guna, G.; **Prabhakaran, D.**; Sivalingam, A. and Thirumarimurugan, M. A Study on need of Entrepreneur's for development and to maintain workforce balance in Tamilnadu, International Journal of Research in Management and Technology, Vol. 6, No. 1, pp.12-15, ISSN: 2249-9563, January 2016. IF:0.765
- 12. Sowparnika, GC.; Sivalingam, A. and **Prabhakaran**, **D**. Professionalism and their Impact on Society due to Laxity, International Journal of Social Science and Inter Disciplinary Research, Vol. 4, No. 12, pp. 1-9, ISSN: 2277-3630, December 2015. IF:3.503
- 13. Anandhi, E. and **Prabhakaran**, **D**. Experimental Study on Effect of Electro Chlorination System for Heat Exchanger Enhancement in Plate Heat Exchanger, Australian Journal of Basic and Applied Sciences, Vol. 9, No. 33, pp. 122-126, October 2015. IF:2.5
- 14. Guna, G.; Sivakumar, P.; **Prabhakaran, D.** and Thirumarimurugan, M. A Study on Recovery of E-Waste by Hydrometallurgical Process, Australian Journal of Basic and Applied Sciences, Vol. 9, No. 33, pp. 68-71, October 2015. IF:2.5
- Saranya, SN.; Venkatachalam, V.; Prabhakaran, D. and Thirumarimurugan, M. A Comparative Study on IMC and PID Controller in an Heat Exchanger, Australian Journal of Basic and Applied Sciences, Vol. 9, No. 33, pp. 64-67, October 2015. IF:2.5
- Paarkavi, P.; Sivalingam, A.; Prabhakaran, D. and Thirumarimurugan, M. Study on Self Confidence and Challenges in Workplace, International Journal of Research in Social Sciences, Vol. 5, No. 3, pp. 459-465, August 2015.
   IF: 7.089
- 17. Sri Gokilavani, N.; **Prabhakaran, D.** and Kannadasan, T. Experimental Studies and CFD Modeling on Solar Distillation system, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 3, No. 9, pp. 15818-15822, September 2014. IF:7.089

- 18. Kannan, G.; **Prabhakaran, D.**; Sivakumar, P. and Thirumarimurugan, M. Recovery of Metals from Electronic Waste using Electrowinning Process, Journal of Chemical and Pharmaceutical Science, Special Issue 4, pp.136-137, ISSN: 0974-2115, 2014.
- 19. Sri Gokilavani, N.; **Prabhakaran, D.** and Kannadasan, T. Various Models of Traditional Solar Distillation System for Water Desalination A Review, Journal of Chemical, Biological and Physical Sciences, Vol. 4, No. 2; pp. 1419-1424, 2014. IF:0.22
- 20. Arensen Aier; **Prabhakaran**, **D**. and Kannadasan, T. Recovery of Noble Metals from Electronic waste by Pyrometallurgy Process, International Journal of Scientific Research, Vol. 2, No. 12, pp. 209-212, December 2013, ISSN No 2277-8179. IF:0.13
- 21. Sri Gokilavani, N.; **Prabhakaran, D.** and Kannadasan, T. Solid waste management challenges in India comparing with other developing nations A review, International Journal of Scientific Research, Vol. 2, No. 12, pp. 176-177, 2013. IF:0.13
- 22. Sivakumar, P.; **Prabhakaran**, **D**. and Kannadasan, T. Comparative Analysis of Advanced Controllers in a Heat Exchanger, American Journal of Engineering Research, Vol. 2, No. 1, pp. 1-6, 2013.
- 23. Sivakumar, P.; **Prabhakaran, D.**; Kannadasan, T. and Karthikeyan, S. Optimization studies on Electrochemical and Biosorption Treatment of Effluent containing Nitrobenzene by RSM, International Journal of Bio Sciences, Vol. 2, pp. 1-7, 2013. IF: 0.553
- 24. Sivakumar, P.; Karthikeyan, S; **Prabhakaran, D**. and Kannadasan, T. Sequential studies on Electrochemical and Biosorption Treatment of on Effluent Containing Nitrobenzene and Optimization using RSM, International Journal of Engineering and Sciences, Vol. 2, No. 2, pp. 31-39, 2013. IF:1.807
- 25. Sivakumar, P.; Karthikeyan, S; **Prabhakaran, D**. and Kannadasan, T. Experimental studies on Electrochemical and Biosorption Treatment of Effluent containing Nitro Benzene and Optimization using RSM, International Journal of Engineering Research, Vol. 3, No. 1, pp.343-348, January February 2013. IF:3.851
- 26. Sivakumar, P; **Prabhakaran**, **D**. and Kannadasan, T. Temperature control of shell and tube heat exchanger by using Intelligent Controllers Case Study, International Journal of Computational Engineering Research, Vol.2, No. 8, pp. 285-291, December 2012. IF:1.145
- 27. Sivakumar, P; **Prabhakaran, D.** and Kannadasan, T. Temperature control of shell and tube heat exchanger by using Intelligent Controllers-Case study International Journal of Computer Applications, Vol.59, No.9, pp. 5-11, December 2012. IF:3.12

- 28. Sivalingam, A.; Kannadasan, T. Thirumarimurugan, M. and **Prabhakaran, D.** Modeling and Simulation of Three Phase Fluidized Bed Characteristics using MATLAB, International Journal of Bioscience, Biochemistry and Bioinformatics, Vol.2, No.6, pp. 411-415, November 2012.
- 29. **Prabhakaran**, **D**.; Kannadasan, T. Thirumarimurugan, M; and Chellamboli, C. Experimental studies on Electrochemical and Photo Oxidation of Effluent containing Ethyl Benzene and Optimization using RSM, International Journal of Bioscience, Biochemistry and Bioinformatics, Vol.2, No.6, pp. 369-373, November 2012.
- 30. Thirumarimurugan, M; Sivakumar, VM.; Merly Xavier, A.; **Prabhakaran, D.**; and Kannadasan, T. Preparation of Biodiesel from Sunflower Oil by Tranesterification, International Journal of Bioscience, Biochemistry and Bioinformatics, Vol.2, No.6, pp.441-444, November 2012.
- 31. **Prabhakaran, D.**; Kannadasan, T.; Rajasekaran, S. and Sivakumar, P. Comparative Study of Intelligent Controllers in Shell and Tube Heat Exchanger, Journal of Chemical Science Photon Journal, Vol. 59, No. 9, pp. 181-186, 2012. IF:4.47
- 32. **Prabhakaran, D.**; Kannadasan, T.; Chellamboli, C. and Sivakumar, P. Experimental studies on Electrochemical and Photo oxidation of Effluent containing Ethyl Benzene and Optimization using RSM, Journal of Advanced Scientific Research, Vol. 3, No. 4, pp 89-93, 2012. IF:0.567
- 33. **Prabhakaran**, **D**.; Ahmed Basha, C.; Kannadasan, T. and Aravindan, P. Removal hydroquinone from water by Electro coagulation using flow cell and optimization by Response Surface Methodology, Journal of Environmental Science and Health, Part A: Toxic/Hazardous substances and Environmental Engineering Taylor & Francis, Vol.45, No.4, pp. 400-412, ISSN: 1735-1472, March 2010. IF:1.67
- 34. Ahmed Basha, C.; Kannadasan, T. and **Prabhakaran**, **D**. An Investigation into the Experimental and Simulated Studies for the Treatment of Resin effluent by Electrochemical Oxidation, Journal of Process & Plant Engineering, Vol. 27, No. 3, pp. 33-37, ISSN: 0970-1729, October December 2009.
- 35. **Prabhakaran, D.**; Kannadasan, T. and Ahmed Basha, C. Mediated Electrochemical Oxidation Process for Destruction of TOC in Batch recirculation reactor, International Journal of ChemTech Research Vol.1, No.4, pp. 962-969, 2009. ISSN: 0974-4290, Oct-Dec, 2009. IF:0.34
- 36. **Prabhakaran**, **D**.; Kannadasan, T. and Ahmed Basha, C. Treatability of resin effluents by electrochemical oxidation using batch recirculation reactor, International Journal of Environmental Science and Technology, Vol. 6, No.3, pp. 491-498, 2009. ISSN: 1735-1472, Summer 2009. IF:1.76

37. **Prabhakaran, D.**; Kannadasan, T. and Ahmed Basha, C. Treatability of Resin Effluent by Electrochemical Oxidation, I-manager's Journal on future Engineering and Technology, Vol.4, No.4, pp. 29-36, May-July-2009. IF:0.72

# Papers Presented in International & National Conferences

- 1. Aishwarya R, **Prabhakaran D**, Thirumarimurugan M & Akash R, "Synthesis of Gold Nano Particles for Degradation of DDT", International Conference on Triple Helix Ecosystem for Earth, Environment and Energy(THE3E 2020), 18<sup>th</sup> & 19<sup>th</sup> March 2020, PSG Institute of Technology and Research, Coimbatore.
- 2. Balaji R, **Prabhakaran D** & Thirumarimurugan M, "Review on Recycling Waste Printed Circuit Board from E-waste Towards Circular Economy", International Conference on Triple Helix Ecosystem for Earth, Environment and Energy(THE3E 2020), 18<sup>th</sup> & 19<sup>th</sup> March 2020, PSG Institute of Technology and Research, Coimbatore.
- 3. Guna G, **Prabhakaran D**, Thirumariurugan M & Meena M, "Experimentation and Simulation Studies of Reverse Osmosis Process Using Various Control Algorithms", National Conference on Advances in Chemical Engineering and Science (ACES), 28<sup>th</sup> & 29<sup>th</sup> February 2020, Indian Institute of Science Education and Research, Bhopal.
- 4. Meena M, Guna G, **Prabhakaran D** & Thirumarimurugan M, "A laconic review on the performance analysis of Reverse Osmosis process", National Conference on Environmental protection and control technologies 2019, 31<sup>st</sup> August 2019, Annamalai University, Chidambaram.
- Uthra N, Anusharani V, Prabhakaran D & Thirumarimurugan M, "Review on modeling and control of a Continuous stirred tank reactor and its application in waste water treatment", National Conference on Environmental protection and control technologies – 2019, 31<sup>st</sup> August 2019, Annamalai University, Chidambaram.
- 6. Praveen S, Guna G, Prabhakaran D & Thirumarimurugan M, "Certain investigation on controllers used in shell and tube heat exchanger", 8<sup>th</sup> National Conference on Emerging trends in Electronics, Instrumentation, Automation and control, 22<sup>nd</sup> March 2019, Karpagam college of Engineering, Coimbatore.
- 7. Gayathri M, Sowbagya P, Anusharani V, **Prabhakaran D** & Thirumarimurugan M, "Performance analysis of observers for Fluidized bed dryers", National Conference on Communication, Computing and system design, 19<sup>th</sup> March 2019, PSG Institute of Technology and Applied Research, Coimbatore.
- 8. Guna G, **Prabhakaran D** & Thirumarimurugan M, "Active Disturbance Rejection control for a pilot scale RO system", International Conference on Advances and Challenges for Sustainable Ecosystem, 6<sup>th</sup>- 8<sup>th</sup> December 2018, NIT- Tiruchirappalli.

- 9. Anusharani V, **Prabhakaran D** & Thirumarimurugan M, "Observer based controller design for Continuous stirred tank reactor", International Conference on Advances and Challenges for Sustainable Ecosystem, 6<sup>th</sup>- 8<sup>th</sup> December 2018, NIT- Tiruchirappalli.
- 10. Guna G, **Prabhakaran D** & Thirumarimurugan M, "A concise review on the control mechanisms assimilated in RO process", International Conference on Engineering and Technology-ICETECH, 30<sup>th</sup>&31<sup>st</sup> August 2018, Rathinam Technical Campus, Coimbatore(IEEE Sponsored)
- 11. Anusharani V, **Prabhakaran D** & Thirumarimurugan M, "Trajectory tracking control of CSTR using sliding mode strategy", International Conference on Engineering and Technology-ICETECH, 30<sup>th</sup>&31<sup>st</sup> August 2018, Rathinam Technical Campus, Coimbatore(IEEE Sponsored)
- 12. Jagadesh R, Magesh R, Mukesh Kumar A, **Prabhakaran D**, "Heat transfer analysis of MgO nanofluids of varying concentrations using Plate Type Heat Exchanger" International Journal of Engineering, 14<sup>th</sup> International conference on Development in Science, Management and Engineering (ICDSME 17), 14 & 15 April 2017.
- 13. Venkatachalam V, **Prabhakaran D**, Thirumarimurugan M, Ramakrishnan K, "LMI based stability analysis of non-linearly perturbed DC motor speed control system with constant and time varying delay", International conference on contemporary topics in power engineering and aiding technologies (ICCPEAT'17), Feb 24-25, 2017.
- 14. Venkatachalam V, **Prabhakaran D**, Thirumarimurugan M, Ramakrishnan K, "Stability analysis of network Controlled DC motor speed control system with constant and time-varying delay" 4<sup>th</sup> International Conference on Advanced computing and communication systems, 1856-1862, 6-7 January, 2017.
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#### 20.Book Reviewer:

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- 2. "Kinetic Modeling of Mixotrophic growth of chlorella vulgar is as a new feedstock for bio lubricant" for Royal Society of Chemistry, UK, 2015

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