


Faculty Profile

Basic Information

Name	Dr. M P MURUGESAN	
Department	Food Technology	
Qualification	M.Tech., Ph.D.,	
Area of Specialization	Chemical Engineering	
Date of Joining EEC	01.12.2021	
Experience (Years)	14	

Educational Qualifications

S.No.	Degree	Specialization	Name of the College	University	Year of Passing
1	Ph.D.,	Chemical Engineering	Kongu Engineering College	Anna University Chennai	2021
2	M.Tech.,	Chemical Engineering	Kongu Engineering College	Anna University Chennai	2013
3	B.Tech.,	Chemical Engineering	Erode Sengunthar Engineering College	Anna University Chennai	2011
4	Diploma	Chemical Engineering	The kavery polytechnic College, Salem	State Board of Technical Education	2008

Other Details

Courses Handled	<ul style="list-style-type: none"> • Unit Operations in food Technology • Food Process Equipment Design • Intellectual Property Rights • Heat and Mass transfer operations in Food processing
Teaching Aids used	<ul style="list-style-type: none"> • Whiteboards/Blackboards/Charts • Brainstorming • Webinars • Quizzes and Tests • Prototype demonstrations etc...
Professional Membership	<ol style="list-style-type: none"> 1. Member of Indian Society for Technical Education (ISTE) 2. Indian Society of Systems for Science and Engineering (ISSE)

	3. International Association of Engineers (IAENG)
Awards / Achievements	1. Received Best Researcher Awards 2022 2. Innovation Ambassador Award 2023
Funding & Research	
Research Supervisor	Reference Number : 4050012 University : Anna University University under : Faculty of Technology
Research Experience	
	<ul style="list-style-type: none"> ❖ Phytochemical Extraction. ❖ Waste water treatment. ❖ Chemical and Environmental Engineering. ❖ Solid waste management. ❖ Effluent treatment by HUASB Reactor. ❖ Enhanced Heat Transfer Performance in Plate Type Heat Exchanger. ❖ Research innovation and Millet processing for value added product development.
Research Fund Received	05
	<ul style="list-style-type: none"> ❖ Funds received Rs. 10000/- entitled with National Level Workshop on "AI-Powered Food Collection and Delivery to Reduce Food Waste and Hunger-Related Deaths" Financial Assistance to Tamilnadu Skill Development Corporation, (Naan Mudhalvan Niral Thiruvizha) in the academic year 2023-24. ❖ Fund Received Rs. 50000/- entitled with National Level Workshop on "Millet Challenges in design and development of innovative solutions to enhance the shelf life of the products" Financial Assistance to Professional Bodies and Seminar Symposia funded by Science & Engineering Research Board (SERB) New Delhi - 110016 Dated: 20-Apr-2023 to 21-Apr-2023. ❖ Fund Received Rs. 7500/- entitled with "Production of oral dosage form for the treatment of cholesterol and vitamin deficiency from the natural source" funded by TNSCST 2019-20. ❖ Fund received Rs. 10000/- entitled with "Preparation and Evaluation of Aloe Vera Extract complex with Phospholipids for Cancer Treatment "This project was funded by TNSCST (Tamil Nadu state council for science and technology, Chennai) 2017-18. ❖ Project done as fulfilment of B.Tech "Study of characteristics of effluent from leather industries and study design and operating parameters in HUASB reactor". This project was funded by TNSCST 2008-2011.
National and International Publications	25
International Journal Publications	<p>1. Murugesan Manikkampatti Palanisamy, M. Venkata Ratnam, Akilamudhan Palaniyappar "Statistical optimization of bioleaching for simultaneous recovery of Cu, Sn, Pb, and Zn from computer-printed circuit boards" Journal of Chemistry Vol.1. 2023, PP 1-9. May 2023. Highlights – SciE (Science Citation Index Expanded), WoS, Scopus, AU Annexure I, IF: 3.241</p>

2. M. Venkata Ratnam, **Murugesan Manikkampatti Palanisamy**, S. Samraj Mohammedsani Abdulkadir and Muktarabdu Kalifa “Methylene Blue Adsorption BY UV-Treated Graphene Oxide Nanoparticles (UV/n-GO): Modeling and Optimization Using Response Surface Methodology and Artificial Neural Networks”. International Journal of Chemical Engineering. Vol.1 2022, PP 1-7. September 2022.
Highlights – SciE (Science Citation Index Expanded), WoS, Scopus, AU Annexure I IF: 3.18
3. **Murugesan Manikkampatti Palanisamy**, Venkata Ratnam M, Minar mugamad labia” “Treatment of Municipal Wastewater in a Fixed Aerated Bed: Use of Natural Fibrous Materials” International journal of Biomaterials. Vol 2022, PP 1-8. July 2022.
Highlights – SciE (Science Citation Index Expanded), WoS, Scopus... IF: 3.18
4. **Murugesan Manikkampatti Palanisamy**, Kannan Kandasamy Venkata Ratnam M 2022, Two phase leaching for metal recovery from waste Printed circuit boards: Statistical optimization Chemical Industry & Chemical Engineering Quarterly, Vol. 28 (2), pp. 103-113. July 2022.
Highlights – SCI (Science Citation Index), WoS, Scopus, AU Annexure I, IF: 0.720.
5. **Murugesan Manikkampatti Palanisamy**, Kannan Kandasamy Venkata Ratnam 2022, Clay mineral Effects of copper reclamation from Leached solution, Indian Journal of Chemical Technology, Vol 29, March 2022, pp. 157-165.
Highlights – SCI (Science Citation Index), Scopus, AU Annexure I, IF: 0.76
6. **Murugesan Manikkampatti Palanisamy**, Venkata Ratnam Myneni 2022, Toxic Metal Recovery from Waste Printed Circuit Boards: A review of Advanced approaches for Sustainable Treatment Methodology, Advances materials Science and Engineering Vol. 22 no. 1. pp. 1-9. February 2022.
Highlights –SciE (Science Citation Index Expanded), WoS, Scopus, AU Annexure I IF: 2.098
7. **Murugesan Manikkampatti Palanisamy**, Akilamudhan Palaniyappan, Venkata Ratnam Myneni Kannan Kandasamy, and Padmapriya Veerappan 2022 “A Comparative review on Recovery of Heavy metals from Printed Circuit Boards (PCB’s) by Chemical and Bio-leaching” Journal of Ceramic Processing Research, Vol. 23 No. 1 pp. 90-98. February 2022.
Highlights – SCI (Science Citation Index, WoS, AU Annexure I. IF: 0.63.
8. Padmapriya Veerappan., **Murugesan Manikkampatti Palanisamy**, 2022, A Review on ECG - Signal Classification of Scalogram Snap shots the use of Convolutional Neural Network and Continuous Wavelet Transform, International Research Journal of Engineering and Technology (IRJET), Vol.9, No. 2, PP. 908-911 February 2022.
Highlights – UGC Approved Journal,
9. **Manikkampatti Palanisamy Murugesan**, M Venkata Ratnam, Ysacor Mengitsu, Kannan Kandasamy 2021, Evaluation of anti-cancer activity of phytosomes formulated from aloe vera extract, Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.11.047>
Highlights – Scopus,
10. **Murugesan Manikkampatty Palanisamy**, Kannan Kandasamy, 2020. Comparative studies on bentonite clay and peanut shell carbon recovering heavy metals from printed circuit boards, Journal of Ceramic Processing Research, Vol. 21 No. 1 pp. 75-85.
11. **Murugesan Manikkampatty Palanisamy**, K. Kannan, T. Selvaganapathy, 2020. Bioleaching recovery of copper from printed circuit boards and optimization of various parameters using response surface methodology (RSM), Materials Today: Proceedings. DOI:10.1016/j.matpr.2020.02.571.
Highlights – Scopus

12. T Selvaganapathy, R Muthuvelayudham, **Murugesan Manikkampatti Palanisamy**, M Jayakumar Minar Mohamed Lebbai 2020, Rheological property analysis of pyrolytic liquid fuel (PLF) using ASTM and APHA standards, Materials Today: Proceedings, Vol. 26, pp.3030-3036.

Highlights – Scopus.

13. **Murugesan Manikkampatti Palanisamy** & Kannan Kandasamy 2020, ‘Comparative studies on Bentonite clay and peanut shell carbon recovering heavy metals from printed circuit boards’ Journal of Ceramic Processing Research. vol.21, pp. 75-85. DOI : 10.36410/jcpr.2020.21.1.75.

Highlights – SCI (Science Citation Index, WoS, AU Annexure I. IF: 0.63.

14. **Murugesan Manikkampatti Palanisamy** and P Selvarasu “Experimental Investigation of HUASB Reactor for Treatment Characteristics of Leather Effluent with Varying of Different Operating Parameters” International Journal of ChemTech Research. Vol.10 No.6, pp 478-484, 2017 (Annexure –II) Impact factor: 1.154, H Index: 29.

15. **Murugesan Manikkampatti Palanisamy**, M Sowntharya and T Nivetha. “Integrated Biological Ozone Treatment of Textile Effluent Using HUASB Reactor” Elixir International Journal, Vol. 102 PP. 44227-44229 January 2017. Impact factor: 6.865.

16. **Murugesan Manikkampatti Palanisamy**, P Akilamudhan, V Mohanraj and P Muthukumar “Production of Biodegradable Plastics by using of Starch (TAPIOCA & CASSAVA)” International Journal of Recent Scientific Research Vol. 5, Issue,10, pp.1756-1759, October, 2014, Impact factor:3.650.

17. **Murugesan Manikkampatti Palanisamy**, P Akilamudhan, A Sureshkumar, and G Arunkarthikeya “Treatment of Hospital and Biomedical Waste Effluent Using HUASB Reactor” International Journal of Innovation and Scientific Research ISSN 2351-8014 Vol. 11 No. 2 pp. 379-386 Nov. 2014, Impact factor :3.917

18. **Murugesan Manikkampatti Palanisamy**, P Akilamudhan., “The Heat Transfer characteristics of plate heat exchanger with different corrugation angles” International journal of recent scientific research Vol.5, issue 6, pp.1022-1026, June 2014, Impact factor:3.650

19. **Murugesan Manikkampatti Palanisamy** and R Balasubramanian., “The Experimental Study on Enhanced Heat Transfer Performance in Plate Type Heat Exchanger” Research journal of Engineering Science Vol. 2(2), 16-22, ISSN 2278 – 9472 February (2013), Impact factor: 3.853.

20. **Murugesan Manikkampatti Palanisamy** and R Balasubramanian., “To Study the Fouling of Corrugated Plate Type Heat Exchanger in the Dairy Industry” Research journal of Engineering Science Vol. 2(1), 5-10, ISSN 2278 – 9472 January (2013), Impact factor: 3.853.

21. **Murugesan Manikkampatti Palanisamy** and R Balasubramanian., “The Effect of Mass Flow Rate on the Enhanced Heat Transfer Characteristics in a Corrugated Plate Type Heat Exchanger” Research Journal of Engineering Science Vol. 1(6), 22-26, December (2012) Impact factor: 3.853.

Text Book Publications

01

1. Dr. M P Murugesan, Biochemistry and nutrition in Food Technology, IIP Iterative International Publishers, Printed at & Distribution by: Selfy page Developers Pvt Ltd., Karnataka, May 2024 (USA) ISBN: 978-1-68576-493-7.

Book Chapter Publication	02
<p>1. Murugesan Manikkampatti Palanisamy, Akilamudhan Palaniappan, Venkata Ratnam M, Padmapriya Veerappan, Minar mugamad labai, 2022, has published the book chapter titled on Leaching Technology for Precious Heavy Metal Recapture through (HCl+HNO₃) and (HC+H₂SO₄) from e-Waste, Heavy metals., Intechopen Limited, Prinnces Gate Court, London, UK. Highlights – WoS, Intechopen is the first open Access Publishers in world.</p> <p>2. Murugesan Manikkampatti Palanisamy, Akilamudhan Palaniappan, Venkata Ratnam Myneni, Kannan Kandasamy, Minar Mohamed Lebbai and Padmapriya Veerappan., 2021. Clay Minerals Effects for Metal Reclamation from Leached Solution. Intechopen Limited, Prinnces Gate Court, London, UK. Highlights–WoS, Intechopen is the first open Access Publishers in world.</p>	
Resource Persons/ Guest Lecture/Invited Speaker	07
<p>1. Served as a recourse person one day National level Awareness programme for titled on “Innovation & Entrepreneurship in future Engineers” for Chemical Engineering students from Nandha Engineering College, Perundurai, held on 05.02.2024.</p> <p>2. Served as a recourse person one day National level Technical Symposium for Food Technology students from Paavai Engineering College, Namakkal, held on 01.11.2022.</p> <p>3. Served as a recourse person one day National level Technical Symposium for Chemical and petrochemical Engineering students from EICT Polytechnic College, Tirupur, held on 03.09.2015.</p> <p>4. Served as a recourse person and delivered an expert talks in final year Chemical and petrochemical Engineering students from EICT Polytechnic College, Tirupur on entitled with “Heat and Mass Transfer Operations in process industries” held on 09.10.2019.</p> <p>5. Served as a recourse person and delivered experts talks in final year petrochemical Technology students from Sri Ramanathan Engineering College, Tirupur on entitled with “Milling Operations in process industries” on 08.08.2018.</p> <p>6. Served as a recourse person and delivered experts talks in final year petrochemical Technology students from Sri Ramanathan Engineering College, Tirupur on entitled with “Unit Operations in process industries” on 19.09.2017.</p> <p>7. Served as a recourse person and delivered experts talks in final year petrochemical Technology students from Sri Ramanathan Engineering College, Tirupur on entitled with “Unit Operations in process industries” on 21.02.2017.</p>	
National/International Conferences Attended	09
<p>1. Presented a paper entitled on “Microbial Fuel Cells Unleashing Sustainable Solutions for Domestic Wastewater Treatment and Bioelectricity Harvesting - A Case Study from Mettur Dam Drainage Channel, Salem, Tamil Nadu, India” 5th I International conference on advances in Mechanical Engineering (ICAME 2024) organized by SRM University, held during March 20-22, 2024.</p> <p>2. Presented a paper entitled on “Identification and formulation of key contribution high potential, medicinal molecules by citrus sinensis and citrus” 5th I International conference on advances in Mechanical Engineering (ICAME 2024) organized by SRM University, held during March 20-22, 2024.</p>	

3. Presented a paper entitled on “Formulation and enhancing the nutritional values of cookies by using *Eleusine Coracana*” First National Conference on Innovative Smart Technologies in Engineering and Management Sciences, organized by Excel Engineering College, held during April 06, 2023.
4. Participated AICTE Two Days National Conference on “Recent Advances in Mechanical & Petrochemical Engineering” (RAMPE’22) and presented Titled on “Production of cordial for the treatment of type 2 diabetics using whey water and Herbal leaves” during 1st & 2nd, September 2022 at Mahendra institute of Engineering and technology.
5. Presented a paper entitled on “Evaluation of anti-cancer activity of phytosomes formulated from aloe vera extract” Materials Today: Proceedings, 'Journal of Materials Today: Proceedings Elsevier conference MATPR 19689, 2020.
6. Presented a paper entitled on “Bioleaching recovery of copper from printed circuit boards and optimization of various parameters using response surface methodology (RSM)” Journal of Materials Today: Proceedings Elsevier conference ICMPC 2020.
7. Presented a paper entitled on "Teacher Factors Influencing Class Room Information and Communication Technology" 18th ISTE National convention, KPR Institute of Engineering and Technology, Coimbatore on 19.12. 2015.
8. Presented a paper titled on "Empowering Technical Education to Address sustainability and Global Competitiveness" 43rd ISTE National Annual Convention at Tatyasaheb Kore Institute of Engineering and Technology, Warananagar held from 19.12.2013 to 21.12.2013.
9. Presented a paper entitled with “Recent trends for enhanced heat transfer coefficients in plate type heat exchanger” one-day national conference on recent trends in Chemical, Energy and Environmental Engineering held at SSN College of Engineering technology 2012.

Short Term Skill Development Training Programme Attended	08
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1. Participated the one week short term Online Skill Development Training Programme entitled on Paint and coating for corrosion prevention by Vishwakarma Institute of Technology, from 5th February, 2024 to 9th February, 2024.
2. Participated the one-week short term Online Skill Development Training Programme entitled on Paint and coating for corrosion prevention by CSIR-Central Electrochemical Research Institute, Karaikudi from 07.03.2022 to 11.03.2022.
3. Participated the one-week short term Online Skill Development Training Programme entitled on waste water treatment conducted by CSIR-Central Electrochemical Research Institute, Karaikudi from 21.02.2022 to 25.02.2022.
4. Participated the one-week short term Online Skill Development Training Programme entitled on Basics of High-Resolution Imaging Techniques and their Applications to Science & Technology conducted by CSIR-Central Electrochemical Research Institute, Karaikudi from 17.01.2022to 21.01.2022.
5. Participated the week short term Online Skill Development Training Programme entitled on Chromatography and thermal analysis conducted by CSIR-Central Electrochemical Research Institute, Karaikudi from 04.10.2021to 08.10.2021.

6. Participated the one week short term Online Skill Development Training Programme entitled on Paints Coatings for corrosion Protection conducted by CSIR-Central Electrochemical Research Institute, Karaikudi from 23.08.2021 to 27.08.2021.
7. Participated the one-week short term Online Skill Development Training Programme entitled on Electrochemical Power Sources: Lithium-ion Battery: Science and Technology & Surface and Structural Analysis conducted by CSIR-Central Electrochemical Research Institute from 09.08.2021 to 13.08.2021.
8. Participated the one-week short term Online Skill Development Training Programme entitled on Electroanalytical Techniques for (Bio) Sensing and (Electro) catalytic Applications, Electrode and Electrocatalysis (EEC) Division, conducted by CSIR–Central Electrochemical Research Institute, Karaikudi held at 12.07.2021 to 16.07.2021.

Faculty Development Programme Attended

12

1. Participated in the One-week Faculty Development Programme on “NAAC Accreditation Framework and Documentation” organized by the Hidusthan college of Engineering and technology, Coimbatore, India held from 26-02-2024 to 01-03-2024.
2. Participated in the One week, ATAL AICTE-FDP program titled "Health and Happiness" with Application No: 1691473167. organized by the Vivekanandha College of Engineering for Women (Autonomous), India held from 04-12-2023 to 09-12-2023.
3. Participated in the One week online Faculty Development Programme on “NAAC Accreditation Framework and Documentation” organized by the Government College Banda Sagar MP India held from 01-03-2023 to 07-03-2023.
4. For successfully completed the 12 weeks NPTEL-AICTE Faculty Development Programme on “Basic Environmental Engineering and Pollution Abatement” NPTEL – IIT Madras, from July to October 2022.
5. Participated in the Five Days Online Faculty Development Programme on "Recent Advances in Chemical Engineering (RACE-22)", Rajalakshmi Engineering College, Chennai, from 08.11.2022 to 12.11.2022.
6. Participated in the one week faculty Development Training Programme entitled on “Research Methodology” Amar Sewa Mandal’s kamala Nehru Mahavidyalaya, Nagpur Maharashtra, India from 02.05.2022 to 07.05.2022.
7. Participated in the one week online faculty Development Training Programme entitled on Tools and Techniques in characterization of compounds” organized by CSIR-CECRI Karaikudi and Dr. Umayal Ramanathan College for woman During January 17-21,2022
8. Participated and completed AICTE Training and Learning (ATAL) Academy Online on titled “Electro analytical Techniques for Bio sensing Applications” From 21.11.2021 to 26.11.2021 conducted by CSIR-Central Electrochemical Research Institute, Karaikudi.
9. Attended One-week short term faculty development programme entitled with “Instructional Design and Delivery systems” organized by Ministry of Human Resource development & Erode Sengunthar Engineering College from 24.07.2017 to 29.07.2017)
10. Participated in the two days faculty Development Programme entitled on Mass Transfer” organized by Erode Sengunthar Engineering College held at 26.05.2014 & 27.05.2014.

11. Participated in the one day faculty Development Programme entitled on Understanding Gen-Y Students” organized by mhelix and Erode Sengunthar Engineering College held at 20.08.2013.
12. Participated in the faculty development programme on instructional design & delivery conducted from 17.06.2013 to 21.06.2013 at Erode Sengunthar Engineering College, Perundurai.

Workshop programme Attended

6

1. Participated in Online Workshop on “Intellectual Property Rights (IPR) - Patents and Design filing” Under National Intellectual Property Awareness programme at Excel Engineering College and association with Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) Government of India, Nagpur on Thursday 05th March, 2024
2. Participated in Online Workshop on “Intellectual Property Rights (IPR) - Patents and Design filing” Under National Intellectual Property Awareness programme at Excel Engineering College and association with Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) Government of India, Nagpur on Friday 25th January, 2023
3. Participated in one day Regional meet IIC & MOE Innovation Cell for faculty development program PSNA College of Engineering and Technology, India duration in 03.03.2022 to 04.03.2022.
4. Participated in online two day workshop for faculty development program on “Light Harvesting Materials for Sustainable Energy” at Department of Chemistry, National Institute of Technology, and Warangal India duration in 03.03.2022 to 04.03.2022.
5. Participated in one day National Workshop on “Simulation Process and Chemical Analysis in Chemical Industries at Paavai College of Engineering & Technology, Tamil Nadu from 22.09.2017.
6. Participated in one day ICMR New Delhi Sponsored Workshop on “Promotion of Emotional and Mental Health among Students through Teachers” at Erode Sengunthar Engineering College, Tamil Nadu from 16.03.2016.

Programme Organized

8

1. Organized Workshop on "Intellectual Property Rights (IPRs) – Challenges and Prospects" at Department of Food Technology, Excel Engineering College (Autonomous), Namakkal, Tamil Nadu, India on 04.04.2024 FN (Thursday).
2. Organized Workshop on "Intellectual Property Rights (IPRs) – and IP Management for startups" at Department of Food Technology, Excel Engineering College (Autonomous), Namakkal, Tamil Nadu, India on 04.04.2024 AN (Thursday).
3. Organized in Workshop on “Intellectual Property Rights (IPR) - Patents and Design filing” Under National Intellectual Property Awareness programme at Excel Engineering College and association with Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) Government of India, Nagpur on Friday 05th March, 2024
4. Organized “One Day National Seminar on "Exploring protein challenges Veg Vs Non-Veg in Millets value addition for Maintaining a Diet” at Department of Food Technology, Excel Engineering College (Autonomous), Namakkal, Tamil Nadu, India on 15.03.2024 (Saturday).
5. Organized “One Day National Seminar on "Enhancing Health through Innovative Food Additives: Mechanisms and Research” at Department of Food Technology, Excel Engineering College (Autonomous), Namakkal, Tamil Nadu, India on 19.08.2023 (Saturday).

6. Organized “National Level One day workshop on “Research & Innovation for Millet based value added products” at Department of Food Technology, Excel Engineering College (Autonomous), Namakkal, Tamil Nadu, India on 21st February 2023.
7. Organized in Workshop on “Intellectual Property Rights (IPR) - Patents and Design filing” Under National Intellectual Property Awareness programme at Excel Engineering College and association with Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) Government of India, Nagpur on Friday 25th January, 2023
8. Organized “National Level Students’ Technical Symposium” at Department of Food Technology, Excel Engineering College (Autonomous), Namakkal, Tamil Nadu, India on 13th May 2022.

Industrial Training Attended & Technical Trainer	3
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1. Attended five days internship programme Ajan drugs Pvt Ltd, Chennai held at 16.06.2023 To 20.06.2023
2. Visited three production plants such as (Aluminum Fluoride (AlF₃), Ammonia and Di ammonium Phosphate) at Southern Petrochemical Industries Corporation Limited, SPIC Nagar, held at 15.11.2017 To 17.11.2017
3. Technical Trainer (Mass transfer operations, Heat transfer operations, mechanical operations and Fluid mechanics) to Chemplast-SANMAR since 2013 to 2020.

Journal Reviewer	
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1. Journal of Cleaner Production
2. International Journal of Photoenergy
3. Journal of Sustainable Chemical Engineering