Curriculum Vitae



Profile:

Dr.M.Perumalsamy is a faculty in the Department of Chemical Engineering at National Institute of Technology, Tiruchirappalli from 2006 onwards, He has obtained his doctoral degree from A.C.Tech, Anna University, Chennai. He was working as a Teaching Research Associate at A.C.Tech, Anna University, Chennai during 2002-2006. He has served as Associate Dean (Academic and Student's welfare) at the Institute level during 2012-2015.

He is a recipient of DST Young scientist award during 2010. He has visited University of Iowa, USA as a visiting scientist and carried out research work on separation and purification of Caffeine Dehydrogenase in *Pseudomonas* sp.Strain CBB1. He has published more than 60 International papers in reputed journals and conference proceedings. His field of Interest includes Separation of Proteins using Aqueous Two Phase System, Computational Fluid Dynamics, Biofuels and Waste water Treatment.

1. Name : Dr. M.Perumalsamy

2. Designation : Associate Professor

3. Department : : Chemical Engineering

National Institute of Technology, Trichy

4. E-mail ID. : mpsamy@nitt.edu

5. Phone : 04312503112

6. Field(s) of Specialization:

Separation of Proteins using Aqueous Two Phase System (ATPS), Computational Fluid Dynamics (CFD), Biofuel from Microalgae, Biological Waste Water Treatment, Microbial Desalination Cell

7. Employment Profile

Job Title	Employer	From	То
Associate Professor	National Institute of Technology Trichy	March 2018	Till date
Assistant Professor	National Institute of Technology Trichy	Oct 2010	March 2018
Lecturer	National Institute of Technology Trichy	April 2006	Oct 2010
Teaching Research Associate	Anna University Chennai	March 2002	Feb 2006
Programmer analyst	Engineering System Solutions USA	Dec 2000	July 2001

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Subjects
Ph.D	Anna University Chennai	2007	Studies in Aqueous Two-Phase System (Phase behavior, Thermodynamic modeling and Partitioning of BSA)
M.Tech	Anna University Chennai	2000	Chemical Engg
B.E	Annamalai University Chidambaram	1998	Chemical Engg
HSC	Tamilnadu State Board	1994	Maths, Physics, Chemistry, Biology
SSLC	Tamilnadu State Board	1992	Maths, Science

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
NEP2020-Online Degree Subcommittee -Member	NIT Trichy	August2021	Till date
Member-Transport Committee	NIT Trichy	December20 20	Till date
Verification Officers- JoSSA2021	NIT Trichy	September 2021	Oct2021
Observer- Group B and C Recruitment	NIT Trichy	July 2021	July 2021
Verification Officers- JoSSA2020	NIT Trichy	November 2020	Oct2020
Deputy Center In-charge- UG Admission	NIT Trichy	January 2018	February 2020
Institute Core Committee Member-CSAB2019 CSAB2019 UG Admission	NIT Trichy	May 2019	November 2019
Associate Dean (Academic)	NIT Trichy	October 2012	November 2015
Associate Dean (Student's Welfare)	NIT Trichy	October 2012	November 2015
Warden for GARNET A Hostel	NIT Trichy	July 2012	November 2015
NSS Coordinator	NIT Trichy	Oct 2010	April 2016
NSS Programme Officer	NIT Trichy	July 2006	Oct 2010
Department Coordinator for TEQIP-II &III	Dept of Chemical Engineering, NIT Trichy	2010	till date
Institute Core Committee Member-CSAB2019	NIT Trichy	May 2019	
Institute Anti-Ragging Committee	NIT Trichy	July 2019	
Formative Assessment	NIT Trichy	September	
Monitoring Committee		2014	
Senate-sub-committee on Academic Reforms	NIT Trichy	May 2015	
First Year Coordinator	NIT Trichy	June 2016	September 2016

Committee Member for	NIT Trichy	January 2013	
tender approval -outsourced			
Security			
Staff Advisor- Chemical	NIT Trichy	July 2010	June 2011
Engineering Association			
Chairman –Performance	Dept of Chemical Engineering,		
Analysis Committee	NIT Trichy		
Organizing Committee	NIT Trichy	February	April 2015
Member-Curriculum		2015	
Conclave 2015			
Committee Member-	NIT Trichy	24.06.2013	
Temporary Faculty (Adhoc)			
recruitment			
Committee Member –Result	NIT Trichy	20.05.2013	
verification for all B.Tech			
and B.Arch Programmes			
Ph.D- Admission	NIT Trichy	July2011	
Coordinator- Chemical			
Engineering Dept			
Member –Committee for	NIT Trichy	16.02.2012	
Digital Class Room			
Solutions			

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	То
External Expert	National Institute of Food	24.01.22	
Member-Performance	Technology, Entrepreneurship		
review for Prime	and management, Thanjavur		
minister formalization			
of micro food			
processing enterprises			
scheme			
Session Chair and	National Institute of Technology	12.3.2021	13.3.2021
Coordinator-	Trichy		
RTAMGESE-2021			

Expert Member- SRF& Project Assistant Selection Committee	Processing Technology Thanjavur	
Expert Member – selection committee of JRF& Young Professional at ICAR-NRCB		30.05.2018
Expert Member- Contractual Faculty selection committee	Thanjavur	
Ph.D thesis evaluation examiner	Coimbatore Institute of Technology Coimbatore	21.03.2018
Ph.D Viva-voce Expert member	A.C.Tech, Anna University, Chennai	8.11.2017
Member- Board of Studies	Anna University, Chennai	07.11.2017
Ph.D thesis evaluation examiner	Coimbatore Institute of Technology Coimbatore	6.10.2017
Expert member- Contractual Faculty selection committee	Indian Institute of Food Processing Technology Thanjavur	11.05.2017
Expert member – selection committee of SRF at ICAR-NRCB		05.02.2016
	Pondicherry University, Puducherry	5.11.2016
Member- Board of Studies	Anna University, Chennai	2.11.2016
Convener of Viva-voce Board	Manonmanium Sundaranar University, Tirunelveli	18.10.2013
External Examiner for the M.Tech (Biotechnology) Project work and Viva-voce Examination	Sastra University, Thanjavur	20.05.2013
Member in Board of Studies	PRIST University, Thanjavur	14.05.2012

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2018	Best Researcher Award	NIT Trichy
2017	Best Researcher Award	NIT Trichy
2010	Young scientist award	DST, New Delhi

12. Fellowships

Year of Award	Name of the Fellowship	Awarding	From	То
		Organization	(Month/Year)	(Month/Year)
2002	Teaching Research	Anna	March 2002	February
	Associate Fellowship	University		2006
		Chennai		

13. Details of Academic Work

- (i) Curriculum Development
- 1. Chemical Process simulation lab for M.Tech Student is developed at Chemical Engineering Department
- 2. Course plan for theory subject, momentum transfer is prepared
- 3. Course plan for theory subject, Computational Fluid dynamics is prepared

(ii)Courses taught at Postgraduate and Undergraduate levels

S.No	Name of the Subject	B.Tech/M.Tech/Semester
1.	Momentum Transfer	B.Tech III Semester
2.	Biotechnology	B.Tech VII Semester
3.	Material Science and Technology	B.Tech, IV Semester
4.	Process Engineering and Economics	B.Tech VIII Semester
5.	Computational Fluid Dynamics	M.Tech II Semester
6.	Organic Chemical Technology	B.Tech IV Semester
7.	Inorganic Chemical Technology	B.Tech III Semester
8.	Mechanical Operation laboratory	B.Tech IV Semester
9.	Chemical Reaction Engineering Lab	B.Tech V Semester
10.	Mass Transfer Laboratory	B.Tech VI Semester
11.	Process Control laboratory	B.Tech VII Semester
12.	Momentum Transfer Laboratory	B.Tech IV Semester
13.	Chemical Process Modelling and Simulation Lab	M.Tech I Semester

4. Projects guided at Postgraduate level

Title of the M.S thesis Guided

S.No	Name of the Title of the thesis		Year of completion
	Student		
1	P. Sreekanth Chowdary (302109001)	Isolation of Cheese Whey Proteins using Aqueous Two Phase System	2011

Titles of PG Dissertations Guided

S.No	Name of the	M.Tech	Title of the Project	Year
	Student (Roll No)	Specilization		
1.	Murtaza Cochinwala (2 02119015)	Chemical engineering	Optimization of biofuel production From microalgae	2021
2.	Murtaza Cochinwala (2 02119015)	Chemical engineering	Optimization of biofuel production From microalgae	2020
3.	Dangeti shree Phani Kalyan (202119007)	Chemical engineering	Design of a bioreactor for the growth of microalgae using CFD	2021
4.	Dangeti shree Phani Kalyan (202119007)	Chemical engineering	Design of a bioreactor for the growth of microalgae using CFD	2020
5.	Yalamarthi Ravikiran (202219021)	Process Control and Instrumentati on	Modelling and control of Multi input multi output Non-linear chemical process	2021
6.	Yalamarthi Ravikiran (202219021)	Process Control and Instrumentati on	Modelling of non-linear chemical Process using machine learning Techniques	2020

7.	M.S.Dinesh	Chemical	Production of biodiesel from	2020
	Chandra	engineering	microalgae using transesterification	
	(202118004)			
8.	M.S.Dinesh	Chemical	Growth of microalgae in wastewater	2019
	Chandra	engineering	for biodiesel production	
	(202118004)			
9.	R V Mohan	Chemical	Production of biodiesel from custard	2019
	Malavya	engineering	apple seeds	
	(202117022)			
10.	R V Mohan	Chemical	Production of Biodiesel using custard	2018
	Malavya	engineering	apple seeds and egg shell as a catalyst	
	(202117022)			
11.	Meghana.A.D	Chemical	Production of biodiesel from	2019
	(202117001)	engineering	scenedesmus abundans by in-situ	
			transesterification	
12.	Meghana.A.D	Chemical	Simulation and optimization of	2018
	(202117001)	engineering	biodiesel production plant	
13.	Monika S	Chemical	Extraction of lignin and pectin from	2018
	(202116020)	engineering	biological source using aqueous two	
			phase system	
14.	Monika S	Chemical	Characterization of aqueous two phase	2017
	(202116020)	engineering	system for extraction of pectin and lignin	
15.	Mohammed suhair	Chemical	Process Simulation of Extractive	2017
	K.P (202115024)	engineering	Distillation using ASPEN PLUS	
16.	Mohammed suhair	Chemical	Process simulation of 1Butene and n	2016
	K.P (202115024)	engineering	Butane separation by extractive	
			Distillation using aspen plus	
17.	Srinivas	Chemical	Energy Efficiency Enhancement in	2016
	kuchibhotla	Engineering	Continuous Pusher type furnace with	
	(202114013)		dual fuel system	
	(202114013)		dual fuel system	

18.	Srinivas	Chemical	Production of Biodiesel from	2015
	kuchibhotla	Engineering	Microalgae	
	(202114013)			
19.	Aniket Bhate	Chemical	Dynamic Simulation of Centrifugal	2016
	(202114009)	Engineering	compressor system in Aspen Hysys	
20.	Aniket Bhate	Chemical	Design of Heat Exchanger using	2015
	(202114009)	Engineering	Aspen Exchanger design and Rating	
21.	Ashish B. Tonge	Chemical	Computational Fluid dynamics	2015
	(202113003)	Engineering	simulation of coal gasification	
22.	Ashish B. Tonge	Chemical	Computational Fluid dynamics	2014
	(202113003)	Engineering	simulation of coal gasification	
23.	J. Sankar	Chemical	Computational Fluid dynamics	2014
	(202112020)	Engineering	Modelling of hydrodynamics and	
			Reaction kinetics in a fluidized bed	
			reactor	
24.	J. Sankar	Chemical	Computational Fluid Dynamics	2013
	(202112020)	Engineering	Modelling of Heat and Mass Transfer	
			Parameters in Fluidized bed dryer	
25.	Jayesh	Chemical	Modeling of coal Gasification using	2014
	Krishnakumar	Engineering	Computational Fluid dynamics	
	(202112011)			
26.	Jayesh	Chemical	Modeling of coal Gasification using	2013
	Krishnakumar	Engineering	Computational Fluid dynamics	
	(202112011)			
27.	S. Keren Jenifer	Energy	Potential Algal –Bacterial Consortium	2013
	(202311011)	Engineering	response to the biodegradation of	
			Textile dyes	
28.	S. Keren Jenifer	Energy	Potential microalgal degradation of	2012
	(202311011)	Engineering	Textile effluent containing azo dyes	
29.	Kishore Ravindran	Chemical	Economic and energy analysis of	2013
	(202111023)	Engineering	extractive distillation using Aspen	

			Engineering Suite	
30.	Kishore Ravindran	Chemical	Energy and Economic Analysis of	2012
	(202111023)	Engineering	Extractive distillation using Aspen	
			Engineering Suite	
31.	Gokul Balan	Chemical	Extraction of Proteins using magnetic	2013
	(202111017)	Engineering	Aqueous two phase system	
32.	Gokul Balan	Chemical	Extraction Of Proteins Using	2012
	(202111017)	Engineering	Magnetic Nanoparticles	
33.	Rompicherla	Chemical	A 3D CFD simulation of coal	2012
	Sreevidya	Engineering	gasification in entrained flow and	
	(202110018)		fluidized bed gasifier	
34.	Rompicherla	Chemical	Characterization of Hydrodynamics of	2011
	Sreevidya	Engineering	gas-liquid-solid Three phase fluidized	
	(202110018)		bed using CFD	
35.	Divyashree	Chemical	Microbial degradation of Textile Azo	2012
	(202310013)	Engineering	dyes	
36.	Divyashree	Chemical		2011
	(202310013)	Engineering		
37.	Tirtha Prasad	Chemical	Modeling of devolatilization and	2011
	Sapkota	Engineering	particle size effects on the	
	(202109034)		performance of entrained flow gasifier	
			for Indian coal feed	
38.	Tirtha Prasad	Chemical	Modeling of devolatilization on the	2010
	Sapkota	Engineering	performance of entrained flow gasifier	
	(202109034)		for different feed types	
39.	K.Divya	Chemical	Thermodynamic Modelling of	2011
	(202109015)	Engineering	Aqueous two phase system	
40.	K.Divya	Chemical	Characterization of PEG -tri-	2010
	(202109015)	Engineering	ammonium citrate based aqueous two	
			phase systems	

41.	P.Praveen kumar	Chemical	Recovery of toluene from para xylene	2010
	(202107010)	Engineering	plant	
42.	P.Praveen kumar	Chemical	Design, Simulation And Economics	2009
	(202107010)	Engineering	Of Toluene Recovery Unit In Px-	
			Plant	
43.	Mohamed Iqbal	Chemical	Studies on partitioning behaviour of	2010
	Batcha I	Engineering	model protein in polymer-salt based	
	(202108001)		aqueous biphasic system	
44.	Mohamed Iqbal	Chemical	Studies on partitioning behaviour of	2009
	Batcha I	Engineering	model protein in polymer-salt based	
	(202108001)		aqueous biphasic system	
45.	45. Gopiraju Tadiboina Chemical Simulation of optimization of efficient		Simulation of optimization of efficient	2010
	(202108015)	Engineering	capturing of CO2 from a coal fired	
			power plant	
46.	Gopiraju Tadiboina	Chemical	Simulation and optimization of	2009
	(202108015)	Engineering	extractive distillation with mono	
			ethanol amine as a solvent	
47.	K.SenthilKumar	PCI	Simulation and Optimization of	2009
	(202207022)		Extractive distillation of Cyclohexane-	
			Ethanol using Mono-ethanolamine as	
			solvent	
48.	K.SenthilKumar	PCI	Optimization of Extractive	2008
	(202207022)		distillation of Cyclohexane-ethanol	
49.	P.Bharat kumar	Plant Design	Studies on partitioning of Bovine	2009
	(202107003)		serum albumin in Aqueous two phase	
			system	
50.	P.Bharat kumar	Plant Design	Separation of Proteins using	2008
	(202107003)		Aqueous two phase system	
51.	T.K.Radhakrishnan	Plant Design	Experimental and Computational	2008
	(CLA-0609)		studies on three phase Fluidized bed	
52.	T.K.Radhakrishnan	Plant Design	Computational study of fluidized bed	2007

	(CLA-0609)		Hydrodynamics	
53.	J.Saravanan	Plant Design	Hydrodynamics and CFD Simulation	2008
	(CLA-0603)		of Rotating Disc Contactor	
54.	J.Saravanan	Plant Design	CFD simulation of Rotating disk	2007
	(CLA-0603)		contactor	
55.	N.A.Manikandan	Plant Design	Comparison of experimental and	2008
	(CLA-0608)		computational studies of continuous	
			stirred tank reactor	
56.	N.A.Manikandan	Plant Design	CFD simulation of Continuous Stirred	2007
	(CLA-0608)		Tank Reactor	
57.	Karthikaruppu	Energy	Simulation of wind blade using CFD	2007
	(ENA0506)		software	
58.	Karthikaruppu	Energy	Simulation of Solar PV FED Motor	2006
	(ENA0506)		controller for water pumping	
			Application	
59.	Ganesan	Plant Design	CFD Simulation of Airlift Reactor	2007
	(CLA0506)			
60.	Ganesan	Plant Design	CFD Simulation of Airlift Reactor	2006
	(CLA0506)			

UG Projects Detail:

S.No	Project Title	Year
1.	Manufacture of Polyisobutylene	2021
2.	Production of Biodiesel Using Algal Biomass	2021
3.	Manufacture of Whey Protein	2020
4.	Carbon Dioxide Fischer-Tropsch Synthesis a New	2020
	Path to Carbon-Neutral Fuels	
5.	Design of Xylene Manufacturing Plant	2019
6.	Production of Polypropylene Co-Polymer	2019
7.	Manufacture of Dimethyleformamide	2018
8.	Manufacture of Sodium Lauryl Sulphate	2018
9.	Manufacture of Mono Propylene Glycol	2018
10.	Manufacture of Toluene	2017
11.	Manufacture of Mixed Xylenes by Catalytic	2017
	Reforming Using Naptha	

12.	Production of Salicylic Acid	2016
13.	Design of Caprolactam Manufacturing Unit	2016
14.	Plant Design for Production of Cumene via	2015
	Alkylation of Benzene	
15.	Design of Polyvinyl Chloride Manufacturing Plant	2015
16.	Manufacture of Acetaldehyde	2014
17.	Manufacture of Ethanol	2014
18.	Manufacture of Polyethylene Terephthalate	2013
19.	Manufacture of Ortho-Xylene	2013
20.	Manufacture of Citric Acid	2012
21.	Production of Acrylic Acid	2012
22.	Production of Propylene Oxide	2011
23.	Manufacture of Terephthalic Acid From Oxidation	2010
	of Para-Xylene	
24.	Manufacture of Phenol From Cumene	2009
25.	Manufacture of Hydrogen Peroxide	2008
26.	Manufacture of Titanium Dioxide	2007

14. Details of Major R&D Projects

S.No	etans of Major K&D Frojects	Funding	Amount	Dura	tion	Status
	Title of Project	Funding Agency	(Rs. In Lakhs)	From	То	Ongoing/ Completed
1.	Downstream processing for	DBT, New	26.3	2018	2021	Ongoing
	utilization of banana wastes for	Delhi				
	natural fibre production, biomass					
	briquettes and edible packages					
2.	Development of pedagogical	MHRD,	7	2017	2018	Completed
	course on "Computer Aided	New Delhi				
	design" under National Mission					
	Project on Education through					
	ICT, coordinated by IIT,					
	Kharagpur					
3.	A new vision for quality planting	Indian	39.33	2016	2017	Completed
	material (QPM) production	Council of				
	system in India	Agricultural				
		Research,				
		New Delhi				
4.	Environmentally benign aqueous	DST,	14	2010	2013	Completed
	two phase system for effective	SERC,				
	separation of cheese whey	New Delhi				
	proteins(α -lactalbumin and β -					
	lacto globulin) from dairy					
	effluents					
5.	Analysis of Flow and Heat	CSIR, New	13.94	2010	2013	Completed
	Transfer Characteristics of Single	Delhi				
	and Two Phase Flow through					
	Plate Heat Exchanger					

15. Number of PhDs guided

Name of the PhD	Title of PhD Thesis	Role(Supervisor/	Year of
Scholar		Co-Supervisor)	Award
V.R.V.Ashwaniy	Microbial desalination cell: An integrated technology for desalination, wastewater treatment and renewable energy generation	Supervisor	2020
C.Chellamboli	Optimization of microalgae growth and lipid production for the synthesis of biodiesel	Supervisor	2019
K.S.Parthiban	Synthesis and characterization of solid acid catalyst for biodiesel production	Supervisor	2017
R.Govindarajan	Environmentally Benign Aqueous Two-Phase System for Effective Separation of Cheese Whey Proteins	Supervisor	2014
B. Vanavil	Studies on Control and Optimization of Bioprocesses	Co-Supervisor	2014
S.Senthilkumar	Studies on treatment of textile dye effluent using sequential and integrated Electrochemical process with Biological oxidation	Co-Supervisor	2012

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

SUMMER/WINTER SCHOOL ATTENDED:

Sl.	Title	Organization/Place	Duration
No.			
1.	Faculty Development programme on	IIT, Bombay	23-25 April 2019
	Artificial Intelligence and machine		
	learning		
2.	Introduction to deep learning and	IIT, Bombay	23-25 February
	Machine learning with application to		2019
	engineering systems		

3.	Two day ISTE Workshop on	IIT, Bombay	10-11 th November
	Akash for Education		2012
4.	Summer Workshop on "Bioprocess	IIT, Madras,	12-21 July 2010
	Technology"	Chennai	(10days)
5.	DST-SERC School on Optimization	IIT Bombay,	July 6–11, 2009
	Techniques for Chemical Engineering	Mumbai	(6days)
	Applications		
6.	MHRD-AICTE Sponsored Summer	NIT, Trichy	16-28 th June 2008
	School on Process Identification and		(13 days)
	Control		
7.	SERC School on "Advanced	DST, UICT,	25-27 April'2007
	measurement techniques in multiphase	Mumbai	(3days)
	systems"		
8.	Short term training program on	QIP, NIT, Trichy	5-9, February 2007.
	"Recent Advances in Environment,		(5days)
	safety and Energy Management"		
9.	Short term course on "Computational	C-DAC, Pune	11-15 Dec' 2006
	Fluid Dynamics"		(5days)
10.	Short term course on "CFD of	Centre for CFD,	September 18-22,
	Convective Heat and Mass Transfer"	IIT, Madras,	2006
		Chennai	(5days)
11.	Refresher course on "Applications of	UGC,	14 th November -3 rd
	chemical engineering principles for	A.C.Tech,	December' 2005
	Biotechnology"	Anna University,	(20 days)
		Chennai	
	I		

WORKSHOPS ATTENDED:

Sl. No.	Title	Organization/Place	Duration
1.	Two week ISTE Workshop on	IIT, Bombay	12-22 nd June 2012
	Computational Fluid dynamics		

2.	Work shop on Sustainable	NIT,Trichy	13th December
	Technologies for future		2008
3.	Awareness Programme on	NIT,Trichy	20 th November
	Intellectual Property Rights		2008
4.	Work shop on Advanced Chemical	NIT,Trichy	20 th October 2008
	Process Design		
5.	Work shop on Rural Development	TEQIP	9 th June, 2008
	Role of Renewable Energy		
	Services		
6.	Workshop on Nanomaterials	TEQIP	28 th February, 2008
	Characterization and their Process		
	Applications		
7.	Workshop on Recent Trends in	TEQIP	27 th February 2008
	Waste water Treatment		
8.	Workshop on Non-Linear Control	TEQIP	21st February, 2008
	Systems		
9.	Workshop on Computational Fluid	TEQIP	17-18, September'
	Dynamics		2007 (2days)
10.	Workshop on Finite Element	TEQIP	1-2 February, 2007
	Methods for Engineers		

CONFERENCES ATTENDED:

S1.	Title	Organization/Place	Duration
No.			
1.	International Conference on Advances	NIT Trichy	6-8 December 2018
	And Challenges For Sustainable Eco		
	System (ICACSE2018)		
2.	International Conference on Chemical	Dubai	22-24 November
	and Biological Processes (ICCBP-		2015
	2015)		

3.	2 nd International Chemical and	Kuala Lumpur,	21-23 December
	Environmental Engineering	Malaysia	2011
	Conference (ICEEC 2011)		
4.	International Conference on Recent	Cochin	10-12 March, 2011
	Advances in Chemical Engineering		
	and Technology (RACET 2011)		
5.	5 th International Conference on Trends	National Institute of	4 -6 th January 2007
	in Industrial Measurements and	Technology, Trichy	
	Automation 2007 (TIMA 2007)		
6.	International Conference on	National Institute of	4 th -6 th February
	Nanomaterial and its Applications	Technology, Trichy	2007
7.	59 th Annual session Chemical	Ankleshwar	December, 27-30,
	engineering congress CHEMCON	regional Centre,	2006
	2006	Gujarat	
8.	Conference on "Role of Technical	Anna University,	March 24-26, 2005
	Education in Sustainable Development	Chennai -25	

FACULTY DEVELOPMENT PROGRAMME ATTENDED:

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by and Venue
18-20 December 2019	Kalasalingam global conference kgc-2019 International Conference on Sustainable Development	International	Chairperson	Kalasalingam Academy of Research and Education, Srivilliputtur
5-6 th October 2012	Two days faculty orientation programme on class room management and Communication	National	Participant	NIT Trichy

29 th Nov-	Two day ISTE	National	Participant	IIT, Bombay
10 th Dec	Workshop on			
2011	Heat Transfer			
14-24 th	Two day ISTE	National	Participant	IIT, Bombay
June 2011	Workshop on			
	Thermodynamics in			
	Mechanical			
	Engineering			
4 th -9 th	AICTE-MHRD	National	Participant	NIT, Trichy
January	Sponsored staff			
2010	development			
	programme on			
	Computer Control of			
	Processes			
21st Dec	AICTE-MHRD	National	Participant	NIT, Trichy
2009-2 nd	Sponsored staff			
Jan 2010	development			
	programme on			
	Quantitative Research			
	Techniques for			
	engineers and			
	Researchers			
13-17 th	AICTE-MHRD	National	Participant	NIT, Trichy
July 2009	Sponsored staff			
	development			
	programme on			
	Chemical Systems			
	modeling and			
	Simulation			
August	Attended Pedagogy	National	Participant	NITTTR,Chennai
21-27	Training on			

2008	"Instructional Design			
(7days)	and delivery system"			
4 th July to	Faculty Development	National	Participant	Active India pvt
13 th July	Training Programme on			Ltd, Bangalore
2007	ANSYS software			
(10days)	package.			
June 20-	General Orientation and	State level	Participant	NSS, Madras
29 th 2007	Training for NSS			School of Social
(10 days)	Programme officers			Work, Chennai

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
One week workshop on Computational Fluid Dynamics: Basics and applications	National	1-6 th July 2019	Coordinator	NIT Trichy
Workshop on Recent Development in waste water treatment Technologies	National	May 6&7, 2016	Coordinator	NIT Trichy
Conclave on "Strengthening chemical Engineering curriculum for the Present and Future scenario"	National	March 13 & 14, 2015	Coordinator	NIT Trichy
Modeling and simulation of chemical Processes using ASPEN PLUS	National	3-5 December 2014	Coordinator	NIT Trichy
Short term course on Piping Technology	National	27-29 March 2014	Coordinator	NIT Trichy

Short term course on	National	19-20	Coordinator	NIT Trichy
"ASPEN plus software		September		
		2013		
Two days workshop on "	National	28-29	Coordinator	NIT Trichy
Application of Chemical		June 2013		
Engineering Principles in				
Biotechnology"				
One day Awareness	National	18 th	Coordinator	NIT Trichy
programme on Drug		February		
abuse and addiction		2013		
One day Disaster	Local	2 nd	Coordinator	NIT Trichy
Management programme		October		
		2010		
One day workshop on	National	14 th April	Coordinator	NIT Trichy
Bioseparation		2007		
Techniques				

18. INVITED TALKS DELIVERED

Sl. No	Name of the topic	Programme	Date	Organization
1.	Role of nanotechnology in	AICTE	24 th August	Coimbatore
	biofuel synthesis	Sponsored	2020	Institute of
		STTP on		Technology,
		Expanding		Coimbatore
		Horizons of		
		Nanotechnology		
		in		
		Engineering,		
		Medicine and		
		Biotechnology		
		Series-II		
2.	Keynote address on	Kalasalingam	18-20	Kalasalingam
	Sustainability of	global	December	Academy of
	Biochemical Engineering	conference kgc-	2019	Research and
	Research	2019		Education,

		International Conference on Sustainable Development		Srivilliputtur
3.	Biofuel synthesis and Characterization	International Workshop on sustainability of Biofuels	15 February 2018	Mahendra Institute of Engineering and Technology, Tiruchengode
4.	Separation of biopolymers Using Aqueous Two Phase System	AICTE Quality Improvement Programme on "Nano & Functional Materials (Nano-FM 2017)"	1 –7 March 2017	Coimbatore Institute of Technology, Coimbatore
5.	Biopolymers and its Application	AICTE Quality Improvement Programme on "Nano & Functional Materials (Nano-FM 2017)"	1 –7 March 2017	Coimbatore Institute of Technology, Coimbatore
6.	Computer Applications in Chemical Engineering	Students Seminar	10 th February 2017	CECRI, Karaikudi
7.	Basics of Computational Fluid Dynamics	TEQIP-II Sponsored two days' workshop on New challenges for young professionals in materials engineering	7 th October 2016	Coimbatore Institute of Technology, Coimbatore
8.	Introduction to Computational Fluid Dynamics	TEQIP-II Sponsored course on "Conceptual mechanisms of Transport Operations in Chemical and Biochemical processes	23 rd August 2016	NIT, Tiruchirappalli

9.	Chemical engineering	National Level	12.10.2015	SASTRA
).	Chemical engineering	Technical	12.10.2013	University,
	future perspectives	symposium		Thanjur
		symposium		Tilalijui
10	Handled CFD Lab session	AICTE	21 Dec 2009	NIT,
10.	Transfer CTD Ear Session	Sponsored	_	Tiruchirappalli
		Faculty	– 2 nd Jan	Tiruciiirappaiii
		development	2010	
		Programme on	2010	
		"Quantitative		
		Research		
		Techniques for		
		Engineers &		
		Researchers"		
11	Two-Phase Systems For	Faculty	13 - 17th July	National
11.	·	development	•	Institute of
	The Extraction Of	Programme on	2009	Technology
	Protein/Biomolecules	"Chemical		Trichy
	1 Totomy Bromorecares	Systems		
		Modeling and		
		Simulation		
12	Bioseparation Techniques	Workshop on	14 April 2007	NIT,
12.	Broseparation reciniques	"Bioseparation	111pm 2007	Tiruchirappalli
		Techniques"		2 11 W W 111 W P P W 111
13	Demonstration on CFD	Workshop on	17 ⁻ 18 th	NIT,
13.		Computational	September	Tiruchirappalli
	fluent software	Fluid Dynamics	2007	Thacimappani
		Tidd Dynamics	2007	
14.	Aqueous two phase	Workshop on	24 th March	NIT,
	systems for the	Multiphase flow	2007	Tiruchirappalli
	systems for the	and Process	2007	
	biomolecules separation	Industries		
			ı	ı .

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	Indian Institute of Chemical Engineers Association (IIChE)	LM31988
Life Member	Indian Society for Technical Education	LM53830

(ISTE)	

20. Academic Foreign Visits

Country	Duration of Visit	Programme	
USA	December 2007 to	Visiting scientist to University of IOWA,	
	January 2008	USA	
Malaysia	December 2010	Attending international conference	
Dubai	November 2015	Attending international conference	

21. Publications

(A) PAPERS PUBLISHED IN INTERNATIONAL JOURNALS

Details

- **1.** Enzymatic Degumming of Banana Fibers by Enterobacter Cloacae PMC04 for Fineness improvisation: An eco-friendly approach, Journal of Natural Fibers, https://doi.org/10.1080/15440478.2022.2048937, **2022**
- **2.** Mira Chares S and **M. Perumalsamy**, Green degumming of banana pseudostem fibers for yarn manufacturing in textile industries, Biomass Conversion and Biorefinery https://doi.org/10.1007/s13399-022-02850-1, **2022**
- **3.** Mira Chares S and **M. Perumalsamy,** Eco-friendly degumming of natural fibers for Textile applications: A comprehensive review, Cleaner Engineering and Technology 5, 100304, **2021**
- **4.** Ashwaniy, V.R.V, **M. Perumalsamy** and P. Sivakumar, Enhancing the synergistic interaction of microalgae and bacteria for the reduction of organic compounds in petroleum refinery effluent, Environmental Technology & Innovation, 19, **2020**
- **5.** A Arunagiri, M Perumalsamy, T SivasankarA. Arunagiri P. Sivashanmugam Suranani Srinath, Advances and challenges for sustainable ecosystems, Environmental Science and Pollution Research, 17, 20573-20575, **2020**

- **6.** Ashwaniy, V.R.V. and **M. Perumalsamy**, Influence of key operating parameters and biofouling on simultaneous desalination of seawater & reduction of organic wastes from petroleum industrial wastewater *Energy Sources*, *Part A: Recovery, Utilization, and Environmental Effects* 1-16, **2019**
- **7.** Ashwaniy, V.R.V, **M. Perumalsamy** and P. Sivakumar, Photosynthetic Free and Immobilized Cells of *Scenedesmus abundans* for Desalination of Sea Water. *Desalination and water treatment*, 138, 19-26, **2019**
- **8.** V.R.V. Ashwaniy, **M. Perumalsamy**, Reduction of organic compounds in Petro-Chemical Industry Effluent and Desalination using *Scenedesmus abundans* algal Microbial Desalination Cell, Journal of Environmental Chemical Engineering, 5, 5961-5967, **2017**
- Chellamboli, M. Perumalsamy, Statistical Study on the Growth of Chlorella pyrenoidosa Using the Response Surface Methodology, Current Biochemical Engineering, 4,43-59, 2017
- **10.** Indulekha J, Prasanthi Y, **Perumalsamy M**, Kalaichelvi P, Arunagiri A, Statistical optimization of acid catalyzed steam pretreatment of citrus peel waste for bioethanol production, Resource-Efficient Technologies 1–5, **2017**
- **11.** Chellamboli, **M. Perumalsamy,** Synergistic Effect of Hormones and Biosolids on *Scenedesmus abundans* for Eliciting Total Biolipids, Water Environment Research, 88, 2180-2190, **2016**
- **12.** K.S.Parthiban and **M Perumalsamy**, Kinetic studies on oil extraction and biodiesel production from Underutilized Annona squamosal seed, **Fuel**, 180, 211-217, **2016**
- **13.** K.S.Parthiban and **M Perumalsamy** Development of functionalized heterogeneous catalyst from *Ceiba pentandra* stalk for biodiesel production using *Sterculia foetida* seed oil **Environmental Progress & Sustainable Energy**,35, 308-314(7), **2016**
- **14.** K.S.Parthiban and **M Perumalsamy** Nano sized heterogeneous acid catalyst from *Ceiba* pentandra stalks for production of biodiesel using extracted oil from *Ceiba pentandra* seeds **RSC Advances** ,**5**, 11180-11187, **2015**
- 15. S Senthilkumar, M. Perumalsamy, HJ Prabhu, N Thajudin Optimization of process

- parameters for efficient decolorization of Congo red by novel fungus Curvularia sp. using Box–Behnken design, **Desalination and Water Treatment**, 54, 1708-1716(9), **2015**
- **16.** Chellamboli, **M. Perumalsamy** Application of response surface methodology for optimization of growth and lipids in Scenedesmus abundans using batch culture system **RSC Advances** 4 (42), 22129-22140, **2014**
- **17. M. Perumalsamy**, T Murugesan Liquid–liquid equilibrium of aqueous two-phase system (PEG 2000-Sodium Citrate–Water) using potential difference as a key tool **Physics and Chemistry of Liquids** 52 (1), 26-36, **2014**
- **18.** B. Vanavil, A. V.N.L. Anusha, **M. Perumalsamy** & A. Seshagiri Enhanced IMC-PID controller design with lead-lag filter for unstable and integrating processes with time delay, **Chemical Engineering Communications**, 201(11), 1468-1496, **2014**
- **19.** B. Vanavil ,**M. Perumalsamy** & A. Seshagiri Studies on the effects of bioprocess parameters and kinetics of rhamnolipid production by P. aeruginosa NITT 6L, **Chemical and biochemical engineering quarterly** 28, 383-390, **2014**
- **20.** S. Senthilkumar, **M. Perumalsamy**, H.J. Prabhua, N. Thajudin Optimization of process parameters for efficient decolorization of Congo red by novel fungus Curvularia sp. using Box–Behnken design, Desalination and Water Treatment, 54,1708–1716, **2015**
- **21.** R.Govindarajan, **M.Perumalsamy**., Phase Equilibrium of PEG 2000 + Triammonium Citrate + Water System Relating PEG Molecular -- at (298.15, 308.15, and 318.15) K, **Journal of Chemical & Engineering Data**, 58, pp 2952-2958, **2013**
- **22.** Govindarajan, R., Divya, K., **M.Perumalsamy**, Phase behavior and density for binary and ternary solutions of PEG 4000 + triammonium citrate + water aqueous two phase systems at different temperatures *Journal of Chemical and Engineering Data* 58 (2), pp. 315-321, **2013**
- 23. B. Vanavil, M.Perumalsamy, and A. Seshagiri Rao Biosurfactant Production from Novel Air Isolate NITT6L: Screening, Characterization and Optimization of Media J. Microbiol. Biotechnol. 23(9), 1229–1243, 2013
- 24. S.Senthilkumar1_, M. Perumalsamy1, H.J. Prabhu "Response surface Optimization for Biodegradation of Textile Azo dyes using isolated bacterial strain Pseudomonas sp." The Arabian Journal for Science and Engineering Arab 38:2279–2291, 2013
- 25. S. Senthilkumar, M. Perumalsamy, Ahmed Basha, C., Selvakumar, K.V., Swaminathan,

- G., Thajudeen, N., Prabhu, H.J. Biodecolorization of a persistent organic dye from model wastewater using Curvularia spp *Desalination and Water Treatment* 46 (1-3), pp. 272-277, **2012**
- **26.** Senthilkumar, S., Basha, C.A., **M.Perumalsamy**., Prabhu, H.J Electrochemical oxidation and aerobic biodegradation with isolated bacterial strains for dye wastewater: Combined and integrated approach *Electrochimica Acta* 77, pp. 171-178, **2012**
- **27.** S.Senthilkumar, **M.Perumalsamy**, H.J.Prabhu C. AhmedBasha, N. Anantharaman "Response surface optimization for efficient dye removal by isolated strain Pseudomonas sp." *Central European Journal of Engineering* 2(3),425-434, **2012**
- **28.** S.Senthilkumar, **M.Perumalsamy**, H.J. Prabhu, C.AhmedBasha, G. Swaminathan "Box Behnken Design based Optimization of Solar Induced Photo Catalytic Decolourization of Textile Dye Effluent" *Central European Journal of Engineering* 1-10, **2012**
- **29. M.Perumalsamy** and T.Murugesan "Extraction of cheese whey proteins (α-Lactalbumin and β-Lactioglobulin) from dairy effluents using environmentally benign aqueous biphasic system" *International Journal of Chemical and Environmental Engineering*, Vol 3(1), pp 502-54, **2012**
- **30. M.Perumalsamy** and Mohamed Iqbal Batcha "Synergistic extraction of bovine serum albumin using polyethylene glycol based aqueous biphasic system" *Process Biochemistry*, Vol.46, pp 494–497, **2011**
- 31. S. Senthilkumar , M.Perumalsamy, H. Janardhana Prabhu Decolourization potential of white-rot fungus Phanerochaete chrysosporium on synthetic dye bath effluent containing Amido black 10B *Journal of Saudi Chemical Society*, 50, 2011
- **32. M.Perumalsamy**, T.Murugesan "Extended NRTL model for PEG + salt based Aqueous two-phase system" *Asia-Pacific Journal of Chemical Engineering* 5(2),pp.355-360, **2010**
- **33. M.Perumalsamy** and B. Kumar "Influence of Phase compositions, pH and temperature on Bovine Serum Albumin partitioning in aqueous biphasic system" *Chemical Product and process modeling vol* 5, 1, 19, 2010
- **34. M.Perumalsamy**, T.Murugesan "Phase Compositions, Molar Mass, and Temperature Effect on Densities, Viscosities, and Liquid-Liquid Equilibrium of Polyethylene Glycol and Salt-Based Aqueous Two-Phase Systems" *Journal Of Chemical & Engineering*

- Data, 54 (4), pp 1359–1366, 2009
- **35. M.Perumalsamy**, T.Murugesan "Prediction of Liquid–Liquid Equilibria for Polyethylene glycol based Aqueous two-phase system by ASOG and UNIFAC method" *Brazilian Journal of Chemical Engineering* Vol 26, pp 171-180, **2009**
- **36.** C. Shanawaskhan, P. Kalaichelvi, **M.Perumalsamy**, A. Arunagiri "Computational fluid dynamic analysis of two phase jet mixer" *Journal of the university of chemical technology and metallurgy*, vol 44, pp 262-266, **2009**
- **37. M.Perumalsamy, T.K.** Radhakrishnan , K. Kalaichelvi "CFD Modeling of flow pattern and phase hold up of three phase fluidized bed contactor" *Chemical Product and process modeling vol 4*, 1, 36, 2009
- **38. M.Perumalsamy**, T.Murugesan "Partition Behavior of Bovine Serum Albumin in PEG2000-Sodium Citrate-Water Based Aqueous Two-Phase System" *Separation Science* and *Technology* Vol 42, pp 2049-2065, **2007**
- **39.** K Sendilkumar, P Kalaichelvi, **M Perumalsamy**, A Arunagiri, T Raja Computational fluid dynamic analysis of mixing characteristics inside a jet mixer for Newtonian and non Newtonian fluids, **World Congress on Engineering and Computer Science**, 120-128, **2007**
- **40. M.Perumalsamy**, A.Bathmalakshmi and T.Murugesan "Experiment and Correlation of Liquid-Liquid Equilibria of an Aqueous Salt Polymer System Containing PEG6000 + Sodium Citrate" *Journal Of Chemical & Engineering Data* Vol 52, pp 1186-1188, **2007**
- **41.** P. Kalaichelvi, **M.Perumalsamy**, A. Arunagiri, K. Sofiya "Synergistic extraction of acetic acid from its aqueous solution", *Journal of the University of Chemical Technology and Metallurgy*, Vol 42, pp 423-426, **2007**
- **42. M.Perumalsamy**, T.Murugesan., "Prediction of liquid–liquid equilibria for PEG2000–sodium citrate based aqueous two-phase systems", *Fluid phase equilibria* Vol 244, pp 52-61, **2006**
- **43.** T.Murugesan., **M.Perumalsamy**, "Liquid-Liquid Equilibria of Polyethylene glycol 2000 + Sodium citrate +Water at (25°, 30°, 35°, 40° and 45) °C", *Journal Of Chemical & Engineering Data* Vol 50, pp 1392-1395, **2005**.

44. T.Murugesan., **M.Perumalsamy**, "Densities and Viscosities of Polyethylene Glycol 2000 + Salt + Water Systems from (298.15-318.15) K ", *Journal Of Chemical & Engineering Data* Vol 50, pp 1290-1293, **2005**.

(B) Conferences/Workshops/Symposia Proceedings

PAPERS PUBLISHED IN INTERNATIONAL CONFERENCES

- Mira Chares S. M.Perumalsamy Identification of efficient bioprocessing of banana fibers for sustainable fibers and textiles International Conference on Green Chemistry and Engineering towards Sustainable Development – An Industrial Perspective 2021 at NIT Surat, during 16-18th June 2021
- 2. Mira Chares S. M.Perumalsamy Production of Hemicellulose Degrading Enzymes by Solid State Fermentation for Degumming of Banana Fiber: an Ecofriendly Approach at Scientific E-poster presentation competition Organized by (BIO-EPITOME 2021) SBE-UIET on 1st and 2nd February 2021, Awarded Best poster presentation
- 3. Mira Chares S. **M.Perumalsamy** Investigation on Green and chemical degumming of *Musa balbisiana* Pseudostem extracted fibers: A Comparative study" in International Conference on Advances in science and Technology (**ICAST**) Organized by **Institutions of Innovations**., Tiruvanamalai during 2nd and 3rd April **2021**
- **4.** Mira Chares S. **M.Perumalsamy** Green degumming of banana pseudostem fibers for application in textile industries" in a National conference on Sustainable Research in Energy and environment (SREE-2021) conducted by Dr. B. R. Ambedkar National institute of Technology, Jalandhar during January 15-16, **2021**
- 5. Mira Chares S. M.Perumalsamy Kinetic analysis of crude enzyme extract produced via solid state fermentation of banana pseudostem waste at CHEMBIOEN2021 conducted by NIT Jalandhar during 20-22 August, 2021

- **6.** Mira Chares S. **M.Perumalsamy** Enzymatic degumming of natural fibers for textile applications" Organized by IICHE headquarters & IICHE Hyderabad regional centre (CHEMCON-2020) during the month of December 27-29, **2020**
- Sudhanthiran MC, M.Perumalsamy A review on the Integration of microalgae and photo bioreactor for waste water treatment Organized by IICHE headquarters & IICHE Hyderabad regional centre (CHEMCON-2020) during the month of December 27-29, 2020
- Ashwaniy, V.R.V. and M. Perumalsamy (2018) Desalination by bio-cathode microbial desalination cell International conference on advances and challenges for sustainable ecosystems (ICASE), National Institute of Technology, Tiruchirappalli during 6-8 December, 2018
- Indulekha John, Prasanthi Yaragarla, Perumalsamy Muthaiah, Kalaichelvi Ponnusamy, Arunagiri AppusamyStatistical optimization of Acid Catalyzed steam Pretreatment of Citrus Peel waste for Bioethanol International Conference on Separation Technologies in Chemical, Biochemical, Petroleum and Environmental Engineering TECNOSCAPE2016, during 2016
- 10. R.Govindarajan and M.Perumalsamy Synergistic Two-stage Extraction of therapeutic whey proteins using Aqueous biphasic system, Biopartitioning and Purification Conference 2015 at Vienna, Austria during 7-10 June 2015
- 11. M.Perumalsamy and T.Murugesan "Synergistic extraction of whey proteins using polyethylene glycol and salt based aqueous biphasic system" International Conference on Chemical and Biological Processes (ICCBP-2015) at Dubai during 21-25 November 2015
- 12. R.Govindarajan and **M.Perumalsamy**, Extraction of value-added therapeutic proteins from cheese whey using environmentally benign biphasic system International conference on Emerging Trends in Biotechnology (ICETB **2014**), New Delhi
- 13. R.Govindarajan and **M.Perumalsamy**, "Extraction of Cheese Whey Proteins using PEG/Citrate Based Environmentally Benign Aqueous Two-Phase System" 17th International Conference on Biopartitioning and Purification (BPP 2013) held at Newport, RI, USA during 6-10th October, **2013**

- 14. C. Chellamboli and **M. Perumalsamy**, "Optimization Of *Scenedesmus abundans* in batch culture system by using response surface methodology", International conference on algal biorefinery: a potential source of food, feed, biochemicals, biofuels and biofertilizers (**ICAB 2013**), organized by IIT, Kharagpur
- 15. R.Govindarajan **M.Perumalsamy** Extraction of Cheese Whey Proteins using Environmentally Benign Aqueous Two-Phase System International Conference on Advances in Biotechnology and Bioinformatics (ICABB 2013) held at Pune during 25-27th November & **2013**
- 16. C.Chellamboli. and M.Perumalsamy "Optimization studies on marine and freshwater microalgae" presented at INDO-US International conference on Energy and Environment 2012 held at NIT Jalandhar, Punjab during 27-30th December 2012
- 17. **M.Perumalsamy** and T.Murugesan "Extraction of Cheese whey proteins (α-Lactalbumin and β-Lactioglobulin) from dairy effluents using environmentally benign aqueous biphasic system' Presented at 2nd International Chemical and Environmental Engineering Conference (**ICEEC 2011**) held at Kuala Lumpur, Malaysia during 21-23 December **2011**
- 18. M.Perumalsamy and T.Murugesan "Extraction of bovine serum albumin using environmentally benign aqueous two phase system" presented at International Conference on Recent Advances in Chemical Engineering and Technology (RACET 2011) held at Cochin during 10-12 March, 2011
- 19. **M.Perumalsamy**, P.Sreekanth Chowdary "Isolation of cheese whey proteins using aqueous two phase system" International Conference on Frontiers in Biological Sciences: **InCoFIBS-2010**" presented at National Institute of Technology Rourkela
- 20. M.Perumalsamy and T.Murugesan Optimization of bovine serum albumin partition coefficient in aqueous two-phase system using surface response method accepted for oral presentation in ICCBPE 2009, Malaysia
- 21. **M.Perumalsamy**, T.K.Radhakrishnan and K.Kalaichelvi "Prediction of flow pattern and phase holdup of three phase fluidized bed contactor using cfd technique"

- accepted for Oral presentation in World Congress on Engineering and Computer Science (WCECS 2008) San Francisco, USA
- 22. **M.Perumalsamy** and T.Murugesan "Environmentally benign Aqueous Two-Phase Systems for the separation and purification of proteins from bioresources" accepted for poster presentation in (**RSCE-SOMChE 2009**), Kuala Lumpur, **Malaysia**
- 23. K.Sentilkumar, P.Kalichelvi, M.Perumalsamy, A.Arunagiri and T.Raja "Computational Fluid Dynamic Ananysis Of Mixing Characteristics Inside A Jet Mixer For Newtonian And Non Newtonian Fluids" accepted for Oral presentation in (WCECS 2007) San Francisco, USA.

PAPERS PUBLISHED IN NATIONAL CONFERENCES :

- V.R.V.Ashwaniy and M.Perumalsamy "Simultaneous Desalination and waste water treatment by Algal microbial Desalination system" Presented in CHEMCON 2016 at A.C.Tech, Anna University, Chennai during 27-30 December, 2016
- K.S.Parthiban and M.Perumalsamy "Conversion of plastic waste into valuable fuel products by hydrothermal liquefaction" National Conference on Environmental Issues and Mitigations for Sustainable Development (EIMSD 2016) at Annamalai University, Chidambaram during November 2016
- 3. C. Chellamboli and **M. Perumalsamy**, "Optimizing the growth and lipid of chlorella pyrenoidosa using response surface methodology for biodiesel production, National Conference On progress in algology on the Indian context, Trichy 19-21 September, **2014**
- 4. R.Govindarajan **M.Perumalsamy**, Isolation of Cheese Whey Proteins using PEG/Salt based Aqueous Two-Phase System Chemical Engineering Congress, CHEMCON-2011, Bangalore during 27-29th December **2011**

- 5. **M Perumalsamy** and Sreekanth Chowdary P "Biotechnological utilization of cheese whey and its derivatives" presented at National conference on Biotechnology and the Environment (**NCBE 2010**) at National Institute of Technology- Durgapur
- 6. Senthilkumar, S., M.Perumalsamy and H. J. Prabhu (2010) Decolourization of Synthetic Dyes Using White Rot Fungus, *Phanerochaete Chrysosporium*. CHEMCON 2010, Annamalai University, ChidambaramDecember, 2010.
- 7. Senthilkumar, S., M. Perumalsamy and H. J. Prabhu 'Bio degradation of textile dyes in fluidized bed bioreactor'. Chemference 09, I.I.T Madras, August, 2009
- 8. **M.Perumalsamy**, T.K.Radhakrishnan, P. Kalachelvi "CFD Modeling of Flow pattern and Phase holdup of Three Phase Fluidized Bed Reactor" accepted for oral presentation in **CHEMCON 2008** held at Punjab University, Chandigarh
- 9. P.kalaichelvi, Majid Ma, K.Deenadhayalan, A.Arunagiri and M.Perumalsamy " Computational Fluid dynamic analysis of heat and fluid flow inside a plate heat exchanger" Presented at National Conference on Emerging Trends In Chemical Engineering at NIT, Surat during 7th to 6th May 2008
- 10. P.Kalaichelvi, K.Deenadhayalan, **M.Perumalsamy**, A.Arunagiri "Thermal Analysis of a plate heat Exchanger water(Hot fluid)-Kerosine(Cold fluid)" accepted for oral presentation in **CHEMCON 2008** held at Punjab University, Chandigarh
- 11. **M.Perumalsamy** and T.Murugesan "Application of Aqueous two-phase systems for the recovery of biological products" **CHEMCON 2007**, Calcutta Regional Centre, Jadavpur University, Calcutta during December' 2007.
- 12. M.Perumalsamy, PR Ganesan and T.K.Radha Krishnan " CFD Simulation of Internal Airlift Reactors" CHEMCON 2007, Calcutta Regional Centre, Jadavpur University, Calcutta during December' 2007.
- 13. P.Kalaichelvi, **M.Perumalsamy**, A.Arunagiri, T.Raja, K.Senthilkumar, C.Shanawaskhan "Modeling and Simulation of Jet Mixers for Non-Newtonian Fluid

- Using Computational Fluid Dynamics" **CHEMCON 2007**, Calcutta Regional Centre, Jadavpur University, Calcutta during December' 2007.
- 14. M.Perumalsamy "Partition behaviour of BSA in PEG2000-sodium citrate based aqueous two-phase system" CHEMCON 2006 held at Ankleshwar regional Centre, Gujarat during December, 27-30, 2006.
- 15. R.Govindarajan **M.Perumalsamy** "Synergistic Two-stage Extraction of therapeutic whey proteins using Aqueous biphasic system" Biopartitioning and Purification Conference 2015 held at Vienna, Austria during June 7-10, **2015**
- 16. B.Vanavil, M.Perumalsamy and A.Seshagiri Rao "Enhanced Biosurfactant Production from Air isolate for environmental applications" National Conference on CEPEA 2012 held at Chennai during March 29-30, 2012
- 17. B.Vanavil, **M.Perumalsamy** and A.Seshagiri Rao "Investigation of the effects of bioprocess design parameters on Rhamnolipid production" CHEMFERENCE 2012 held at IIT Bombay during December 10-11, **2012**
- 18. C. Chellamboli and **M. Perumalsamy** "Optimization studies on marine and fresh water microalgae" CHEMCON-2012 held at NIT, Jalandhar. Punjab ,**2012**

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of	Year of	ISSN/ISBN
		Publishers	Publication	Number
Mira Chares S,	Biodegradable Composite	Elsevier	2022	
M.Perumalsamy	for Smart Packaging			
	Applications			
V.R.V.Ashwaniy	Microbial Desalination	Materials	2019	ISSN
M.Perumalsamy	Cell an Integrated	Research Forum		2471-8890
	Technology for	LLC		
	Desalination, Wastewater			
	Treatment and Renewable			
	Energy Generation			