

National Institute of Technology, Tiruchirappalli: CV of Dr. K.M. Meera Sheriffa Begum

Curriculum Vitae



Brief Profile:

Dr. (Mrs.) K. M. Meera Sheriffa Begum graduated from Anna university, Chennai. Doctoral research work was under taken at “Chennai Petroleum Corporation Ltd” (Formerly Madras Refineries Ltd) at R&D division as “MRL Research Fellow” from 1991-95. She is a faculty at the Department of Chemical Engineering, NIT, Tiruchirappalli since 1997. Co-authored FOUR Chemical Engineering books, published by Elsevier, PHI. Contributed sponsored and consultancy research projects towards Functional materials for Sustainable environment, and energy funded by MHRD, DST, SPARC and CSIR. Involvement in professional related activities and administrative responsibilities to serve the community.

1. Name : Dr.(Mrs.)K. M. Meera Sheriffa Begum
2. Designation : Professor
3. Office Address: Dept. of Chemical Engineering,
National Institute of Technology,
Tiruchirappalli -620015
4. Telephone (Direct) (Optional): 0431-2503109
Mobile (Optional): -
5. Email (Primary): meera@nitt.edu
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meerasheriffa@gmail.com
6. Field(s) of Specialization: Functional Materials in Chemical
Process application

7. Employment Profile

Job Title	Employer	From	To
Lecturer	Regional Engineering College, Trichy	1997	2001
Senior Lecturer	Regional Engineering College, Trichy	2001	2006
Assistant Professor	National Institute of Technology (Formerly REC),Trichy	2006	2009
Associate Professor	National Institute of Technology,Trichy	2009	March 2018
Professor	National Institute of Technology,Trichy	March 2018 onwards	

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	Anna University, Chennai	1996	-	Chemical Engineering specialized in Petroleum Refining
M.E. / M.Tech.	Anna University, Chennai	1990	First Class with Distinction	Chemical Engg.
B.E. / B.Tech.	Anna University, Chennai	1988	First Class	Chemical Engg.
HSC(XII)	TN State Board	1984	First Class with Distinction	Maths and Biology
High school(X)	TN State Board	1982	First Class with Distinction	Maths, Science and Social Science

9. Academic/Administrative Responsibilities within the University

Sl. No	Name of the Activity	Department/ Institution	Year
1.	Head of the Department	Department	2018-2020
2.	Member in PMRF committee	Institution	2020-2022
3.	Member in UG-ARC committee	Institution	2020-2022
4.	Presiding Officer for Women Sexual Harassment committee (ICC)	Institution	2018-2021
5.	Associate Dean (Institute Development)- Women Cell/Internal Complaints Committee/PwD cell	Institution	2012-15
6.	Member in ICC cell	Institution	2012 -2015 & 2017-2018
7.	Department Member in Strategic Planning group and IoE core team	Department	2017 -18
8.	Member in promotion committee Related to MACPS Implementation	Institution	2017 onwards
9.	Member in IPR cell	Institution	2017 onwards
10.	Member in Scrutiny committee for PwD recruitment	Institution	2015-16
11.	Member in Dept. Administrative Council (DAC)	Department	2012-14
12.	UG/PG curriculum coordinator(NBA and BOS)	Department	2016-17/ 2020-2022
13.	DPEC Chairman/member, Project Evaluation committee	Department	2015-18(Member) 2009-10(Chairman)

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14.	Dept.Purchase committee member	Department	2010-12
15.	Member of Institute Package A/C Maintenance	Institution	2009-2010
16.	Chairman, Performance Analysis Committee	Department	2005-07 (UG) 2009-10 (UG) 2011-12 (PG-I year) 2012-13 (PG- II year)
17.	Staff Advisor, ALCHEMY	Department	2006-2007
18.	In-Charge of Mass transfer Lab Procurements	Department	2002 onwards
19.	In-Charge of Heat Transfer Lab Procurements	Department	2001-2006
20.	Executive member in Officers club	Institution	2004-2005
21.	Stock Verification Officer	Institution	1998-2000
22.	Department Library In charge	Department	1998-2001

10. Academic/Administrative Responsibilities outside the University

- **Guest Editor**, Special issue for Chemical Product and Process Modeling Journal.
- Served as **DC member** in other institutions like Anna university, Chennai, Trichy, VIT, SRM university
- Served as **PhD Viva-Voce External examiner** at various National Universities.
- Served as **Syllabus Subcommittee member** in Anna university, Chennai
- Served as **BOS Expert** in Periyar University, CIT Coimbatore, SRM university, SSN college of Engg., Adhiyamann College of Engg., Hosur.
- **Co-PI** for Project Evaluation on Particle Size and Fuel Value of Carbonaceous Deposits in Duct at TNPL Captive Power Plant.
- **Technical Chair** at International conferences, and CHEMCON
- **Lectures delivered** at FDP in various institutions.

11. Awards, Associateships etc.

Sl.No	Name of the Award	Year
1	M.H. Shukla Award for Best Technical Paper presentation in CHEMCON 2003 awarded in the joint conference of Indian Institute of Chemical Engineers and American Institute of Chemical Engineers, CHEMCON 2004 , at Mumbai	2004
2	Candidate in the Biographical Data of Who's Who in the World	2007
3	Best teacher Award by NITT	2009
4	Best Paper Award in the area of Environmental Engg., Presented at International Conference RACET-2011 , Kochi	2011
5	Technical Co-Chair for a session in National conference on "Recent trends on Renewable Energy sources", Anna University, Trichy, 2011	2011
6.	Best Paper Award Presented at Int. Conf. on Trends and Innovations in Chem. And Pharm.Tech. (TICPT) 2017 , AU,Trichy	2017

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7.	Best Paper Award at CHEMCON 2017	2017
8.	Faculty recognition award for paper publication at NITT	2017,2018
9.	Best Paper Award at International Conference DUBAI	2017
10.	Tech Samaritan Award for COVID Service by IE (TLC)	2021

12. **Fellowships:** Sponsored by IChE for my M.Tech student Project on Microwave Catalytic Pyrolysis of E-Waste using Industrial Slag for fuel Production

13. **Details of Academic Work :**

(i) **Curriculum Development**

- Industrial Applications/components included in Equilibrium staged operations course.
- Tutorial classes conducted in UG course to enhance the knowledge towards design and analysis of industrial problems.
- Seminar classes conducted in PG course to update the recent developments and applications towards down streaming operations.
- Setting up Analytical Instrumentation lab for PG
- Practical sessions conducted for PG to give awareness and enhance the research skills in analytical instrumentation.

(ii) **Courses taught at Postgraduate and Undergraduate levels**

- Mass transfer Operations (UG)
- Mechanical Operations (UG)
- Transport Phenomena (UG)
- Petroleum Refining Engineering and petrochemicals (UG)
- Advanced Separation Techniques (PG)
- Piping and Instrumentation (PG)
- Unit operations and Unit processes (PG)

(iii) **Projects guided at Postgraduate level**

Sl. No	Name of the Thesis	Year
1.	Effluent treatment by Solvent extraction in batch extractor and York - Scheibel column	1997
2.	Distillery effluent odour control by Emulsion liquid membrane extraction	1998
3.	Studies on extraction of Amino acid using Emulsion liquid membrane technique	1999
4.	Energy audit in sugar Industry	1999
5.	Studies on extraction of Amino acid using ELM technique with different emulsions	2000
6.	Recovery of 2-Chlorophenol from aqueous solutions by ELM	2001
7.	Removal of Chromium VI ions by Emulsion liquid membrane technique	2002
8.	Experimental investigation on Bio-Diesel from Rice bran oil	2002
9.	Studies on reactive distillation for the esterification of acetic acid by methanol over cation ion exchange resins.	2003
10.	Studies on Foam Fractionation	2004
11.	Studies on Desalination by Emulsion liquid membrane technique	2004
12.	Modeling the Recovery of heavy metal ions using ELM	2005

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13.	Recovery of Imidazole from dilute solutions by ELM in Continuous operations	2005
14.	Studies on preparation and characterisation of Nanosized Magnetic Particles	2006
15.	Recovery of Resorcinol from dilute solutions by ELM in batch process	2006
16.	Adsorption of biomolecules using functionalized magnetic nanoparticles	2007
17.	Recovery of Resorcinol from dilute solutions by ELM in Continuous-Mathematical Modeling	2007
18.	Improved hydraulics calculation tool	2007
19.	Preparation of Nanosize zinc sulphide by emulsion liquid membrane technique	2007
20.	Steady State data Reconciliation using Aspen Plus	2008
21.	Removal of chromium from aqueous and Tannery effluent using Nanomagnetic particles	2008
22.	CO ₂ Sequestration from Thermal power plant using ammonia	2008
23.	Adsorption of Methylene blue dye on activated carbon from rice husk	2009
24.	Production of Biodiesel using heterogeneous ion exchange resin catalyst	2009
25.	Process Simulation and Economic Assessment of Biodiesel Production	2009
26.	Treatment of industrial textile dye effluent by carbonized rice husk	2010
27.	Removal of Hexavalent Chromium Ions by Acid Treated Carbon from rice husk	2010
28.	Synthesis and Characterization of RTIL Encapsulated and RTIL Impregnated Microcapsules	2010
29.	Removal of hexavalent Chromium ions by surface functionalized carbon from rice husk	2011
30.	Removal of Phenol using RTIL encapsulated polymer Microcapsules	2011
31.	Production of Biodiesel From WCO Using Clam Shell as Catalysts	2011
32.	Removal of phenol using mixed RTIL encapsulated polymer Microcapsules in packed bed adsorber	2011
33.	Thermodynamic Model Studies for Liquid- Liquid Separation Techniques	2012
34.	Adsorption Studies on Surface Functionalized Cellulose Beads From Rice Straw for Dye Removal	2012
35.	Removal of Phenol Using Mixed RTIL Encapsulated Polymer Microcapsules in Packed Bed Adsorber	2012
36.	Synthesis of Cellulose Hydrogels from Rice straw for Protein Drug delivery	2013
37.	Biodiesel production using nanosized KOH doped CaO-MgO catalyst	2013
38.	Studies on Engine Performance Characteristics of biodiesel synthesized using heterogeneous catalysts	2013
39.	Effect of Arabic Gum on Alginate/Hydroxyapatite composites for Drug delivery	2013
40.	Resveratrol separation from red grapes and studies on drug delivery kinetics	2013
41.	Reaction Kinetics and Modeling for the Trans-Esterification Reactions in Batch and Continuous Proces	2014
42.	Biodiesel production from Jatropha oil using mixture of natural shells as heterogeneous catalysts	2014
43.	Green Synthesis of Iron Nano Particles and Its Characterization	2014
44.	Effect of Injector Design on Combustion Modeling of an IC Engine Using ANSYS	2014

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45.	Transesterification of J.oil Using Industrial Scale Deposits as Solid Catalyst	2015
46.	Arsenic Removal by Using Iron loaded Activated Carbon	2015
47.	Drug Loading and Drug Delivery Kinetics using calcium ferrite NPs	2015
48.	Drug Delivery Studies Using Biomediated Iron NP	2016
49.	Environmental Friendly Corrosion Inhibitors for Oil and Gas Fields	2016
50.	Hydrodynamic and Mechanical Design of Reactive Absorber Using Aspen Plus and Unigraphics	2016
51.	Thermal and Mechanical Design of Mutiple Effect Evaporator Using Matlab and Unigraphics	2016
52.	CFD Analysis of Flow Patterns in Deoiling Hydrocyclone	2017
53.	Steam Reforming of Ethanol for Hydrogen Generation-Catalytic and Drift Spectroscopic Study	2017
54.	Development and characterisation of Cellulose Hydrogel as Drug carrier	2017
55.	Development and characterisation of Hybrid Casein-CFNP Drug carrier	2017
56.	Curcumin Release studies using Hybrid Casein-CFNP Drug carrier	2018
57.	Curcumin drug delivery using Cellulose Hydrogel as Drug carrier	2018
58.	Controlled delivery of Biopesticides using Hydrogels from Sugarcane Bagasse	2018
59.	Magnetic assisted Curcumin drug delivery using Receptor based Hybrid Nanocarrier	2018
60.	Process Equipment Design and Analysis for Maleic Anhydride Plant	2019
61.	Targeted delivery of Phyto-derived drugs using BSA-CFNP Hybrid carrier	2019
62.	Environmental safety by Organic Forming	2019
63.	Kinetic study of cellulase production using lemongrass waste by <i>Aspergillus niger</i>	2020
64.	Theoretical design of chitosan Hydrogel supercapacitor	2020
65.	Theoretical design of Functionalized chitosan Hydrogel supercapacitor	2021
66.	Development of activated carbon electrodes from rice straw for capacitive deionization of brackish water	2021
67.	Microwave Pyrolysis of E-Waste for fuel Production with and without bi-metal doped catalyst	2021
68.	Synthesis of Formic acid via electrochemical reduction of CO ₂ : theoretical study	2022
69.	Microwave Catalytic Pyrolysis of E-Waste using Industrial Slag for fuel Production.	2022

(iv) Other contribution(s)

- Mini Experimental Projects given to UG students to develop research skills on the following areas of research:
 - Dye removal using functionalized adsorbents
 - Drug synthesis from natural resources
 - Preparation of Silica gel from rice husk

- Established new experiments on “Hydrodynamic studies on ELM Pertraction using Rotating Disc Contactor, Continuous Foam Separator for enrichment of metal ions, Continuous

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adsorption column for Breakthrough studies, Recirculating gas humidifier and VLE data generation” for UG/PG/PhD students.

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Studies on Emulsion Liquid Membrane Extraction	MHRD	2003	2006	completed
Modernisation of Separations Laboratory	MHRD	2005	2007	completed
Removal of Phenol/Phenolic compounds using RTIL impregnated Microcapsules	DST	2010	2011	completed
A novel study on Biofuel from Non-edible oils using Heterogeneous catalysts in a continuous process	CSIR	2011	2014	completed
Environmental and Energy Impacts of Higher Alcohol and Biofuel Synthesis by Thermochemical Process	SPARC, MHRD	2019	2021	ongoing
Life cycle assessment of CO ₂ reduction by energy efficient hybrid biomass pyrolysis and gasification	DST-BRICS	2020	2023	Sanctioned Awaiting Fund

15. Number of PhDs guided:

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
R. Baskar	Characterization and Reuse of Process industry solid wastes in Clay bricks	Co-Supervisor	2007
N.S. Badrinarayanan	Studies on electrochemical Methods of treatment of Industrial effluents	Co-Supervisor	2009
S.Venkatesan	ELM Technique for removal of heavy metal ions from aqueous solutions and Industrial effluents	Supervisor	2009
M. Arulmozhi	Removal of Metal ions from Aqueous solutions and Industrial effluents by Foam separation	Supervisor	2009
S.Sugashini	Surface Functionalized adsorbents for the removal of metal ions from aqueous solutions and Industrial effluents	Supervisor	2014
S.Niju	Production of Biodiesel from waste frying oil using Calcium oxide derived from natural resources	Supervisor	2015
K.Sriram	Hydrophobically modified chitosan with	Supervisor	2018

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	inorganic oxide as hybrid nanocarriers for controlled curcumin (drug) delivery		
A.V.S.L Sai Bharadwaj	Synthesis, Characterisation and applications of Biodiesel from Rubber seed oils using heterogenous catalysts	Co-Supervisor	2020
Dhanya George	Controlled drug delivery and kinetics using Bio-inspired nanohybrid hydrogels	Supervisor	2020
K P Bindhya	Receptor targeted-hybrid nanocarrier for magnetically modulated drug delivery	Supervisor	2021
Vigneshwaran G	Wastewater Reclamation by Capacitive DeIonization (CDI) using Effective Carbon Electrode Functionalised with Materials	Supervisor	On Going

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

(i) Short Term Training Programme Attended

Sl. No.	Title	Duration	Sponsor	Venue
1.	Bio Process Technology,	01.06.1999 – 24.06.1999	(UGC)	Annamalai University, Chidambaram
2.	Recent trends in sustainable energy sources for the Human development – strategies for the 21 st century	09.12.1999 – 29.12.1999	(AICTE)	Bharathidasan University
3.	Computer control of processes	20-25 th Feb2002	(QIP)	IIT , Chennai
4.	Biotechnology-Emerging trends& challenges ahead	11.11.2002- 22.11.2002	(AICTE-ISTE)	Annamalai University, Chidambaram
5.	Safety and Environment management Emerging trends	9.6.2003- 20.6.2003	(AICTE-ISTE)	National Institute of Technology, Trichy
6.	SERC school on Interfacial Fluid Dynamics	22.9.2003- 27.9.2003	(DST)	Indian Institute of Science, Bangalore
7.	Emerging Trends in Energy Management and Non-Conventional Energy	22.11.2004 - 03.12.2004	(AICTE-ISTE)	National Institute of Technology, Trichy
8.	Advanced Measurements and Techniques in process industries	25th to 27th April 2007	(DST-SERC)	UICT, Mumbai.
9.	Advanced alternative Energy technologies on Fuel Cells	03.03.2008- 13.03.2008	(TEQIP)	National Institute of Technology, Trichy
10.	The Seven Habits of Highly Effective People	21.12.2008- 23.12.2008	(Franklin Covey)	National Institute of Technology, Trichy
11.	Chemical Systems modeling and Simulation	13.7.2009- 17.7.2009	(AICTE-MHRD)	National Institute of Technology, Trichy

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12.	Next Gen Fuels 2010	3011.2010-2.12.2010	GDC care council	SurajKund, New Delhi
13.	Communication skill Development	21.2.2013 – 22.2.2013	TEQIP I	National Institute of Technology
14.	Conclave on Academic Reforms	28-29 th April 2015	TEQIP II	National Institute of Technology
15.	Waste Management	8.5.2016-13.5.2016	TEQIP-II	National Institute of Technology
16.	New Teaching-Learning Aid and course Module development using Aspen Plus	3-5 th October 2019	TEQIP-II	National Institute of Technology
17.	E-Content Development	11-15 th May 2020	MHRD-QIP	National Institute of Technology

(ii) Workshops Attended-National

Sl. No.	Title	Duration	Sponsor	Venue
1	Recent Trends in wastewater Treatment	27.2.2008	TEQIP	NIT, Trichy
2	Advanced Chemical Process Design	20.10.2008	TEQIP	NIT, Trichy
3	Sustainable Technologies for future	13.12.2008	TEQIP	NIT, Trichy
4	Sexual Harassment at Workplace	26.4.2018	UGC	Bharathidasan University, Trichy
5	Ways to Handle Millennial kids	2020	TEQIP	Tanjore

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

(i) International Conference-Organized

Title	Duration	Sponsor	Role	Venue
International Conference on Desalination-Clean Technologies, role of Desalination and Swachh Bharat Mission	20- 21 April 2018	InDA-DBT	Organizing Secretary	NIT, Trichy
International Conference on Multifunctional and Hybrid Composite Materials for Energy, Environment and Medical applications	9-11 September, 2019	DBT	Chairman	NIT Trichy
Environmentally Benign Processes, Products and Materials for Sustainable Ecosystem	19-20 November 2021	DST-SERB/ Seshasayee Paper Boards	Convener	NIT, Trichy

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(ii) Short Term Training Programme- Organized (National)

Title	Duration	Sponsor	Role	Venue
Novel Separation Techniques	15.11.1999-27.11.1999	ISTE	Coordinator	NIT, Trichy
Recent Advances in Environment, Safety and Energy Management	5.2.2007 to 9.2.2007	QIP (Poly scheme)	Coordinator	NIT, Trichy
Communication Skill Development	21.2.2013 to 22.2.2013	TEQIP	Coordinator	NIT, Trichy
Conceptual Mechanisms of Transport operations in Chemical and Biochemical Processes	22.8.2016-27.8.2016	TEQIP- II	Coordinator	NIT, Trichy
Women in Science and Technology-Breaking the glass ceiling	18.3.2019-23.3.2019	NCW &TEQIP III	Coordinator	NIT, Trichy

(iii) Workshops Organized-(National)

Title	Duration	Sponsored by	Role	Venue
Safety and stress management	8.12.2006	TEQIP	Coordinator	NIT, Trichy
Environment and Hygiene	9.12.2006	TEQIP	Coordinator	NIT, Trichy
Nanomaterials Characterization and their Process Applications	28.02.2008	TEQIP	Coordinator	NIT, Trichy
Remediation for Clean and Green Environment	30.11.2012-01.12.2012	Self supporting	Coordinator	NIT, Trichy
Energy Conservation : Scope and Options	24.01.2014	PCRA-NITT	Coordinator	NIT, Trichy
Energy Conservation and Alternative Options	20.5.2016	PCRA-NITT	Coordinator	NIT, Trichy
Workshop on Nurturing IPR and Technology Transfer	20.4.2017	NITT	Coordinator	NIT, Trichy
Self Defence, Safety Awareness and Psychological Empowerment for woman Against Crime	17.9.2019-18.9.2019	TEQIP	Coordinator	NIT, Trichy
Recent Technologies on Waste to Energy Conversion	2.12.2019-13.12.2019	SPARC	Coordinator	NIT, Trichy
Environmental and Energy impacts of Biomass Thermochemical Process	25.01.2021-29.01.2021	SPARC	Coordinator	NIT, Trichy
Next Gen Fuels: A Sustainable Approach	16.3.2022-20.3.2022	SICI	Coordinator	NIT, Trichy

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18. Invited Talks delivered:

Name of the topic	Programme	Period	Organization
Extraction Process in Petroleum refineries	IE Regional special Lecture	1997	Institution of Engineers (I), Tiruchirappalli Local center, BHEL
Emulsion liquid membrane Pertraction- A Tool for Novel Separation	ISTE sponsored winter school	1999	NIT (REC), Tiruchirappalli
Emulsion liquid membrane – A tool for Effluent Treatment	ISTE sponsored summer school	2003	NIT (REC), Tiruchirappalli
Emulsion liquid membrane - A Novel Separation technology	ISTE sponsored winter school	2003	Annamalai University
Emulsion liquid membrane Pertraction-A Tool for Novel Separation	IE Regional special Lecture	2004	Institution of Engineers (I), Tiruchirappalli Local center
Emulsion liquid membrane Treatment–Environmental sustainable Technology	ISTE Sponsored Short term Programme	2004	Anjalai Ammal Mahalingam College of Engineering, Needamangalam
Membrane processes for Waste Water Treatment	ISTE sponsored Short term training Programme	2004	Periyar Polytechnique, Tanjore
Liquid Membranes as a tool for treatment of wastes	TEQIP sponsored workshop	2006	National Institute of Technology, Tiruchirappalli
Membrane Reactors for Hydrogen fuel production	AICTE-QIP sponsored Short term training programme	2007	National Institute of Technology, Tiruchirappalli
Nanoparticles for waste water treatment	ISTE sponsored Short term training Programme	2007	Periyar Maniyammai college of technology for Women, Tanjore
Alternate Fuel for Future Demands	Special lecture	2009	Selvam College of Technology, Namakkal
Essential for Eco-friendly Society-CO2 Sequestration	Invited talk	2010	Sudharsan Engineering College, Pudukkottai
ELM –A technique for effluent Treatment	Special lecture	2010	Adhiyamaan College of Engineering, Hosur
Surface Functionalized adsorbents for Environmental applications	lecture in workshop	2012	NITT
Alternate Fuels	Mechanical Engineering Association	2014	Mother Teresa College of Engineering, Viralimalai, Trichy
Mass Transport principles in Separation processes	Lecture in STTP Course	2016	NITT
Transfer Operations	FDP lecture	2016	Anna university, Trichy
Bioenergy	Invited talk	2017	SRM university
Advanced Materials	Key note address	2018	SRM University

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Functional materials for Biofuels	FDP lecture	2019	NIT, Calicut
Advanced materials for Adsorption	FDP Lecture	2020	Pondicherry Engineering College, Puducherry
Biofuels: Next gen fuel	FDP lecture	2021	PSNA college of Engg, Dindigul

19. Membership of Learned Societies

Sl.No.	Type of membership	Organization	Membership Number
1	life member	ISTE	LM 28924
2	life member	IICChE	LM 30531
3	life member	IE	LM 1385059

20. Academic Foreign Visits

Country	Duration of Visit	Programme
NUS,Singapore	April 2006 to May 2006	TEQIP training on Surface Functionalized Nano Magnetic Particles for Biomolecular Separations
Malaysia	5 days	Paper Presentation at 11 th APCCHE Congress, Kuala Lumpur, Malaysia, 2006.
Harrogate, UK	7 days	Paper presentation at IWA International conference, May 2007.
Maldives	4 days	Paper presentation at (ICESB) 2011 by APCBEES, November 2011.
Dubai (UAE)	4 days	Paper presentation at ISER-82nd Int. Conf. on Chem. and Environ. Science (ICCES)-Dec.2016.

21. Patents awarded/submitted

S. No.	Title of the patent	Name of Faculty/Role	Patent Number
1.	Calcium ferrite (CaFe ₂ O ₄) as super paramagnetic nano particle for magnetically targeted drug delivery under <i>in-vitro</i> and <i>in-vivo</i> conditions	K. M. Meera Sheriffa Begum - Inventor	201641038101
2.	Applications of phenanthroline-dione and related compounds for various medicinal purposes	K.M. Meera Sheriffa Begum- Co Inventor	201741000780
3.	Membrane free cylindrical capacitive deionization(CDI) system for the brackish water treatment	K. M. Meera Sheriffa Begum - Inventor	submitted

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22.Publications :

(A) Refereed Research Journals :

(i) International

Name of the Journal	Authors	Title of the paper	Volume /Year/Page Nos
Chemical Engineering Journal	Kumaresan.T, K.M. Meera Sheriffa Begum, P. Sivashanmugam, N. Anantharaman, and S. Sundaram,	Experimental studies on treatment of distillery effluent by Liquid Membrane Extraction'	95, (2003), 199-204
J. of Univ. of Chem. Tech. and Metallurgy	S.Saravanan, K.M.Meera Sheriffa Begum and N.Anantharaman	Removal of Hexavalent Chromium by Emulsion Liquid Membrane Technique	41, 3, (2006), 193-198
Chem. Engg. and Tech.	P.Ganesh Prasad, S.Venkatesan, K.M.Meera Sheriffa Begum and N. Anantharaman	Pertraction of zinc and copper by Emulsion liquid Membrane Technique and Emulsion formation using Computational Fluid Dynamics	30, (9), (2007), 1212-1220
J. of Univ. of Chem. Tech. and Metallurgy	R.Ramesh Babu, Bhadrinarayana, K.M.Meera Sheriffa Begum and N. Anantharaman	Treatment of Tannery wastewater by Electrocogulation	42, (2), (2007), 201-206
J. of Hazardous Materials	C.A. Basha, N.S. Bhadrinarayana, Anantharaman, K.M.Meera Sheriffa Begum	Heavy metal removal from copper smelting effluent using electrochemical cylindrical flow reactor	152, (2008), 71-78
Asia Pacific J. of Chem. Engg.	S.Venkatesan, K.M. Meera Sheriffa Begum	Removal of Copper and Zinc from Aqueous and Industrial effluents using ELM Tech.	3, (4), (2008), 387-399
Chem. Eng. J	S. Venkatesan, K.M. Meera Sheriffa Begum	Emulsion liquid membrane pertraction of benzimidazole using room temperature ionic liquid (RTIL) carrier	148, (2009), 254-262
Desalination	S.Venkatesan, K.M.Meera Sheriffa Begum	Emulsion Liquid Membrane pertraction of imidazole from dilute aqueous solutions by Aliquat-336 mobile carrier	236, (2009), 65-77
Chem. Eng. J	K.Sivaguru, K.M.Meera Sheriffa Begum and N. Anantharaman	Hydrodynamic studies on three phase fluidized bed using CFD analysis	155, (2009), 207-214.
Adsorp. Sci. and	K.M.Meera Sheriffa Begum, N.	Removal of Chromium(VI) from Aqueous solutions and industrial	27, (7), (2009),

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Tech.	Anantharaman	effluents using Magnetite Nanoparticles	701-722
Int. J. of Env. Engg	S.Venkatesan, K.M.Meera Sheriffa Begum	Removal of trivalent chromium from dilute aqueous solutions and industrial effluents using ELM	2, No.1/2/3, (2010), 250-268.
Chem.Eng.Com	M.Arulmozhi, K.M.Meera Sheriffa Begum, N.Anantharaman	Continuous foam separation of heavy metal ions from electroplating industrial effluent	198, (4), (2011), 541-551
Chem.Eng.Com	K.M.Meera Sheriffa Begum, S.Venkatesan and N. Anantharaman	ELM Pertraction of Metal ions from Aqueous solutions and Electroplating Effluent using RDC	199, (2012), 1575 – 1595
Desalination and Water Treatment	M.Sindhu, K.M. Meera Sheriffa Begum and S.Sugashini	A comparative study of surface modification in carbonized rice husk by acid treatment	45, (2012), 170-176
Clean Tech. and Environmental Policy	S.Sugashini, K.M. Meera Sheriffa Begum	Optimization using CCD for biosorption of Cr(VI) ions by cross linked Chitosan Carbonized rice husk(CCACR)	15, (2013), 293–302
J. of Chemistry	S.Sugashini and K.M. Meera Sheriffa Begum	Column Adsorption studies for the removal of Cr(VI) ions by EA modified Chitosan CRH Composite Beads with Modeling and Optimization	Article ID 460971, (2013),11 pages
Bioremediation J.	S.Sugashini and K.M. Meera Sheriffa Begum	Studies on the performance of EA modified Chitosan Carbonized rice husk Composite Beads for adsorp. of metal ion	17, (2), (2013), 97–106
J. Env. Chem. Eng.	S.Sugashini and K.M. Meera Sheriffa Begum	Performance of Ozone treated rice husk carbon for continuous adsorption of Cr (VI) ions from synthetic Effluent	1, (2013),79–85
Fuel	N.Girish, S.Niju, K.M.Meera Sheriffa Begum and N.Anantharaman	Utilization of Cost Effective solid catalyst derived from Natural White Bivalve Clam Shell for Trans-esterification of waste Frying Oil	111, (2013),653-658
Separation and Purification Technology	Lakra R., Meera Sheriffa Begum K.M, Saranya R., Thuyavan Y.L., Sugashini S. and G. Arthanareeswaran	Separation of acetic acid and reducing sugars from biomass derived hydrosylate using biopolymer blend polyethersulfone membrane	118, (2013),853–861
Desal. and Water Treatment	K.M. Meera Sheriffa Begum and S.Sugashini	Adsorption and Desorption studies on the performance of Fe-Loaded chitosan carbonized rice husk for metal ion removal	51, (2013),7764–7774
J. of Saudi Chem. Soc.	K.M.Meera Sheriffa Begum, S.Niju, and N.Anantharaman	Modification of egg shell and its application in biodiesel Production	18, (2014),702–706

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Powder Technology	K.M.Meera Sheriffa Begum, S.Niju, and N.Anantharaman	Hydrodynamic studies on fluidized beds with internals: Experimental and ANN approach.	18, (2014),702–706
RSC Adv.	S. Niju, K. M. Meera Sheriffa Begum and N. Anantharaman	Continuous flow reactive distillation process for biodiesel production using waste egg shells as heterogeneous catalysts	4, (2014), 54109–54114
New Carbon material	S. Sugashini, K.M. Meera Sheriffa Begum	Preparation of activated carbon from carbonized rice husk by ozone activation for Cr removal	30, (3), (2015), 250-260
J. Mol. Liq.	S. Sugashini, K.M. Meera Sheriffa Begum, Anantharaj Ramalingam	Removal of Cr(VI) ions using Fe-loaded chitosan carbonized rice husk composite beads (Fe-CCRCB): Experiment and quantum chemical	208, (2015), 380–387
Env. Prog. & Sust. Energy	K.M.Meera Sheriffa Begum, S.Niju, and N.Anantharaman	Preparation of Biodiesel from Waste Frying Oil Using a Green and Renewable Solid Catalyst derived from Egg Shell	34, (1), (2015), 248-254
Energy Conversion and Management	Sneha E. Mahesh, R. Anand, K.M. Meera Sheriffa Begum and N.Anantharaman	Biodiesel production from waste cooking oil using KBr impregnated CaO as catalyst	91, (2015), 442-450
Env. Prog. & Sust. Energy	S. Niju, M. Niyas, K. M. Meera Sheriffa Begum and N. Anantharaman	KF-impregnated clam shells for biodiesel production and its effect on a diesel engine performance and emission characteristics	34, (4), (2015), 1166–1173
Arab. J. Chemistry	V.Archana, K.M.Meera Sheriffa Begum, and N.Anantharaman	Studies on removal of phenol using ionic liquid immobilised polymeric microcapsules	9, (2016), 371–382
Arab. J.of Chem.,	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Enhancement of biodiesel synthesis over highly active CaO derived from natural white bivalve clam shell	9, (2016) 633–639.
Biofuels	Y. Eswararao, S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman and S.Malik Raj	Transesterification of jatropha oil using a mixture of natural shells as solid catalyst	7 (4), (2016), 345-351.
Environmental Progress & Sustainable Energy	P.A. Anjana, S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Utilization of limestone derived calcium oxide for biodiesel production from non-edible pongamia oil	35 (6), (2016), 1758-1764
Biofuels	P.A. Anjana, S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman, R.	Studies on biodiesel production from Pongamia oil using heterogeneous catalyst and its effect on diesel engine	7 (4), (2016), 377-387.

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	Anand and D. Babu,	performance and emission characteristics	
Int. J. of Green Energy	S. Niju, K.M. Meera Sheriffa Begum and N. A	Clam shell catalyst for Continuous Production of Biodiesel	13, (13), (2016), 1314–1319.
Powder Technology	M. Sai Vijaya Krishna, K. M. Meera Sheriffa Begum, N. Anantharaman	Hydrodynamic studies in fluidized bed with internals and modeling using ANN and ANFIS	307, (2017), 37–45
Int. J. of Biol. Macromolecule	Ram Bilas, K. Sriram, P. Uma Maheswari, K.M. Meera Sheriffa Begum,	Highly biocompatible chitosan with super paramagnetic calcium ferrite (CaFe ₂ O ₄) nanoparticle for the release of Ampicillin	97, (2017), 513–525.
J. Polym. Materials	K. Sriram, D. Renuga, P. Uma Maheswari, K. M. Meera sheriffa begum, G.Arthanareeswaran	A Comparative Study on Chitosan and Benzimidazole Modified Chitosan as Antimicrobial and Mercury (Hg) Sensor Biomaterials	34, No. 1, (2017), 45-55
Biofuels	S. Niju, J. Indhumathi, K. M. Meera Sheriffa Begum and N.Anantharaman	Tellina tenuis- a highly active environmentally benign catalyst for the transesterification process	8 (5), (2017), 565-570
Asia Pacific. J. Chem. Engg.	K. Sriram, P. Uma Maheswari, A. Ezhilarasu, K.M. Meera Sheriffa Begum and G. Arthanareeswaran	CuO loaded hydrophobically modified chitosan as hybrid carrier for curcumin delivery and anticancer activity	12, (6), (2017), 858-871
European J. of Pharmaceutical Sciences	Sriram, K., P. Uma Maheswari, K. M. Meera Sheriffa Begum, G. Arthanareeswaran, M. Gover Antoniraj and K. Ruckmani	Curcumin delivery by vanillin modified chitosan with Superparamagnetic hybrid nanoparticles as carrier	116, (2018), 48–60
Iranian polymer J.	K.Sriram, P. Uma Maheswari, K. M.Meera Sheriffa Begum, G.Arthanareeswaran	Functionalized chitosan with super paramagnetic hybrid nanocarrier for targeted drug delivery of curcumin	27, (2018), 469–482
J. Agri. Food Chem.,	Dhanya George, P. Uma Maheswari, K.M. Meera Sheriffa Begum and G. Arthanareeswaran	Biomass derived dialdehyde cellulose crosslinked chitosan nanocomposite hydrogel with phyto-synthesised zinc oxide nanoparticles for enhanced curcumin delivery and bioactivity	67, 2019, 37-48,
Green Processing and Synthesis	AVSL Sai Bharadwaj, Madhu Singh, S Niju, KM Meera Sheriffa Begum, N Anantharaman	Biodiesel production from rubber seed oil using calcium oxide derived from eggshell as catalyst– optimization and modeling studies	8(1), 2019, 430-442
International	Dhanya George, P Uma Maheswari, KM Meera	Synergic formulation of onion peel quercetin loaded chitosan-cellulose	

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journal of Biological Macromolecules	Sheriffa Begum	hydrogel with green zinc oxide nanoparticles towards controlled release, biocompatibility, antimicrobial and anticancer activity	132, 2019, 784-794
Journal of Drug Delivery Science and Technology	Bindhya K Purushothaman, P Uma Maheswari, KM Meera Sheriffa Begum	Magnetic assisted curcumin drug delivery using folate receptor targeted hybrid casein-calcium ferrite nanocarrier	52, 2019, 509-520
Journal of Polymers and the Environment	B Anagha, Dhanya George, P Uma Maheswari, KM Meera Sheriffa Begum	Biomass derived antimicrobial hybrid cellulose hydrogel with green ZnO nanoparticles for curcumin delivery and its kinetic modelling	27(9),2019, 2054-2067
Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	AVSL Sai Bharadwaj, KM Meera S Begum	Free fatty acid optimization and modeling of biodiesel production from high viscous rubber seed oil– A comparative study of RSM and ANN	2019, 1-15
Journal of Environmental Chemical Engineering	Bharadwaj AVSL Sai, Niju Subramaniapillai, Meera Sheriffa Begum Khadhar Mohamed, Anantharaman Narayanan	Optimization of continuous biodiesel production from rubber seed oil (RSO) using calcined eggshells as heterogeneous catalyst	8(1), 2020 , 103603
Waste and Biomass valorization	Dhanya George, KM Meera Sheriffa Begum, P Uma Maheswari	Sugarcane bagasse (SCB) based pristine cellulose hydrogel for delivery of grape pomace polyphenol drug	11(3), 2020, 851-860
Reactive and Functional Polymers	Dhanya George, P Uma Maheswari, KM Meera Sheriffa Begum,	Cysteine conjugated chitosan based green nanohybrid hydrogel embedded with zinc oxide nanoparticles towards enhanced therapeutic potential of naringenin	148, 2020, 104480
Chemical Product and Process Modeling	Rhea Muthappa, Bindhya K Purushothaman, KM Meera Sheriffa Begum, P Uma Maheswari	Kinetic modeling and optimization of the release mechanism of curcumin from folate conjugated hybrid BSA nanocarrier	15(1), 2020
Environmental Progress & Sustainable Energy	AVSL Sai Bharadwaj, S Niju, KM Meera Sheriffa Begum, Anantharaman Narayanan	Performance and evaluation of calcined limestone as catalyst in biodiesel production from high viscous nonedible oil	39(3), 2020, e13342
International journal of biological macromolecules	Bindhya K Purushothaman, Meera Sheriffa Begum KM	Magnetic casein-CaFe ₂ O ₄ nanohybrid carrier conjugated with progesterone for enhanced cytotoxicity of citrus peel derived hesperidin drug towards breast and ovarian cancer	151, 2020, 293-304

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Carbohydrate polymers	Dhanya George, P Uma Maheswari, KM Meera Sheriffa Begum	Chitosan-cellulose hydrogel conjugated with L-histidine and zinc oxide nanoparticles for sustained drug delivery: Kinetics and in-vitro biological studies	236, 2020, 116101
Materials Today: Proceedings	M Dineshkumar, KM Meera Sheriffa Begum, Banagiri Shrikar, Anand Ramanathan	Synthesis and characterization study of solid carbon biocatalyst produced from novel biomass char in a microwave pyrolysis	46, 2021, 9814-9819
Materials Today: Proceedings	R Muthu Dineshkumar, KM Meera Sheriffa Begum, Anand Ramanathan	Comprehensive characterization of cashew nutshell for biomass gasification	46, 2021, 9837-9843
Journal of Drug Delivery Science and Technology	P Uma Maheswari, Rhea Muthappa, K Purushothaman Bindhya, KM Meera Sheriffa Begum	Evaluation of folic acid functionalized BSA-CaFe ₂ O ₄ nanohybrid carrier for the controlled delivery of natural cytotoxic drugs hesperidin and eugenol	61, 2021 & 102105
Environmental Progress and Sustainable Energy	Sai Bharadwaj Aryasomayajula Venkata Satya Lakshmi, Niju Subramaniapillai, Khadhar Mohamed Meera Sheriffa Begum, Anantharaman Narayanan	Identification of sensitive process parameter of rubber seed oil conversion to biodiesel using fluorite and calcined limestone as catalysts—Uncertainty error analysis	40(3), 2021, e13564
Materials Letters	Bindhya K Purushothaman, P Uma Maheswari, KM Meera Sheriffa Begum	Glutamic acid functionalized casein-calciumferrite magnetic nanosystem based on paired targeting effect for synergistic anticancer therapy	303, 2021, 130550
Anti-Cancer Agents in Medicinal Chemistry	Duraisamy Renuga, Palanisamy U Maheswari, Kadhar MM Begum, Dharmar Prabakaran	TrizbenzIm, Cu-TrizbenzIm and Zn-TrizbenzIm as G-quadruplex inducing and stabilizing compounds on human telomeric sequence and their anticancer properties	21(17), 2021, 2407-2418
Materials Chemistry and Physics	K Purushothaman Bindhya, P Uma Maheswari, KM Meera Sheriffa Begum	Milk protein inspired multifunctional magnetic carrier targeting progesterone receptors: Improved anticancer potential of soybean-derived genistein against breast and ovarian cancers	272, 2021, 125055

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(ii) National Journals

Title	Author(s)	Journal	Year Vol. (No), Page
Viscosity correlations for alcohols	Anantharaman, N., K.M. Meera Sheriffa Begum, Masud Hossain S.K. and Ibrahim, S.H.	Journal of Current Sciences	2002, 2 (1) 1-4,
Studies on lignin Biodegradation of Bamboo- An eco friendly pulping process	Masud Hossain, S.K., N. Anantharaman and S.H. Ibrahim, K.M. Meera Sheriffa Begum	Eco. Env. & Cons.	2003, 9(1): (7-14)
Separation of L-Glutamic acid by emulsion liquid membrane extraction	Bhuvanewari, S., K.M. Meera Sheriffa Begum, P.S. Shanmugam, N. Anantharaman	CSIR Journal of scientific and Industrial research	2003, 62, 329-333
Studies on Biodegradation of Polychloro Biphenyl (Benzopyrine) using Phanerochaete Chrysosporium	S.K. Masud Hossain, S.H. Ibrahim, K. M. Meera Sheriffa Begum and N. Anantharaman	Indian JI. Environmental Protection	2003, 23(4), 150-160.
Studies on Bio-hydrometallurgical Leaching of Iron pyrite ore using Thiobacillus ferrooxidans	S.K. Masud Hossain, Manas Das, S.H. Ibrahim, K.M. Meera Sheriffa Begum and N. Anantharaman	Indian Journal of Chemical Technology	2004, 11, 116-120
Extraction of L-Glutamic acid by ELM	S.Venkatesan, K.M. Meera Sheriffa Begum, and N. Anantharaman	Journal of Indian Chemical Society	2004, 81, 1-3
Biobleaching of Zinc Sulphide (ZnS) ore using Thiobacillus ferrooxidans	S.K. Masud Hossain, Manas Das, K. M. Meera Sheriffa Begum and N. A	J. Institution of Engineers	2004, 85, 7-11
Studies on Lignin Biodegradation of Cyanide (AgCN) using <i>P.chrysosporium</i>	S.M Hossain, M. Das, K M M S Begum and N. Anantharaman	IE Journal _ Chem.Engg. Division	2005, 85, 45-49
Studies on reuse of tannery sludge in manufacture of bricks	R. Baskar, K.M. Meera S. Begum and S. Sundaram	Process and Plant Engineering	2006, 24, (2) 48-51
Characterisation and Constructive reuse of solid waste from Bauxite industry	R. Baskar, K.M. Meera S. Begum and S. Sundaram	Ind. J. of Environmental Protection	2007, 28, 68-75
Thermogravimetric Analysis of Waste sludge from Tannery	R. Baskar, K.M. Meera S. Begum and S. Sundaram	Ind. J. Chem. Tech	2006, 1, (2-4), 39-44
Aerobic Pollution Abatement of dairy Effluent using B. Candida haemulonii in Three phase fluidized bed	K. Sivaguru, S.K.M. Hussain, K.M. Meera S. Begum and N. Anantharaman	Ind. J. of Environmental Protection	2006, 90, 788-793

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Bioreactor			
Dairy Effluent treatment using <i>Candida haemulonii</i>	K.Sivaguru, S.K.M.Hussain, K.M.Meera S.Begum and N. Anantharaman	Chemical Engg. World	2006, 11, 58-61
Analysis study of FLC based Chemical Process using simulations	S.Nithya, T.Balasubramanyam, N.Anantharaman and K.M.Meera S. Begum	Process & Plant Engineering	2007, 24, (6), 59-61
Performance improvement in a model bioreactor using genetic Algorithm	S.M.Girirajkumar, N.Anantharaman, V.Dharmalingam and K.M.Meera S. Begum	J.Curr.Sci.	2007,10, (2), 479-484
Foam Separation of copper (II) from Aqueous Solutions	M.Arulmozhi, K.M.Meera S.Begum and N.Anantharaman	J.Env.Res. and Dev.	2007, 2, (2), 217-225
Removal of Heavy metal ions from aqueous and Industrial effluent by Foam Separation	M.Arulmozhi, M.Jaleel Rahman, K.M.Meera S.Begum and N.Anantharaman	Water Digest	2008, 4, 73-76
Genetic Algorithm based PID Controller Tuning for a Model Bioreactor	S.M.Girirajkumar, N.Anantharaman, V.Dharmalingam and K.M.Meera S. Begum	Ind.Chem.Engr.	2008, 50, (3), 214-226
Studies On Fluidized Beds Using Disk Type Internals And Modeling By ANN	Ronnie Kiran Mathew, Deepa Aravind, K.M. Meera S Begum and Anantharaman Narayanan	Indian Chemical Engineer	2015, 57, (2), 164-176
A comparative study of ANN and CFD modeling for Pressure drop prediction in Fluidized bed with Internals	Tushant Ghode, KM Meera S Begum, Anand B Desamala, Anantharaman Narayanan	Indian Chemical Engineer	(2017), 59 (1), 57-75.
Acid value optimization of calcined eggshells catalyzed biodiesel produced from rubber seed oil–A response surface methodology (RSM) approach	Bharadwaj Sai AVSL, Niju Subramaniapillai, Meera Sheriffa Begum Khadhar Mahommed, Anantharaman Narayanan	Indian Journal of Chemical Technology (IJCT)	2021, 27(5), 411-417

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(B) Conferences/Workshops/Symposia Proceedings

(i) International

Author(s)	Title	Name of the Conference, Place, Date
Sridhar, T., Siva Shanmugam, P., K.M. Meera Sheriffa Begum, and Anantharaman, N	Process Integration Study of Ammonia Plant	International Symposium on Recent trends in Heat and Mass transfer, held at IIT Guahathi 2002
R. Baskar, K.M.Meera S.Begum and S.Sundaram	A case study on Characterisation and reuse of Steel industry Pickling Plant waste sludge	Proc. of 11 th APCCHE Congress, Kuala Lumpur, Malaysia, 27-30 th August 2006
M.Arulmozhi, K.M.Meera S.Begum and N.Anantharaman	Foam separation of tributyl phosphate	International Conference on Cleaner Technologies and Environmental Management, Pondicherry Engg. college, Puducherry, 4-6 th January 2007
K.M.Meera Sheriffa Begum and S.Venkatesan	Mathematical modelling of ELM pertraction of heavy metal ions from dilute aq. solutions	4 th IWA Conference on Water and Waste Water Treatment at Harrogate, UK, 15 th – 17 th , May 2007
K.M.Meera Sheriffa Begum and S.Venkatesan	Emulsion Liquid Membrane (ELM) Pertraction of imidazole from dilute aqueous solutions by Aliquat-336 mobile carrier	the 6 th International Membrane Science and Technology Conference organized by The University of New South Wales, Sydney, Australia, November 5-9, 2007
K.M.Meera Sheriffa Begum, M.Arulmozhi and N.Anantharaman	Foam fractionation of Copper (II) from aqueous solutions	International Congress of Environmental Research by Govt. Geetanjali Girl's P.G.College, Bhopal, 28-30 th December 2007
K.M.Meera Sheriffa Begum, M.Arulmozhi and N.Anantharaman	Removal of Chromium (VI) ions by Foam separation from aqueous and industrial effluents	IV Int. conf. on Environmental, cultural, economic and social sustainability at Universiti Malaysia Terengganu, , 4-7 January 2008.
K.M.Meera Sheriffa Begum, M.Arulmozhi and N.Anantharaman	Recovery of Zinc (II) ions from aqueous and industrial effluent using a batch foam fractionator	14 th . Annual International Sustainable Development Research Conference, India Habitat Center, New Delhi, India, September 2008
K. M. Meera Sheriffa Begum, V. Archana and N. Anantharaman	Preparation and Characterization of RTIL Encapsulated polymer microspheres for phenol recovery	Recent Advances in Chemical Engineering and Technology, (RACET) 2011, by IChE Kochi Regional Centre and Cochi University of Science and Technology, Kochi, India, 10-12 March 2011.
K. M. Meera Sheriffa	Removal of Hexavalent	(RACET) 2011, by IChE Kochi

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Begum, S.Sugashini and M.Sindhu	Chromium Ions using activated carbon from surface functionalized rice husk	Regional Centre and Cochi University of Science and Technology, Kochi, India, 10-12 March 2011
K. M. Meera Sheriffa Begum	Current development of water treatment in India	Poster presentation made at INDO-UK workshop, 2012
K. M. Meera Sheriffa Begum and N. Anantharaman	RTIL Encapsulated microspheres as a tool for phenol recovery	Paper presented in International Conference on Environment Science and Biotechnology, (ICESB) 2011, by APCBEES, Maldives 25-26 November, 2011
K. Sriram, G. Arthanareeswaran, K.M.Meera.S.Begum	Effects of nano particles on sulfonated polyethersulfone membrane for fuel cell application.	11th International Conference on Membrane Science & Technology (MST2013) held in Kuala Lumpur, Malaysia on 27- 29 August 2013
K.Sriram, D.Renuga, P.Uma Maheswari, K.M.Meera S.Begum and G.Arthanareeswaran	Novel benzimidazole modified chitosan as antimicrobial biomaterial and effective Hg sensing for sequestration	ISER-82nd Int. Conf. on Chem. and Environ. Science (ICCES), Dubai, Dec. 2-3, 2016.
K.Sriram, P. Uma Maheswari, K. M.MeeraSheriffa Begum, G.Arthanareeswaran M.GoverAntoniraj and K. Ruckmani	Curcumin drug delivery by vanillin modified chitosan with calcium ferrite hybrid nanoparticles as carrier	Int. Conf. on Trends and Innovations in Chem. and Pharm.Tech. (TICPT) Feb. 2-4, 2017, Anna university, Trichy.
K.Sriram, P. Uma Maheswari, R. suganya, R.satishkumar, K. M.Meera Sheriffa Begum and G.Arthanareeswaran	Sulphonated polyamide imide with tyrosine modified chitosan composite membranes for fuel cell applications.	International Conference on Membrane Technology and its Applications (MEMSEP-2017), Feb. 21-23, 2017, NIT, Trichy.
Anagha B, Dhanya George, K.M. MeeraSheriffa Begum	Nano-hydrogel from sugarcane bagasse cellulose with green ZnO nanoparticles for potential biomedical applications	International Symposim on Functional materials: Energy and Biomedical applications (ISFM-2018) – Punjab University, April 13-15, 2018.
Rhea Muthappa, Bindhya K. Purushothaman, K. M. Meera Sheriffa Begum and P. Uma Maheswari	Kinetic modeling on the release mechanism of curcumin from folate conjugated hybrid BSA nanocarrier	International Conference on Advances and Challenges for Sustainable Eco System (ICACSE-2018), NIT-T, December 6-8.
Dhanya George, K.M. MeeraSheriffa Begum P. Uma Maheswari	Bioinspired nanohybrid hydrogel on GA conjugated chitosan-cellulose polymer: Drug release and Kinetic Modeling	International Conference on Multifunctional and Hybrid Composite Materials for Energy, Environment and Medical applications 9th to 11th September 2019 (ICMHCEE 2019) NIT-T

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Bindhya K P, K.M. MeeraSheriffa Begum P. Uma Maheswari	Folic acid functionalized BSA-CFNP carrier for controlled and targeted drug delivery using natural cytotoxic agents	International Conference on Multifunctional and Hybrid Composite Materials for Energy, Environment and Medical applications 9th to 11th September 2019 (ICMHCEE 2019) NIT-T
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(ii) National Conferences

Author(s)	Title	Name of the Conference, Place, Date
Meera Sheriffa Begum, K.M., Lakshmanan, C.M. and Balaraman K.S.	Extraction of Aromatics from Lubricating oils using solvent extraction in Batch and Continuous extractors	National symposium held at Indian Institute of Petroleum, Dehradun (1995)
Velmurugan, T. and K.M. Meera Sheriffa Begum	Distillery effluent treatment by solvent extraction	CHEMCON '99, Punjab University, Chandigarh, 1999
Anantharaman, N., Sivashanmugam, P., K.M. Meera Sheriffa Begum, and Mohan Rao	Studies on Treatment of Dairy waste water using Three-Phase Fluidisation	CHEMCON 2001, 54 th Annual session of IChE held at Chennai, December 2001
L. Gurunathan, K.M. Meera Sheriffa Begum and N. Anantharaman	Fluidized bed drying with internals	CHEMCON 2003 at bhuvaneshwar in Dec 2003
S. Saravanan, K.M. Meera Sheriffa Begum, N. Anantharaman, P. Siva Shanmugam and K.C. Velappan	Removal of Chromium (VI) from aqueous solutions by Emulsion liquid membrane	CHEMCON 2003 at bhuvaneshwar in Dec 2003
S. Saravanan, K.M. Meera Sheriffa Begum, K.C. Velappan, N. Vedaraman	Exhaust emission of a Diesel Engine fueled with trans-esterified Ricebran oil	CHEMCON 2003 at bhuvaneshwar in Dec 2003
R.Arul Gnanaraj, N.Anantharaman and K.M.Meera Sheriffa Begum	Experimental Study on Composting of Press Mud	CHEMCON 2005 at New Delhi in December 2005
M.Jaleel Rahman, K.M.Meera Sheriffa Begum and N.Anantharaman	Removal of Heavy metal ions from aqueous and Industrial effluents by Foam Separation	CHEMCON, 27-30 th December 2007
K. M. Meera Sheriffa Begum and S.Sugashini	Preparation and Characterization of Ozone Treated Carbonized Rice Husk for Removal of Chromium (VI)	CHEMCON 2012, NIT, Jalandhar, 2012
K.M.Meera S. Begum, S.Niju, and N.Anantharaman	Development of a cost effective heterogeneous catalyst for transesterification reaction	CHEMCON 2012, NIT, Jalandhar, 2012
K.M.Meera.S.Begum, K.Sriram, P.Uma	Modified chitosan: Synthesis, Characterization and application	17 th Chemical Research Society of

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Maheswari, A.Ezhilarasu, and G.Arthanareeswaran	towards biological activities	India(CRSI) symposium in Chemistry, Pune, 2015
K. Sriram, P. Uma Maheswari, K. M.MeeraSheriffa Begum, and N.Anantharaman	Antimicrobial property of CuO loaded hydrophobically modified chitosans for skin infective application	CHEMCON, Dec.26-28, 2016, Anna university, Chennai.

(C) BOOKS/BOOK CHAPTER

Books

Book Name	Authors	Publisher	Edition and Year
Elements of Mass Transfer- Part - I	Meera Sheriffa Begum K.M, and Anantharaman N	Prentice-Hall of India (P) Ltd.,	I Ed. 2005
Mass transfer Theory and Practice	Meera Sheriffa Begum K.M, and Anantharaman N	Prentice-Hall of India (P) Ltd.,	I Ed. 2011, Reprint, 2013
Process calculations	Meera Sheriffa Begum K.M, and Anantharaman N	Prentice-Hall India (P) Ltd.,	II Ed. 2011.
A Thermo-economic Approach to Energy from Waste	Anand Ramanathan, K.M.Meera Sheriffa Begum, Amaro Olimpio Pereira and Claude Cohen	Elsevier	2021

Book Chapters

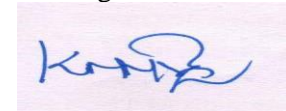
Chapter name	Authors	Publisher	Year
Agro-Residues as fuel and as a feedstock for other Products	Anupama R, Niju S, Meera Sheriffa Begum K.M, and Anantharaman N	Advances in Bio-process technology by Springer Publishers	2015
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I certify that the above information furnished by me is true to the best of my knowledge.

Signature



(K.M.Meera S.Begum)