

National Institute of Technology, Tiruchirappalli:
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Curriculum Vitae



Brief Profile:

Dr.M.Premalatha completed Phd in 2005, in the area of improvement of solar water heating system. She completed her certification program on ISO 9001:2015, IRCA Approved OHSAS Lead Auditor Conversion Training Program and NABL 17025:2005, all on Internal audit training. She is the Principal Investigator for “Carbon- di- oxide sequestration using solar/chemical methods (2008-2011 and 2012-2015) funded by DST. She has established a research lab with full-fledged facilities required for micro-algae cultivation, testing and analysis of solid and liquid samples. She is currently working on feasibility of phyco-remediation, for treating real industrial effluents, and feasibility (site) studies on Carbon-di- oxide sequestration from flue gas and organic spirulina. She is the principal investigator for PM fellowship (Industry-Institution tie up research project.

1. Name: Dr.M. Premalatha
2. Designation: Professor
3. Office Address: Department of Energy and Environment
4. Telephone (Direct) (Optional):0431-250-3130
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Mobile: 9894600407
5. Email (Primary): latha@nitt.edu
6. Field(s) of Specialization:
 - Energy audit
 - Energy efficiency
 - CO 2 sequestration
 - Wastewater treatment
 - Bioremediation
 - Algae Research
 - Biomass and Bioenergy

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty

7. Employment Profile

Employer	Job Title	From	To
National Institute of Technology, Tiruchirappalli	Professor	17/01/2018	Till date
National Institute of Technology, Tiruchirappalli	Associate Professor	02/08/2008	16/01/2018
National Institute of Technology, Tiruchirappalli	Assistant professor	02/08/2005	01/08/2008
Regional Engineering college, Tiruchirappalli	Lecturer	09/01/1996	01/08/2005
Regional Engineering college, Tiruchirappalli	Research Assistant	05/11/1993	28/01/1996
Trichy Distilleries and Chemicals Ltd, Trichy	Company Apprentice	02/07/1992	30/07/1993

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	REC Trichy	2005	Commended	Solar water heating systems
M.Tech	Bharathidasan University, Trichy	1994	First Class	Energy Engineering
B.Tech	Bharathidasan University, Trichy	1991	First Class	Chemical Engineering

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Head of the Department	Department of Energy and Environment	27.01.2020	Till date
Head of the Department	Department of Energy and Environment	27.01.2015	26.01.2018
Quality Manager	Calibration Lab	2018	2022
Management Representative	ISO testing lab	2015	2018

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Member- Board of Studies	Gandhigram Rural University Dindigul		
Member- Board of Studies	Periyar Maniammai College of Technology for Women (PMCTW) Thanjavur.		
Doctoral Committee member for 4 candidates	Anna University, Trichy		
Doctoral Committee member for 1 candidate	Vellore Institute of Technology, Vellore		
Doctoral Committee member for 1 candidate	Gandhigram Rural University, Dindigul		
External Expert	Quality assurance cell of distance education centre, Gandhigram Rural University, Dindigul		
External Examiner	Anna University		

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2014	Excellence (The Paper was selected as one of the best entries in the college category)	Wipro (Earthian-2014)
2014	Honor from 'The Hindu'	'The Hindu'
2015	Bharat Excellence Award for outstanding achievements and contributions at a seminar on "Economic growth and national Unity"	Global Brotherhood forum at New Delhi
2015	Indira Gandhi Award	Global Brotherhood forum at New Delhi
8th March 2016	International Women's Day Award	"Nehru Memorial College and the Ponsiva Research Innovation Trust"

12. Fellowships

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
Principal Investigator(Industry-Institute interaction)	Prime Minister Fellowship for Doctoral Research	SERB	2013	Till now

13. Details of Academic Work

- (i) Curriculum Development– M.Tech Energy Engineering
- (ii) Courses taught at Postgraduate and Undergraduate levels

levels Solar Energy Utilization
Optimum Utilization of
Heat and Power Energy
Efficient Buildings
Energy Audit and Management
Environmental Engineering &
Pollution Control Process
Control and Instrumentation

- (iii) Projects guided at Postgraduate level:35
- (iv) Other contribution(s)

14. Details of Projects

(A) R & D Projects

Title of Project	Funding Agency (Rs in Lakhs)	Duration		Status
		From	To	Ongoing/ Completed
“Creating infrastructure for Environmental Engineering Laboratory	MHRD (6)	2000	2002	Completed
“Establishment of Solar Energy Laboratory”	MHRD(10)	2002	2004	Completed
R&D project on “ Solar Heat Pipe for Air and Wind heater”	MHRD(5)	2002	2005	Completed

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

“Development, Design and Demonstration of a Self Circulating bio Gas Generator for Bone Wash and Sinews”,	MHRD(8)	2003	2006	Completed
“Experimental and simulation studies on CO2 sequestration using Solar, Chemical methods”	DST(40)	2008	2011	Completed
Experimentation on biofixation of CO2 using an efficient Photo Bio Reactor & Simulation and development of scale up methods, in National Institute of Technology, Tiruchirappalli, India	DST(82.5)	2012	2015	Completed
Prime Minister’s fellowship for doctoral research project on ‘Microalgae treatment of distillery waste’	DST(24)	2013	2016	Completed
Effective Conversion of Medical and Municipal Plastic Wastes into Value Added Products through Integrated Thermochemical Reactors and its Kinetic Study and Life Cycle Assessment	SERB-TARE(18)	11/2022	11/2025	Ongoing

(B) Consultancy Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Physical model of ESP for NTPC Faraka Super thermal power	TryCAE Pvt Ltd	June 2021	June 2022	Completed

**National Institute of Technology, Tiruchirappalli:
Perfoma for CV of Faculty**

station stage -II (2x500 MW)				
Validation and approval of test procedures and methods involved in the measurement of flow using Averaging Pitot Tube	TryCAE Pvt Ltd	22.05.2021	11.06.2021	Completed
Fabrication, erection and operation of a scaled down physical model of ESP for	UP Rajya Vidyut Utpandan Nigam Ltd	30.07.2021	31.12.2021	completed

15. Number of PhDs guided/currently guiding

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
R. Nalini	Auto gasification of wooden sticks	Co-Supervisor	April 2008
S. Shanmugha Priya	Studies on Photolysis of Phenol	Supervisor	April 2009
Sudhakar K	Microalgae feasibility study for CO ₂ capture	Supervisor	December 2013
K.K.Vasumathi	CO ₂ sequestration using microalgae	Supervisor	June 2014
K. Sankaran	Characterization and enhanced bioremediation of distillery wastewater using microalgae and its CDM potential	Supervisor	2017
C.Naveen	Solid waste management of distillery waste through thermal degradation technique	Supervisor	2017

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

EM.Nithya	Experimental studies on improving CO ₂ utilisation and resource minimisation in biosequestration of CO ₂ by microalgaeim	Supervisor	2018
Siva Krishna Rao	Day-ahead forecasting of solar photovoltaic power using Artificial Neural Network	Supervisor	2018
Ramakant pandey	Analysis of light intensity distribution,Hydrodynamics behavior and design parameters of open photobio reactor using CFD	Supervisor	2018
Mande Amol balu	Performance analysis and modelling of a low cost modified solar still with coco peat and charcoal as basin materials	Supervisor	2019
G.Shanthi	Experimental studies on the effect of organic nitrogen on growth,biochemical compositions,pigments,and CO ₂ sequestration-spirulina platensis	Supervisor	2021
M.Vivekanandan	Experimental and CFD Investigations on a full loop circulating fluidized BED combustion(CFBC) Boiler	Co-Supervisor	2021
V.S.N.Narasimharaju	Novel control strategies for Enhancing the Performance of grid connected hybrid PV-Battery / WindBattery systems	Supervisor	2022
S.Dinesh kumar	Experimental studies on disposal of distillery effluent - sustainable approach	Supervisor	Ongoing
Virendra Raghuram	Design modifications in solar water heating systems	Supervisor	Ongoing
G.Gopi	Performance and sustainability of solar powered desalination systems using evacuated tube solar collector	Co-Supervisor	Ongoing
Baji Katta	Design of a heat exchanger for preheating of air for	Supervisor	Ongoing

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

	ladle preheating by using combustion flue gas		
Nandyala shiva kishan	Model Energy analysis in Building and model development by ANN	Co-Supervisor	Ongoing
Prushottam lal	IoT based Energy Auditing and Conservation in Railways	Co-Supervisor	Ongoing
Anto s	Microalgae cultivation for biodiesel and bioproduct recovery	Co-Supervisor	Ongoing
Dharavath Ramesh	Design and Implementation of smart power management for smart dc adapter ports for smart dc home	Supervisor	Ongoing
J.Ramesh	Development of Energy efficient Vanadium Redox Flow Battery through Novel operating strategies and cost effective components manufacturing	Co-Supervisor	Ongoing
S.N.Hariprasad	Performance analysis and development of models for large scale solar PV plants in India	Co-Supervisor	Ongoing
Beula Isabel J	Comparison of biofuel production from microalgae and other feedstocks-sustainable approach	Supervisor	Ongoing

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

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson , Paper presenter, Any other)	Event Organized by	Venue
14-15th Oct.2011	Energy efficiency and Environmental Impact	National Workshop	Participant	Manipal University	Manipal

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

20-21st Mar.2009	Green Management in a warning world: Challenges & Opportunities	International Conference	Paper presenter	Association of British Council, Cochin	Kerala
17-18th Oct.2011	Use of Solar Energy for CO2 capture, algae technology and hydrogen production and subsequent use of algal biomass for commercial purpose.	International Workshop	Paper presenter	IIT, Khargpur	Hyatt residency, Kolkata

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

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Two days Workshop on Thermal and Elemental Analysis of Solids and Spectroscopic Analysis of Solid and Liquid Samples	National	21&22nd Dec.2015	Convener	CEESAT, NITT
A one day demonstration of Calibration Instruments for Industries	National	25th Feb.2016	Convener	CEESAT, NITT
Short term course on "Waste Management"	National	May 9th to 14th 2016	Convener	CEESAT, NITT
TEQIP Sponsored One week Workshop on Thermal and Elemental Analysis of Solids	National	1st - 5th august 2016	Convener	CEESAT, NITT
one day workshop on spectroscopic analysis of solid and liquid samples	National	10th October 2014	Convener	CEESAT, NITT
one day workshop on Thermal & Elemental analysis of	National	9th October 2014	Convener	CEESAT, NITT

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

solid samples				
one day workshop on ISO documentation, record making and control	National	August 2014	Convener	CEESAT, NITT
one day workshop on Energy Conservation in Process Industries organized	National	30th December 2013	Convener	CEESAT, NITT
one day workshop on Spectroscopic analysis of solid and liquid samples	National	05th September 2013	Convener	CEESAT, NITT
two day workshop on Thermal & elemental analysis of solid samples	National	29th & 30th August 2013	Convener	CEESAT, NITT
one day workshop on Necessity of calibration for Industries	National	18th July 2013	Convener	CEESAT, NITT
Energy Day	National	2013	Convener	CEESAT, NITT
Energy day	National	20th April, 2012	Convener	CEESAT, NITT
One day seminar on “Energy and Environment”	National	5th June 2010	Convener	CEESAT, NITT
One day seminar on “Energy Day 09”	National	24th April, 2009	Convener	CEESAT, NITT
Workshop on “Rural development: Role of Renewable Energy Services”-TEQIP	National	9th June, 2008	Convener	CEESAT, NITT
National Conference on “Energy Efficiency : The Environmental Solution (EEE 07)	National	27-28th December, 2007	Convener	CEESAT, NITT
One day Training program on “Instrumentation methods of thermal analysis and data interpretation”-TEQIP	National	25th November, 2006	Convener	CEESAT, NITT
Basic Training program on “CFD- CFX 5.7.1”	National	1-5th March 2005	Convener	CEESAT, NITT

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

One day workshop on “Instrumentation of Thermal Analysis” under the sponsorship of M/s. Perkin Elmer India Pvt Ltd, Chennai	National	30th April 2005	Convener	CEESAT, NITT
Two day workshop cum discussion on “Small hydro power projects” under the sponsorship of Ministry of Non conventional Energy Sources (MNES), New Delhi, Jointly organized with Alternate Hydro Energy Centre, IIT Roorkee	National	22-23rd April 2005	Convener	CEESAT, NITT
One day workshop on “Solar Home Appliances”	National	5th March 2005	Convener	CEESAT, NITT
National Conference on Environment Awareness and Pollution Impacts Sponsored by AICTE, New Delhi	National Conference	26th November 2004	Convener	CEESAT, NITT
Short term training program on Emerging Energy Technologies sponsored by AICTE-ISTE, New Delhi	National	17-28th May 2004	Convener	CEESAT, NITT
International Workshop on “Sustainable Customerization for Sustainable Energy” jointly conducted by Intermediate Technology Consultants (ITC) and CEESAT	International	3-5th December 1998	Convener	CEESAT, NITT
Non conventional Energy Systems: Theory and Practice, sponsored by state project Implementation unit, Directorate of technical Education, Chennai.	National	21st July to 1st August, 1997	Convener	CEESAT, NITT

18. Invited Talks delivered

PLACE	PROGRAM	TITLE OF THE	ORGANISED BY	DATE
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National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

		TALK		
Mahendra Engineering College, Namakkal	National conference	"Climate Changes on Energy Sector NCCC'16"	Mahendra Engineering College, Namakkal	07.04.2016
Kaueri College, Trichy				2015
Bharathidhasan University, Trichy	International Conference	"MICROALGAL CYANOBACTERIAL BIOTECHNOLOGY (MACB-2016)"	Bharathidhasan University, Trichy	31.08.2016
Periyar Maniyammai University, Tanjore				2015
Vivekanantha Engineering College, Thiruchengode				2015
NIT, Trichy	Faculty Development Programme (FDP) on Entrepreneurship development	Smart use of energy audits	Centre for Entrepreneurship Development and Incubation	15th May 2014
NIT, Trichy	One day workshop on "Hybrid Waste Water Treatment Technologies"	Waste water treatment for Energy generation through micro algae	Department of Chemical Engineering	12th April 2014
Calicut	FDP on Advances in Energy Hybrid Systems	Hybrid Energy systems	NIT Calicut	26th June-2nd July 2011
Thanjavur	International conference on Emerging Green Technologies (ICEGT 2011)	Application of Solar energy for industries	Periyar Maniammai University	28.7.2011

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty**

Trichy	National workshop on Energy Efficiency in Thermal/Mechanical systems	Energy Efficiency in Thermal systems	K. Ramakrishnan College of Engineering	15.3.2011
Calicut	National Conference on Recent Trends in Alternate Energy	CO2 sequestration using microalgae	NIT Calicut	9-10 th June 2011
Tiruchirappalli	National Conference on Renewable Energy	Applications of Solar Energy	Department of Petrochemical Engineering, Anna University	

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	Indian Society for Technical Education (ISTE)	LM-31321
Member	Institution of Engineers	M-137819-2
Life Member	Solar Energy Society of India	LM/1596/2011
Ordinary Member	International Society of Applied Phycology	From March 2011
Silver membership	International Solar Energy Society (ISES)	1110053(March 2011)

20. Academic Foreign Visits

Country	Duration of Visit	Programme
UK	1998	Training in UK “Heat Pipes and Heat pumps”, The Energy Group, Department of Engineering at The University of reading, 20 th April- 29 th May 1998, UK.

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

		<p>“ Photovoltaic Systems Course in Building Integrated PV systems Stand alone PV systems”, The Energy Group, Department of Engineering at The University of reading, UK, 21st-22nd may 1998. “Training of IR thermal imaging, data loggers and Energy Management”, Energy Design advise</p>
		<p>scheme (EDAS), Sheffield University, Uk, 1st – 25th February 1998. “Construction of Hospital Waste incineration and Hybrid Energy System”, Innovative Technology group, De Mont Fort University, Lincoln, School of Agriculture and Horticulture, UK, 1st -15th June 1998. “Energy audit for buildings” in Buildings Research Establishment, Garston- March 1998. “Energy audit for buildings” in University of Sal ford, Sal ford. January, June 1998. Activities carried out in UK Energy Audit for Newton Building in university of Salford, Salford. Energy Audit for Royal Manchester Children’s Hospital, Manchester. Calibration of hot chamber and air-conditioning chamber, Energy Design Advice Scheme (EDAS), University of Sheffield, Sheffield. Heat Pipe at forced and natural convection conditions, University of Reading, Reading. Effect of feed size on biogas production by anaerobic digestion process, innovative Technology Group, De Mont Fort University, Lincoln. Certification examination passed in 2008 Conducted by Bureau of Energy Efficiency (Certified Energy Auditor 2008-2013(EA0847)</p>

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year
Dinesh Kumar, S., Amol mande Balu., Premalatha, M. , and Sivasankar, T	Experimental studies on the impact of porous bed induced solar evaporation and thermal degradation of the solid content of the distillery effluent using cocopeat- a sustainable approach	Journal of Cleaner Production	377	134250	2022
DVSK Rao Kasagani, P Manickam	Modeling of solar photovoltaic power using a two-stage forecasting system with operation and weather parameters	Energy sources			2022
N.Kalaiselvan, Godwin Glivin, A.K. Bakthavatsalam, V. Mariappan, M. Premalatha , P. Saji Raveendran, S. Jayaraj, S. Joseph Sekhare	A waste to energy technology for Enrichment of biomethane generation: A review on operating parameters, types of biodigesters, solar assisted heating systems, socio economic benefits and challenges	Chemosphere	293	133486	2022
Godwin Glivin, Maria ppan V., Premalatha M. , Hareesh Krishnan H., Joseph Sekhar S.	Comparative study of biogas production with cow dung and kitchen waste in Fiber-Reinforced Plastic (FRP) biodigesters	Materialstoday: Proceedings		2264-2267	2022
Dinesh Kumar S, Premalatha M. , T. Sivasankar	Utilising hen feather as an adsorbent on comparison with bentonite in distillery effluent using Fourier-transform infrared spectroscopy and thermogravimetric analyser	International Journal of Environmental Analytical Chemistry			2021

National Institute of Technology, Tiruchirappalli:
Perfoma for CV of Faculty

Godwin Glivin, N. Kalaiselvan, V. Mariappan, M. Premalatha , P.C. Murugan, Joseph Sekhar	Conversion of biowaste to biogas: A review of current status on techno-economic challenges, policies, technologies and mitigation to environmental impacts	Fuel	302	121153	2021
Godwin Glivin, V. Mariappan, M. Premalatha , H. Hareesh Krishnan, S. Joseph Sekhar	Comparative study of biogas production with cow dung and kitchen waste in Fiber-Reinforced Plastic (FRP) biodigesters	Materials Today			2021
Srividya, K., Glivin, G., Sreeja, V. & Premalatha, M	A Review on Eco-Restoration of Rivers with Special Focus on Industrial Wastewater Treatment	Energy Research Journal	12(1)	22-38	2021
P. M. Sivaram M. Premalatha , A. Arunagiri	Computational studies on the airflow developed by the building-integrated passive solar energy system	Journal of Building Engineering	39	102250	2021
S Krishnamoorthy, P Manickam	Phycoremediation of industrial wastewater: challenges and prospects	Bioremediation for Environmental Sustainability		99-123	2021
P. M. Sivaram, S. Dinesh Kumar, M. Premalatha , et al	Experimental and numerical study of stepped solar still integrated with a passive external condenser and its application	Environment, Development and Sustainability			2020
K Sankaran, M Premalatha , M Vijayasekaran	Evaluation of distillery wastewater treatability in a customized photobioreactor using blue-green microalgae – Laboratory and outdoor study	Journal of Environmental Management	234	412-423	2019
P.M.Sivaram,S.Din esh Kumar, M. Premalatha , et al	Experimental investigation on airflow and water production in the integrated rooftop solar thermal system	ASME Journal of Solar Energy Engineering	142(3)		2019

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

M.Sivaram, Mande Amol Balu M. Premalatha	Investigation on a building-integrated passive solar energy technology for air ventilation, clean water and power	Energy Conversion and Management	211		2020
S Krishnamoorthy, P Manickam , V Muthukaruppan	Bioprocessing of cane molasses to produce ethanol and its derived products from South Indian Distillery	Emerging Eco-friendly Green Technologies for Wastewater Treatment		129-145	2020
P. M. Sivaram, Harish Sivasankaran, M. Premalatha .et al	Performance analysis of solar chimney using mathematical and experimental approaches	International Journal of Energy Research	42		2018
S Krishnamoorthy, M Premalatha	Bioremediation of Distillery Wastewater: Nutrient Uptake by Microalgae	Recent Advances in Environmental Management		197-214	2018
Vivekanandan ,Premalatha M ,Anantharaman N	Erosion Reduction and Enhancement in Performance of a Novel Cyclone separator using CFD analysis	Journal of Engineering Technology			2019
Vivekanandan ,sai vijaya, Premalatha M et al	Experimental and computational studies on gas-solid fluidization in a cylindrical column with and without Internals	Materials Today proceedings			2020
Vivekanandan ,Premalatha M ,Anantharaman N	The Hydrodynamics studies on loop seal in CFBC Boilers using CFD analysis	. Chemical product and process modeling			2019
MA Balu, K Rao, C Naveen, M Premalatha	Effect of orientation on the yield of low-cost solar stills with coco peat and charcoal as an absorber material”, Desalination and Water Treatment	Desalination and Water Treatment		126-135	2019
R Elankovan, M Premalatha	Utilization of unfiltered LPG-burner exhaust-gas emission using microalga Coelastrella sp	Journal of CO 2 Utilization	29	283-295	2019

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

EM Nithiya, F Fenila, KK Vasumathi	Cultivation of scenedesmus sp. using optimized minimal nutrients and flocculants – a potential platform for mass cultivation”	Environmental Technology		1-14	2018
MA Balu, DV Rao, K Siva Krishna, M Premalatha	Performance analysis of biomass- based absorber solar still through ANN and MLR approach	Desalination and Water Treatment	127	262-271	2018
D. V. Siva Krishna Rao K, M Premalatha , C. Naveen	Analysis of different combinations of meteorological parameters in predicting the horizontal global solar radiation with ANN approach: A case study	Renewable and Sustainable Energy Reviews	91	248-258	2018
D. V. Siva Krishna Rao K, M Premalatha , C. Naveen	Models for forecasting monthly mean daily global solar radiation from in-situ measurements: Application in Tropical Climate, India	Urban Climate	24	921-939	2018
GS Narayanan, S Seepana, R Elankovan, S Arumugan, M Premalatha	Isolation, identification and outdoor cultivation of thermophilic freshwater microalgae Coelastrella sp. FI69 in bubble column reactor for the application of biofuel production	Biocatalysis and Agricultural Biotechnology	14	357-365	2018
K Sankaran, M Premalatha	Nutrients uptake from anaerobically digested distillery wastewater by Spirulina sp. under xenon lamp illumination	Journal of Water Process Engineering	25	295-300	2018
KDV Siva Krishna Rao, M Premalatha , C Naveen	Method and strategy for predicting daily global solar radiation using one and two input variables for Indian stations	Journal of Renewable and Sustainable Energy	10	013701	2018
G Shanthi, M Premalatha , N Anantharaman	Effects of l-amino acids as organic nitrogen source on the growth rate, biochemical composition and polyphenol content of Spirulina platensis	Algal Research	35	471-478	2018
MA Balu, M Premalatha	Investigation of charcoal, coco peat and black sponge as absorber materials on the performance enhancement of low cost solar still	Desalination and Water Treatment	116	57-66	2018

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

Amol Balu Mande and Premalatha Manickam	Enhanced solar still productivity using transparent walls with integral trough and organic porous absorber material	International Journal of Green Energy	16(3)	211-227	2018
S Krishnamoorthy, M Premalatha , M Vijayasekaran	Characterization of distillery wastewater–An approach to retrofit existing effluent treatment plant operation with phycoremediation	Journal of cleaner production	148	735-750	2017
M Nithiya, J Tamilmani, KK Vasumathi, M Premalatha	Improved CO ₂ fixation with Oscillatoria sp. in response to various supply frequencies of CO ₂ supply	Journal of CO ₂ Utilization	18	198-205	2017
RK Moorthy, M Premalatha , M Arumugam	Batch sedimentation studies for freshwater green alga scenedesmus abundans using combination of flocculants	Frontiers in Chemistry	5	37	2017
R Pandey, M Premalatha	Design and analysis of flow velocity distribution inside a raceway pond using computational fluid dynamics	Bioprocess and biosystems engineering	40	439-450	2017
KK Vasumathi, EM Nithiya, R Pandey, M Premalatha	Studies on the effect of wind speed on loss of carbon dioxide during bio sequestration	International Journal of Hydrogen Energy	42	26555-26562	2017
LMA Kumar, V Sivaramakrishnan, M Premalatha , M Vivekanandan	Experimental and simulation studies on the effect of suction opening orientation on solar vertical chimney	International Journal of Sustainable Energy	36	592-605	2017
C Naveen, M Premalatha	Impact of blend ratio on the co-firing of post-methanated distillery effluent solid waste and low-rank Indian coal via analysis of oxidation kinetics through TGA	RSC Advances	6	26121-26129	2016
SS Priya, M Premalatha , I Thirunavukkarasu	Indoor air quality optimization by thermal displacement air-conditioning methods	Indian Journal of Science and Technology	9	100984	2016
K. Sankaran, Lakshmi Pisharody, G. Suriya Narayanan, M. Premalatha	Bacterial assisted treatment of anaerobically digested distillery wastewater	RSC Advances	5	70977-70984	2015

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty

Ramakant Pandey, Akhilesh Sahu, Vasumathi K K, Premalatha M	Studies on light intensity distribution inside an open pond photo-bioreactor	Bioprocess and Biosystems Engineering	38(8)	1547-57	2015
K. Sudhakar, M. Premalatha	Characterization of micro algal biomass through FTIR/TGA/CHN analysis: Application to <i>Scenedesmus</i> sp. Energy Sources Part A	Recovery Utilization and Environmental Effects	37(18)	1-8	2015
C. Naveen, M. Premalatha	Thermo gravimetric and kinetic studies on dried solid waste of post- methanated distillery effluent under oxygen and nitrogen atmosphere	Bioresource Technology	174	126–133	2014
K. Sankaran, M.Premalatha, M.Vijayasekaran, VT. Somasundaram	DEPHY project: Distillery wastewater treatment through anaerobic digestion and phycoremediation	A green industrial approach. Renewable and Sustainable Energy Reviews	3		634-643
Vasumathi KK, Premalatha M, Subramanian P	Experimental studies on the effect of harvesting interval on yield of <i>Scenedesmus arcuatus</i> var	Ecol. Eng	58	13-16	2013
Vasumathi KK, Premalatha M, Subramanian P	Parameters influencing the design of photobioreactor for the growth of microalgae	Renew. Sust. Energ	16(7)	5443-50	2012
Sudhakar K, Srivastava T, Satpathy G, Premalatha M	Modelling and estimation of photosynthetically active incident radiation based on global irradiance in Indian latitudes	Int. J Energ. Environ. Eng	14	1421-26	2013
Sudhakar K, Rajesh M., Premalatha M	Carbon Mitigation potential of <i>Jatropha</i> biodiesel in Indian Context	Energ. Procedia	14	1421-26	2012
Sudhakar, K, Rajesh M, Premalatha M	A Mathematical Model to Assess the Potential of Algal Bio-fuels in India	Energ. Sour. A: Recovery, Utilization, and Environmental Effects	34(12)	1-7	2012
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Sudhakar K, Suresh S, Premalatha M	Techno economic Analysis of Micro algal Carbon Sequestration and Oil Production	Int. J Adv. Eng. Sci. Technol	12(2)	46-53	2011
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Sudhakar K, Premalatha M	Micro-algal Technology for Sustainable Energy Production State of the Art	J. Sust. Energ. Environ	3	59-62	2012
Shanmuga Priya S, Premalatha M, Subramanian P	Role of optical density on the choice of photolytic reactor	IJEE	6	136-151	2014
Sankaran K and Premalatha M	Coupling Microalgae technology in the treatment process of distillery wastewater	IJATER	2	94-97	2014
Vasumathi KK, Premalatha M, Subramanian P	Experimental studies on the effect of harvesting interval on yield of <i>Scenedesmus arcuatus var. capitatus</i>	Ecol. Eng	58	13-16	2013
Vasumathi KK, Premalatha M	Parameters influencing the design of photobioreactor for the growth of microalgae	Renew. Sust. Energ	16(7)	5443-50	2012
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V.Sivaramkrishnan, V.Kirubakaran, M.Premalatha and P.Subramanian	Experimental study on waste heat recovery for sustainable industrial systems	Journal of Current Sciences (An International Triannual publication of Society of Sciences	9(2)	489-496	2010
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S.Shanmuga Priya, M.Premalatha, N.Anantharaman	Feasibility studies on solar photo degradation of phenol	International Journal of Applied Engineering Research	3(10)	1329-1336	2008
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PG Nikhil, M. Premalatha	Performance enhancement of solar module by cooling: An experimental Investigation	International Journal of energy and Environment	3	73-82	2012
M.Premalatha, S.Shanmuga Priya and V.Kirubakaran	source of bio fuels for India	eNREE,	4(1)	4-7	2007

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V.Sivaramkrishnan, V.Kirubakaran, M.Premalatha and P.Subramanian	Kinetics of Auto-Gasification of bagasse for energy augmentation	Indian Journal of Environment and Eco Planning (An official trianual publication of Society of Environmental Scientists	12(3)	591-598	2006
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S. Shanmuga Priya, M. Premalatha, P. Subhamanian	Elucidation of kinetics of photolysis of phenol	Journal of the Institution of Engineers (Chemical Engg Division)	90	10-16	2009
S.Shanmuga Priya, M.Premalatha, I.Thirunavukkarasu	Solar Photocatalytic treatment of phenol wastewater	Journal of Institution of Engineers (Chemical Engineering division)	89	31-35	2009
M.Premalatha, S.Shanmuga Priya, V.Sivamakrishnan	Efficient cogeneration scheme for sugar industry	Journal of Scientific & Industrial Research/ S & T and Industrial Research	67(3)	239-242	2008
S.Shanmuga Priya, M.Premalatha	Solar Energy as a best energy option for treatment of Phenol	Journal of Solar Energy Society of India			2010
M.Premalatha and I.Neethi Manickam	Energy Conservation in Lightly loaded induction motors in cement plants – A case study	Cement, Energy and Environment	5(3)	10-11	2001
S. Saravanan, M.Premalatha, G.Punitha and P. Subramanian	Improving Piping Design	Hydrocarbon Processing		59-61	1996

National Institute of Technology, Tiruchirappalli:
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S. Saravanan, Chetan T. Goudar, M.Premalatha and P. Subramanian	Development of Novel Anaerobic Digester- Apoorva Lakshmi	Biogas Forum Impressum	1996/2/65		1996
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(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Kalaiselvan Narasimman, Sivasankar N, Hareesh Krishnan H, A.K. Bakthavatsalam, Premalatha M , Godwin Glivin	Performance analyses of DSSC (Dye-Sensitized Solar Cell) with various type of electrodes and natural dyes using FTO glass	AIP Conference Proceedings		International Conference on Research Advances in Engineering and Technology		2021
Kalaiselvan Narasimman, Sivasankar N, P.Saji Raveendran, Hareesh Krishnan H, A.K. Bakthavatsalam, Premalatha M , Joseph Sekhar S, Godwin Glivin	Performance analysis of 1 KW Standalone PV system coupled with V – trough concentrator under various geometrical conditions	AIP Conference Proceedings		International Conference on Research Advances in Engineering and Technology		2021
Hareesh Krishnan H, Murugan P.C., Varughese, Alfred Franklin, Premalatha M , Bibin Prasad, Godwin Glivin	Effect of Solar Shading Device inside the Cavity of Double Skin Facade for Increasing Energy Efficiency An Experimental Study	AIP Conference Proceedings		International Conference on Research Advances in Engineering and Technology		2021

National Institute of Technology, Tiruchirappalli:
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Sankaran K, Suriya Narayanan G and Premalatha M	Enhancing biogas potential of distillery wastewater through phycoremediation	Elsevier	220-223	ICACE TKMCE-14		2014
Suriya Narayanan G, Sankaran K and Premalatha M	Effect of inoculum concentration of Oscillatoria Sp. in the treatment of distillery wastewater	Elsevier	256-259	ICACE TKMCE-14		
V.Sivaramkrishnan, V.Kirubakaran, S.Shanmuga Priya.M.Premalatha	Elucidation of Kinetics of Bagasse Gasification in Nitrogen and Air	International Conference on Advances in Energy Research		ICAER		2007
V.Sivaramkrishnan, V.Kirubakaran, S.Shanmuga Priya.M.Premalatha	Experimental Investigation of gasification characteristics of biomass and effect of bio-oxygen	Proceedings of International conference on Modeling and Simulation(CITCOMS)		CITCOMS	CIT	2007
V.Sivaramkrishnan, V.Kirubakaran, S.Shanmuga Priya.M.Premalatha	Segregated flow modeling of Solar Flat Plate Collector	Proceedings of 3rd International conference solar Radiation and Day Lighting	15-23	SOLARIS	IITD	2007
S.Shanmuga Priya, M.Premalatha and V.Kirubakaran	Coupled Solar Bio process for Industrial effluent Coupled Solar Bio process for Industrial effluent	Proceedings of International Conference on Cleaner Technologies and Environmental Management	309-314		Pondichery	2007

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
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22. Any other (Extracurricular Activities/ Social activities)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role	Event Organized by	Venue

23. Date of profile update: 13/07/2022