

## Faculty Profile



**Name** : **Dr. S. Karthikeyan**  
**Designation** : Associate Professor & Head  
**Address** : No. 53, II Street,  
Rock Mount City,  
Erode, TN, India - 638112  
**Contact Number** : +91 9442264501  
**Email ID** : environkarthi@gmail.com  
**Date of Joining in Collegiate Education** : 09.07.2009  
**Date of Joining in the Present College** : 09.07.2009  
**Academic Profile** : <https://nanoient.org/editor-in-chief/>

Degree	Institute/College	University	Period
B.Sc. (Chemistry)	Bharathidasan University, Tiruchirapalli	Bharathidasan University, Tiruchirapalli	1989
M.Sc. (Chemistry)	Bharathidasan University, Tiruchirapalli	Bharathidasan University, Tiruchirapalli	1991
M.Tech (Nanotechnology)	Anna University, Coimbatore	Anna University, Coimbatore	2010
M.Phil	Bharathiyar University, Coimbatore	Bharathiyar University, Coimbatore	1999
PhD (Chemistry)	Bharathiyar University, Coimbatore	Bharathiyar University, Coimbatore	2007

**Teaching Experience** :

i) **Total** : 32 Years  
ii) **UG** : 32 Years  
iii) **PG** : 17 Years

Name of the college	Position held	Period
Chikkanna Govt. Arts College, Tiruppur, TN, India	Assistant Professor	2009 - 2022
Chikkanna Govt. Arts College, Tiruppur, TN, India	Associate professor	2022 – till date

## Honors and Research Awards

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- ❖ Outstood as College First rank in M.Sc. Degree
- ❖ Visited USA, UK, Thailand, Malaysia, Singapore and Kuwait for presenting Research Pape in Several International Conferences
- ❖ Chaired a number of sessions in many National level and International Seminars Conference
- ❖ Obtained funding from TNSCST under popularization of science and technology scheme (Lr.No.TNSCST/NTD-2001/TD/2465, Dated (20.09.2001)
- ❖ Obtained Major Research Grant from UGC, New Delhi (Lr.No.39-769/2010 dated.13.02.2011  
Ø Obtain travel grants from different agencies such as AICTE, UGC and CSIR
- ❖ Received Service Recognition Award on account of the Excellent Participation in Polio plus immunization programme to eradicate polio to achieve Goal of a World without Polio for the Rotary year 2001-02
- ❖ One of my research proposals entitled “Low Temperature Synthesis of High Purity Carbon Nanotubes from Unconventional Precursors: Bio-diesel Oils” has been considered for possible funding by Department of Science and Technology, New Delhi, under Nano Mission Scheme
- ❖ Act as a president for Rotary Club of Erode Cosmos for the year 2007-08 and got Best President Citation Award
- ❖ He has act as Assistant Governor for RI District-3202 for the year 2009-10 and got Best Assistant Governor Award
- ❖ Entering Rotary 2000 as gracious charter member responsibilities in club level
- ❖ Received Service Recognition Award on account of the Excellent Participation in Polio plus Immunization program me to eradicate polio to achieve Goal of a World without Polio for the Rotary year 2001-02
- ❖ Act as a district Sergeant at arms in koodal 2003
- ❖ Act as a district Sergeant at arms for District conference and kudumbam 2010
- ❖ Act as a president for Rotary Club of Erode Cosmos for the year 2007-08 and got Best President Citation Award
- ❖ Act as a District co-chair in 2008-09. And act as Assistant Governor for RI District 3202 for the year 2009 -10 and got Best Assistant Governor Award
- ❖ Act as a District deputy trainer in 2009-10
- ❖ Act as Assistant Governor in 2010-11

- ❖ Act as a District co-chair award committee 2011-12
- ❖ Act as a District co-chair Rotaract in 2013-14
- ❖ Act as a District Chair Rotaract 2014-15
- ❖ Act as a State literacy Chair 2016-17
- ❖ Act as a State Chair value based Teaching and Learning 2018-19

**Field of Interest** : Environmental Chemistry & Advanced Carbon Nano Materials.

- i) **Teaching** : Organic, Physical, Inorganic chemistry
- ii) **Research** : Environmental chemistry & Advanced Carbon Nanomaterials
- iii) **Proficiency in instrumentation** : Raman spectra, Chemical Vapor Deposition

**Research Guidance**

**Guidance Number**

: Anna University - (PhD/M.S) 801103,  
Bharathiar University - 21600-2-14241/A2/2010

S. No.	Name of the Student	Thesis Title (M.Phil)	Completed
3	N. Hemalatha	Synthesize of One Dimensional Carbon Nano Material From Pine Oil With Ferrocene Catalytic Mixture	2019
2	K. Gopal	Exploratory Investigation of Removal of Textile Effluent Using Multiwalled Carbon Nanotubes As An Adsorbent by Fixed Bed Column Series	2019
1	G. Tamilarasan	Synthesis, Characterization and Environmental Applications of Novelfireclay-MnO <sub>2</sub> Nano Composite Material	2015

S. No.	Name of the Student	Thesis Title (PhD)	Completed
10	D. Thillaikkarasi	Pongamia Pinnata-Derived Nanoporous Activated Carbon and Multi-Walled Carbon Nanotubes and Their Impact on The Efficiency of Supercapacitors	2023
9	V.S. Angulakshmi	Optimization of Reaction Conditions for the Entangled Carbon Nanotube From Natural Renewable Carbon Precursor by Spray Pyrolysis	2017
8	S. Mageswari	Effect of Process Parameters on the Growth of Multiwalled Carbon Nanotubes Synthesized Using Natural Carbon Precursor by Spray Pyrolysis	2017

7	P. Mahalingam	Assessment of Yield and Morphology of Carbon Nanotubes Synthesis from in Conventional Natural Carbon Precursor by Spray Pyrolysis	2017
6	A. Baburajendran	Kinetic Equilibrium & Thermodynamic Studies on the Removal of Dyes Using Nano Porous Activated Carbon Prepared From Leucaenaleucocethala Seed Shell	2016
5	S. Kalaiselvan	Structure and Morphological Studies of Muultiwalled Carbon Nanotubes Synthesized From Methyl Esters of Plant Derived by Oils by Spray Pyrolysis	2016
4	C. Sathiskumar	Synthesis of One Dimensional Carbon Nano Materials From Non-Conventional	2016
3	P. Anitha	Mechanistic Study of Adsorption of Dyes Using Activated Carbon Prepared From Albizia Amarapod-Shell Waste	2016
2	P. Shanthi	Film And Pore Diffusion Modeling for Adsorption of Dyes by Activated Carbon Prepared From Sterculia Quadrifida Seed Shell Waste	2015
1	C. Sumithra	Dynamic And Equilibrium Studies In Adsorption of Dyes Using Activated Carbon Derived From Moringa Oliefera Fruit Shell Waste	2015

#### Funded Projects

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#	Name of the project	Name of the funding agency	Total grant sanctioned	Amount received during the academic year
<b>Major projects</b>				
1.	Synthesis of carbon nanotubes from nonconventional resources - Biodiesel oils	UGC Major Grant	₹ 6,24,000	2011-2013
<b>Minor projects</b>				
2.	Establishment of science activities	TNSCST	₹ 50,000	1991
3.	Spray pyrolysis for controllable synthesis of one diemensional nanostructured carbon materials from plastic pyrolytic oil	TNSCHE	₹ 1,00,000	2013-2014
4.	Impact of MWCNT as a filler in carbon fiber reinforced epoxy polymer and pitch based	TNSCHE	₹ 1,00,000	2018-2019

#### Faculty Development Programs Attended

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Course	University/Institute	Subject	Period
UGC – Sponsored Refresher course	Madras university	Orientation programme	09.07.2009 to 05.08.2009
	GOA university	Refresher course	31.03.2011 to 21.04.2011
	Bharthiyar university	Refresher course	04.07.2018 to 24.07.2018
	Bharthiyar university	Refresher course	12.09.2019 to 25.09.2019

**Membership in Professional Bodies** :

S. No	Name of the Professional Body	Membership Detail	ID Number
1	International Congress of Chemistry and Environment	Fellow Member	5053
2	Indian Association of Chemistry Teachers	Fellow Member	LM727
3	Indian Council of Chemists	Life Member	1026
4	Indian Society of Technical Education	Life Member	32911
5	Swadeshi Science Movement of India (SSMD)	Fellow Member	620

**Research Publications** :

- i) **Research Papers** : (Annexure – I)
- ii) **Editor-in-Chief** : [Journal of environmental Nanotechnology](#) (Scopus indexed)
- iii) **Book/Book Chapters** :
  - S. Karthikeyan and P. Mahalingam, Carbon Nanotubes from Unconventional resource, “Recent progress in carbon nanotube Research /Book 1”, INTech- open science, open minds. ISBN 980-953-307-536-0. <https://doi.org/10.5772/51073>
  - Karthikeyan Srinivasan, Angulakshmi Sathyamoorthi, Venkatasamy and Mageswari Subramanian, “Carbon Nanotube from Unconventional Precursor-Optimization of Synthesis Parameters”. <https://doi.org/10.5772/intechopen.84860>

**National and International Conferences** : (Annexure – II)

- i) **Participated** : (20)
- ii) **Paper Presented** : (13)

**Conference/Seminars Organized** : (1)**Workshop attended** : (1)**Resource Person/Invited Lectures** : (10)**Academic Activities** :**i) Subject Handled**

- Organic Chemistry, Advanced Nanomaterials, Textile chemistry, Environmental chemistry, Polymer Technology, General Chemistry, Allied Chemistry, Gravimetric and Physical Chemistry Laboratory and all Practical courses.

**ii) Class Advisor**

- UG class Advisor - 2012-2015, 2018-2021

- PG class Advisor - 2022-24

### iii) Student Community Beneficial Activities

- Contributed 2,39,629 USD to Rotary Foundation
- Contributed 10,778 USD to Polio Fund
- Contributed 10,000 USD to Sri Lanka for artificial Limb Project through Matching Grant

### iv) Co-curricular and extra curricular activities

- ECO Club Member / Rotaract Club Co-Ordinator, UGC Network Centre Staff in-charge

### Professional Activities :

#### i) Reviewer/Editor

- Editor-in-Chief for [Journal of environmental Nanotechnology](#) (Scopus indexed).

#### ii) Board of Studies/UR

- Tamil Nadu Agricultural University, Department of Nanoscience & Technology, during 12<sup>th</sup> & 13<sup>th</sup> August 2016.

#### iii) Examiner/Scrutiny

- Bharathiar University theory and practical External Examiner
- Theory and practical External Examiner for Autonomous Colleges
- PG Question paper chairman for department of chemistry for the year

#### iv) Senate/Syndicate

- Nil

### National/ International Collaborations : Nil

### Annexure – I

- 1) K. Jothivenkatachalam, A. Nithya, S. Karthikeyan, A Study on the Photocatalytic and Antimicrobial Activities of Chitosan–ZnO Nanocomposites, J. Environ. Nanotechnol., 12(4), 9-16 (2023). <https://doi.org/10.13074/jent.2023.12.234478>
- 2) D. Thillaikkarasi, S. Karthikeyan, R. Ramesh, S. Prabhu, MuthuBalasubramanian Malarvizhi, Dhamodaran Kavitha, Vedamanickam Nirmala, Facile synthesis of activated carbon and multiwalled carbon nanotubes and comparative performance of various

ACMWCNTs supercapacitor electrodes, *Journal of Materials Science: Materials in Electronics* 34, 353 (2023). <https://doi.org/10.1007/s10854-022-09668-7>

- 3) D. Thillaikkarasi, S. Karthikeyan, R. Ramesh, S. Prabhu, Dhamodaran Kavitha, Malarvizhi MuthuBalasubramanian, Electrochemical performance of various activated carbon multi-walled carbon nanotubes symmetric supercapacitor electrodes in aqueous electrolytes, *Carbon Letters* 32, 1481-1505 (2022). <https://doi.org/10.1007/s42823-022-00386-y>
- 4) M. Malarvizhi, S. Meyvel, M. Sandhiya, M. Sathish, M. Dakshana, P. Sathya, D. Thillaikkarasi, S. Karthikeyan, Design and fabrication of cobalt and nickel ferrites based flexible electrodes for high-performance energy storage applications, *Inorganic Chemistry Communications* 123, 108344 (2021). <https://doi.org/10.1016/j.inoche.2020.108344>
- 5) D. Thillaikkarasi, S. Karthikeyan, M. Malarvizhi, Nanoporous Activated Carbon and Multi-walled Carbon Nanotubes from Renewable Botanical Hydrocarbons and their Impact on Efficiency of Supercapacitor Performance, *Journal of Environmental Nanotechnology*, 9(1), 1-4 (2020). <https://doi.org/10.13074/jent.2020.03.201393>
- 6) M. Malarvizhi, S. Meyvel, M. Sandhiya, M. Sathish, M. Dakshana, P. Sathya, D. Thillaikkarasi, S. Karthikeyan, Design and fabrication of cobalt and nickel ferrites based flexible electrodes for high-performance energy storage applications, *Inorganic Chemistry Communications*, 123(1), 1-10 (2020). <https://doi.org/10.1016/j.inoche.2020.108344>
- 7) M. Malarvizhi, S. Meyvel, S. Karthikeyan, D. Thillaikkarasi, M. Dakshana, G. Ravikumar, Biomass derived Nanoporous Carbon Based Electrodes for High Performance Symmetric Supercapacitor, *Journal of Environmental Nanotechnology*, 8(4), 33-37 (2019). <https://doi.org/10.13074/jent.2019.12.194387>
- 8) Chinnusamy Sathiskumar, Shanmugam Ramakrishnan, Mohanraj Vinothkannan, Ae Rhan Kim, Srinivasan Karthikeyan, Dong Jin Yoo, Nitrogen-Doped Porous Carbon Derived from Biomass Used as Trifunctional Electrocatalyst toward Oxygen Reduction, Oxygen Evolution and Hydrogen Evolution Reactions, *Nanomaterials* , 10(1), 2-16 (2019). <https://doi.org/10.3390/nano10010076>
- 9) C. Sathiskumar, S. Karthikeyan, Recycling of waste tires and its energy storage application of by-products - a review, *Sustainable Materials and Technologies*, 22(1), 1-6 (2019). <https://doi.org/10.1016/j.susmat.2019.e00125>
- 10) V. S. Angulakshmi, S. Mageswari, S. Kalaiselvan, S. Karthikeyan, Application of Box Behnken design to Optimize the Reaction Conditions on the Synthesis of Multiwalled Carbon Nanotubes, *Journal of Environmental Nanotechnology*, 7(1), 30-36 (2018). <https://doi.org/10.13074/jent.2018.03.181297>

- 11) S. Kalaiselvan, V. S. Angulakshmi, S. Mageswari, S. Karthikeyan, Carbon Nanotubes from Plant Derived Hydrocarbon - An Efficient Renewable Precursor, Journal of Environmental Nanotechnology, 7(1), 41-46 (2018). <https://doi.org/10.13074/jent.2018.03.181298>
- 12) B. Parasuram, S. Sundaram, C. Sathiskumar, S. Karthikeyan, Synthesis of multi-walled carbon nanotubes using tire pyrolysis oil as a carbon precursor by spray pyrolysis method, Inorganic and Nano-Metal Chemistry, 48(2), 103-106 (2018). <https://doi.org/10.1080/24701556.2017.1357578>
- 13) S. Kalaiselvan, K. Balachandran, S. Karthikeyan, R. Venkatesh, Botanical Hydrocarbon Sources based MWCNTs Synthesized by Spray Pyrolysis Method for DSSC Applications, Silicon, 10(1), 211-217 (2018). <https://doi.org/10.1007/s12633-016-9419-7>
- 14) K. T. Karthikeyan, V. S. Angulakshmi, S. Karthikeyan, K. Jothivenkatachalam, P. A. Ananda Kumar, DIRECT GROWTH OF VERTICALLY ALIGNED CARBON NANOTUBES ON SILICON SUBSTRATE BY SPRAY PYROLYSIS OF GLYCINE MAX OIL, Bulletin of the Chemical Society of Ethiopia, 31(2), 233-240 (2017). <https://doi.org/10.4314/bcse.v31i2.5>
- 15) K. T. Karthikeyan, K. Jothivenkatachalam, S. Karthikeyan, A Discussion about Surface Diffusion Mechanism for the Adsorption of Basic Green 4 Dye on to Various Nano Structured Carbon Materials, e-Journal of Surface Science and Nanotechnology, 14(1), 165-174 (2016). <https://doi.org/10.1380/ejssnt.2016.165>
- 16) K. GEETHA, N. VELMANI, S. KARTHIKEYAN, S. SHABUDEEN, COMPARISON ON EQUILIBRIUM AND KINETIC STUDIES ON THE REMOVAL OF DIRECT GREEN 6 FROM AQUEOUS SOLUTIONS USING ACTIVATED CARBONS PREPARED FROM AGRO WASTE, Digest Journal of Nanomaterials and Biostructures, 11(1), 199-212 (2016).
- 17) L. Sampath Kumar, D.P. Bhatt, S. Karthikeyan, Influence of Hole and Electron Transport Materials on Perovskite Sensitized Solar Cells-A Review, Journal of Environmental Nanotechnology, 5(2), 48-64 (2016). <https://doi.org/10.13074/jent.2016.06.162195>
- 18) S. Kalaiselvan, K. Jothivenkatachalam, S. Karthikeyan, Effect of Catalyst composition on the Growth of Multi-walled Carbon nanotubes from Methyl esters of Oryza sativa oil, Journal of Environmental Nanotechnology, 5(1), 33-38 (2016). <https://doi.org/10.13074/jent.2016.03.161181>
- 19) S. Kalaiselvan, K. Gopal, S. Karthikeyan, Synthesis and characterization of multiwalled carbon nanotubes using Brassica Juncea oil as carbon source, Carbon - Science and Technology, 8(1), 25-31 (2016).



- 20) C. Sathiskumar, M. Karthik, S Karthikeyan, Synthesis of Y-Junction Carbon Nano-Fibers by CVD Process from Tire Pyrolysis Oil, *Journal of Environmental Nanotechnology*, 4(1), 23-26 (2015). <https://doi.org/10.13074/jent.2015.03.144141>
- 21) V. S. Angulakshmi, P. S. Syed Shabudeen, R. Murugesan, N. Pasupathy, S. Karthikeyan, Performance of Carbon Based Dye-Sensitized Solar Cells by Inclusion of Modified Low Cost Carbon Nanotubes, *Journal of Environmental Nanotechnology*, 4(2), 47-59 (2015). <https://doi.org/10.13074/jent.2015.06.152148>
- 22) A. Babu Rajendran, K. Sakthivel, K. Jothivenkatachalam, S. Karthikeyan, Determination of Equilibrium and Kinetics Modeling for the Adsorption of Acid Orange 7 onto Activated Carbon prepared from *Leucaena leucocephala* Seed Shell Waste, *International Journal of Applied Engineering Research*, 10(17), 38470-38476 (2015).
- 23) S. MAGESWARI, P.S. SYED SHABUDEEN, S. KARTHIKEYAN, Low Temperature Growth of Vertically Aligned Carbon Nanotubes by Spray Pyrolysis Method, *ASIAN JOURNAL OF JOURNAL OF CHEMISTRY*, 27(6), 2225-2227 (2015). <https://doi.org/10.14233/ajchem.2015.18586>
- 24) Sathiskumar C., Karthikeyan S., Roddatis V., Karthik M., Facile and Large Scale Fabrication of Thick Walled Carbon Nanotubes by Using Waste Tire Pyrolysis Oil as Carbon Feedstock, *Materials Focus*, 4(4), 307-312 (2015). <https://doi.org/10.1166/mat.2015.1248>
- 25) B. Parasuram, S. Sundram, S. Karthikeyan, Spray Pyrolysis for Controllable Synthesis of One Dimensional Nanostructured Carbon Materials from Plastic Pyrolytic Oil, *Journal of Environmental Nanotechnology*, 4(3), 1-5 (2015). <https://doi.org/10.13074/jent.2015.09.153159>
- 26) S. Kalaiselvan, G. Manivannan, S. Karthikeyan, Growth and Structural Studies of Carbon nanotubes from Unconventional Natural Precursor by Spray Pyrolysis Approach, *International Journal of Applied Engineering Research*, 10(21), 42197-42201 (2015).
- 27) V. S. Angulakshmi, S. Karthikeyan, P. S. Syed Shabudeen, EFFECT OF SYNTHESIS TEMPERATURE ON THE GROWTH OF MULTIWALLEDED CARBON NANOTUBES FROM ZEAMAYS OIL AS EVIDENCED BY STRUCTURAL, RAMAN AND XRD ANALYSES , *RASAYAN Journal of Chemistry*, 8(1), 1-7 (2015).
- 28) A. Babu Rajendran, G. Manivannan, K. Jothivenkatachalam, S. Karthikeyan, CHARACTERIZATION STUDIES OF ACTIVATED CARBON FROM LOW COST AGRICULTURAL WASTE: *LEUCAENA LEUCOCEPHALA* SEED SHELL , *RASAYAN Journal of Chemistry*, 8(3), 330-338 (2015).
- 29) S. Karthikeyan, Haresh M. Pandya, M. U. Sharma, K. Gopal, Gas Sensors- A Review, *Journal of Environmental Nanotechnology*, 4(4), 1-14 (2015). <https://doi.org/10.13074/jent.2015.12.153163>

- 30) K. Geetha, N. Velmani, S. Karthikeyan, P. S. Syed Shabudeen, Ceiba Pentradenta wood waste activated carbon for waste water treatment, *Carbon - Science and Technology*, 6(2), 395-406 (2014).
- 31) A. Arockiaraj, S. Karthikeyan, V. Renuga, Sorption dynamics of acid and basic dyes onto activated carbon derived from ipomoea carnea stem waste, *Der Chemica Sinica*, 5(2), 118-123 (2014).
- 32) M. Sathish Kumar, K. Manonmani, S. Karthikeyan, Multivariate Optimization of Carbon Nanotubes Synthesis from Nonconventional Precursor using Box-Behnken Design towards Higher Yield, *Journal of Environmental Nanotechnology*, 3(1), 72-78 (2014). <https://doi.org/10.13074/jent.2013.12.132061>
- 33) Arockiaraj, S. Karthikeyan, V. Renuga, Dynamic and Equilibrium Studies on Adsorption of Direct Dye (Direct Red 28) by Lowcost Nanoporous Activated Carbon Derived From Ipomoea Carnea Stem Waste, *INDIAN JOURNAL OF APPLIED RESEARCH*, 4(7), 70-74 (2014).
- 34) P. Shanthi, G. Tamilarasan, K. Anitha, S. Karthikeyan, FILM AND PORE DIFFUSION MODELING FOR ADSORPTION OF REACTIVE RED-4 ONTO STERCULIA QUADRIFIDA SEED SHELL WASTE AS ACTIVATED CARBON, *RASAYAN Journal of Chemistry*, 7(3), 229-240 (2014).
- 35) C. Sumithra, S. Karthikeyan, Removal of Dyes from Aqueous Solution using Low Cost Activated Carbons Derived from Moringa Oleifera Fruit Shell Waste, *Journal of Environmental Nanotechnology*, 3(2), 30-42 (2014). <https://doi.org/10.13074/jent.2014.03.142065>
- 36) Anitha, S. Karthikeyan, M. Sivadhayanidhi, M. Soundrarajan, T. Maiyalagan, Effect of Various Carbonization Processes in the Preparation of Nanoporous Carbon Materials using Albizia amara Pod Shell Waste for the Removal of Dyes from Textile Industrial Effluents, *Journal of Environmental Nanotechnology*, 3(4), 112-122 (2014). <https://doi.org/10.13074/jent.2014.12.144134>
- 37) GEETHA, N. VELMANI, S. KARTHIKEYAN, P.S. SYED SHABUDEEN, Comparison of physio-chemical Characterization of Ceiba Pentradenta Wood Waste and Ipomea Carnia Stem Waste by H3 PO4 Treatment for the dye Removal, *ORIENTAL JOURNAL OF CHEMISTRY*, 30(4), 2017-2023 (2014). <https://doi.org/10.13005/ojc/300466>
- 38) T. Karthikeyan, S. Karthikeyan, K. Jothivenkatachalam, Removal of reactive blue 2 dye from aqueous solution using turmeric industrial waste activated carbon, *Journal of Chemical and Pharmaceutical Sciences*, 7(4), 52-54 (2014).
- 39) P. Mahalingam, P. S. Syed Shabudeen, G. Tamilarasan, S. Karthikeyan, Geomorphic and Constructive Studies of MultiWalled Carbon Nanotubes by Spray Pyrolysis using Pine

oil, Journal of Environmental Nanotechnology, 3(1), 1-7 (2014).  
<https://doi.org/10.13074/jent.2014.03.143063>

- 40) Arockiaraj, S. Karthikeyan, V. Renuga, Kinetic and Equilibrium Studies on Adsorption of Reactive Dye (Reactive Blue 4) by Lowcost Nanoporous Activated Carbon Derived From Ipomoea Carnea Stem Waste, Journal of Environmental Nanotechnology, 3(1), 79-87 (2014). <https://doi.org/10.13074/jent.2013.12.132086>
- 41) C. Sumithra, S. C. Murugavel, S. Karthikeyan, Evaluation of dynamics and equilibrium models for the sorption of Basic Violet 3 on activated carbon prepared from Moringa oleifera fruit shell waste, Carbon - Science and Technology, 6(1), 342-348 (2014).
- 42) S. Mageswari, P. S. Syed Shabudeen, N. Kanakachalam, S. Karthikeyan, Simplified Synthesis of Multi-Walled Carbon Nanotubes from a Botanical Hydrocarbon: Rosmarinus Officinails Oil, Journal of Environmental Nanotechnology, 3(2), 62-68 (2014). <https://doi.org/10.13074/jent.2014.03.142069>
- 43) Anitha, S. Karthikeyan, P.S. Syed Shabudeen, REMOVAL OF ACID DYE FROM AQUEOUS SOLUTION USING ACTIVATED CARBON PREPARED FROM ALBIZIA AMARA POD SHELL: DYNAMIC, EQUILIBRIUM AND THERMODYNAMICS, RASAYAN Journal of Chemistry, 7(4), 308-316 (2014).
- 44) V. S. Angulakshmi, G. Tamilarasan, S. Karthikeyan, Optimization of CVD Synthesis Conditions for the Synthesis of Multiwalled Carbon Nanotubes using Response Surface Methodology, Journal of Environmental Nanotechnology, 3(2), 81-91 (2014). <https://doi.org/10.13074/jent.2014.03.142066>
- 45) P. MAHALINGAM, N. SIVAKUMAR, M. KARTHIK, S. KARTHIKEYAN, Characterization of Magnetic Metal Encapsulated in Multi-Walled Carbon Nanotubes Synthesized from Methyl Ester of Pongamia pinnata Oil and Its Application for Removal of Arsenic Ions from Aqueous Solution, ASIAN JOURNAL OF JOURNAL OF CHEMISTRY, 26(14), 4167-4171 (2014). <https://doi.org/10.14233/ajchem.2014.16053>
- 46) S. Mageswari, P. S. Syed Shabudeen, S. Karthikeyan, ENTANGLED MULTI-WALLED CARBON NANOTUBES FROM CITRUS LIMONUM OIL, RASAYAN Journal of Chemistry, 7(3), 281-286 (2014).
- 47) S. Karthikeyan, P. Shanthi, A. Saravanan, K. Saranya, Sorption of Basic Dye (Rhodamine B) by Nano Porous Activated Carbon From Sterculia Quadrifida Shell Waste, Journal of Environmental Nanotechnology, 3(1), 88-100 (2014). <https://doi.org/10.13074/jent.2013.12.132087>
- 48) P. Shanthi, M. Karthik, K. Jothi Venkatachalam, S. Karthikeyan, Adsorption of Acid Blue 92 from Aqueous Solution using an Activated Carbon Prepared from Sterculia quadrifida Seed Shell Waste, Journal of Environmental Nanotechnology, 3(4), 96-104 (2014). <https://doi.org/10.13074/jent.2014.12.144133>

- 49) S. Kalaiselvan, K. Anitha, P. Shanthi, P. S. Syed Shabudeen, S. Karthikeyan , MORPHOLOGY OF ENTANGLED MULTIWALLED CARBON NANOTUBES BY CATALYTIC SPRAY PYROLYSIS USING MADHUCA LONGIFOLIA OIL AS A PRECURSOR, RASAYAN Journal of Chemistry, 7(4), 333-339 (2014).
- 50) S. Mageswari, S. Kalaiselvan, P. S. Syed Shabudeen, N. Sivakumar, S. Karthikeyan , Optimization of growth temperature of multi-walled carbon nanotubes fabricated by chemical vapour deposition and their application for arsenic removal, Materials Science-Poland, 32(4), 709-718 (2014). <https://doi.org/10.2478/s13536-014-0235-8>
- 51) C. Sumithra, S. Karthikeyan , Removal Of Acid Blue 92 From Aqueous Solution Using Moringa Oleifera Fruit Shell Waste: Optimization And Kinetic Studies, RASAYAN Journal of Chemistry, 7(2), 149-155 (2014).
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## Annexure – II

### National and International Conferences

#### i) Participated (20)

- A one day DRDO Sponsored national conference on recent advances in crystal growth and Nano Science (NCRACGN-2010) held on 26th & 27th march 2010 at Kongu Engineering College, Perunduari Erode
- UGC sponsored one day seminar on "NAAC BENCHMARKING POINTERS", 10th Jan 2015, conducted by IQAC, Chikkanna Government Arts College, Tirupur
- A one day national conference on "Innovation in Physics & Chemistry (NCIPC-2012)" in the title of Studies On Effect Of Activating Agents On The Activated Carbon Prepared From SterculiaQuadrifida Shell Conducted by Tejaa Shakti Institute Of Technology for women Coimbatore held on 25th Feb 2012
- A one day national seminar on "Eemerging trends in chemistry" (ETC-4-2012), Oct 4th & 5th 2012 at a post graduate department of chemistry cardamom planters association college Bodinayakanur, Thenidistrict, Tamil Nadu
- International conference on "Nano materials & nanotechnology" (NANO-2010) 13th TO 16th DEC 2010, conducted ByKSR College of technology, Tiruchengode
- International conference on "Resource Utilization& Intelligence Systems During" 4th to 6th JAN 2006, conducted Kongu Engineering College, Perunduari Erode
- A one day national conference on "Developments in water science & management" held at VIT Institute of technology during 11th and 12th march 2004

- International congress of chemistry & Environment (ICCE-2009) Organized By ubonratchathani, Thailand from 21st to 23rd Jan 2010
- International congress of chemistry & Environment (ICCE-2009) Organized by Kuwait University – Kuwait society of engineers, from 18th to 20th Nov 2007
- International seminar on the development of criticism in terminology organized by A Veeriaya vandayar memorial Sree Puspam College ,Tanjore from 20th to 22nd Jan 2003
- National workshop "Recent trends ion pollution control environmental conservation" held at Erode Sengundhar Engineering College, during 15th & 16th July 2004.
- International Conference on solid waste technology & management held at Philadelphia, PA,USA during 18th to 21st march 2007
- He has participated in the paper in the eighth annual convention of ISTE-Tamilnadu and Pondicherry section on the innovation in engineering education – trends and focus organized by PSNA College of Engineering & technology Dindikul, during 28th and 29th Oct 2005
- He has participated in the paper in the First annual convention of ISTE-Tamilnadu and Pondicherry section on the innovation in engineering education – trends and focus organized by Kongu of Engineering College, Perunduari, Erode, during 1st august 1998
- He has participated in the XXXI ACADEMIC CONFERENCE on the theme towards scientific and equitable education for all conducted by JAC Kanyakumari TAMIL NADU, DURING 23rd TO 25th Nov 2018
- 2nd International congress of chemistry & Environment ICCE-2005 Organized by the Emerald heights international school, Indore. he has presented a paper titled on "Adsorption on lead from aqueous solutions using a low cost activated carbon prepared from turmeric industrial solid waste" on 26th Dec 2005
- Participated National workshop on "PMIP - 2004" held at NIT-Rourkela during 20th to 21st Nov 2004
- A one day national seminar on Nanomaterial's Research VISION NANO-15, organized by the Department of Nanotechnology, Sri Ramakrishna Engineering College, Coimbatore, DURING 21st 2015
- He has participated National conference on "Innovations in Indian science, Engineering & Technology organized buy National physical laboratory, New Delhi-during 4th to 5th march 2017



- A one day State level seminar conducted by Department of physics, Chikkanna Government Arts College, Tirupur, he has presented the paper titled on "Nanotechnological treatment of Dying unit Effluents" held in During 7th & 8th March 2013

## ii) Paper Presented (13)

- Dr. S. Karthikeyan has presented a paper titled "A Study on the Photocatalytic and Antimicrobial Activities of Chitosan–ZnO Nanocomposites", in one day National Conference on the Role of Science Engineering & Technology 2023, Conducted by Teerthankar Mahaveer University, Moradabad, held on on November 3, 2023
- Dr. S. Karthikeyan has presented a paper titled "Nanofabrication of Bi<sub>2</sub>MoO<sub>6</sub>/TiO<sub>2</sub> heterojunction via facile microwave-assisted method towards enhanced photocatalytic performance", in one day National Conference on the Role of Science Engineering & Technology 2023, Conducted by Teerthankar Mahaveer University, Moradabad, held on on November 3, 2023
- 5th International congress of chemistry & Environment Organized By "Research journal of Chemistry And Environment" Held at Port Dicson Malasia. From 27th & 29th may 2011. Presented a scientific paper "characterization of multiwalled carbon nanotubes by nitrogen adsorption"
- A one day national seminar on new renaissance in chemical research organized by department of chemistry, SRM University, Ramapuram campus, Chennai-89 on 4th march, 2011, he has presented a paper in the title "kinetics for the removal for methyl violet B from aqueous solution pon the nanoporous carbon material prepared from balsomodentron caudatum wood waste
- A one day national conference on innovation in Physics & Chemistry (NCIPC-2012) in the title of Characterization of Activated carbon prepared from Moriengo OLEFERA SHELL WASTE Conducted by TejaaShakthi Institute of Technology for women Coimbatore held on 25th FEB 2012
- A one day CSIR Sponsored national conference on "Recent Applications of nano materials in chemistry and environmental research (RANCER-2011) held on 18th & 19th Feb 2011, has presented paper titled on "synthesis of multiwalled carbon nanotube & properties" held at Kongu Engineering College, Perunduari, Erode
- International conference on "Innovative research in engineering and technology" organized by Park College of Engineering & Technology, Coimbatore. He has presented a paper title synthesis& characterization of vapor grown carbon fibers and its applications for polymer composites on 12th to 14th august 2010

- Dr. S. Karthikeyan has presented a paper titled on removal and recovery of lead from waste water using an agricultural waste material: *Leucaena leucocephala* seed shell held at Anna university, Chennai, during 10th to 13th Dec 2006
- A one day national seminar on "Emerging trends in science & technology (ETSAT-2004)" presented the paper Conducted by Karunya institute of technology held on 30th to 31st Jan 2004
- Dr. S. Karthikeyan has presented a paper titled on "Simplified synthesis of multiwalled carbon nanotubes from a botanical hydrocarbon: *Rosmarinus officianails* Oil" held at PG and Research Department Of Chemistry, at Jamal Mohammed college during 11th & 12th march 2014
- Dr. S. Karthikeyan has presented a Paper In Two Days National Conference In Material Chemistry (CSIMC-2015) Organized By PG & Research Department Of Chemistry, Jamal Mohammad College, Tiruchirappalli-20, during 9th and 10th Feb 2015
- Dr. S. Karthikeyan has presented a paper titled on "The Effect of synthesis Temperature on the Growth of Carbon Nanotubes From Eco-Friendly Plant Derived Hydrocarbon In The Two Days National Seminar On removal and recovery of lead from waste water using an agricultural waste material: *Leucaena leucocephala* seed shell" held at Anna university Chennai during 10th to 13th Dec 2006
- Dr. S. Karthikeyan has presented a Paper In Two Days National Conference on National seminar on "NANO TECHNOLOGY – ENERGIZING THE FUTURE", Organized by the PG & Research Department of Chemistry, PSGR, Krishnammal college fro women, Coimbatore, Tamindu, During 7th & 8th Jan 2016

#### **Conference/Seminars Organized (1)**

- Dr. S .Karthikeyan organized one day work shop entitled “INDUSTRY INSTITUTE ENCLAVE 2017” Jointly Conducted by CSIR-AMPRI, Bhopal And IENT, Erode at Le Meridian, Coimbatore, during 9th august 2017

#### **Workshop attended (1)**

- Interface of science and society, held at the National Physical Laboratory, New Delhi. During 14th Dec, 2018

#### **Resource Person/Chairperson/Chief Guest/Appreciation (10)**

- Acted as a Co-chairperson in one day National Conference on the Role of Science Engineering & Technology 2023, Conducted by Teerthankar Mahaveer University, Moradabad, held on on November 3, 2023
- Dr. S. Karthikeyan acted as a resource person in the in-service in the training programme for secondary grade science teachers sponsored by Tamil nadu state council for science

and technology Chennai & Organized by department of zoology, Chikkana government arts college, Tirupur, Jan 4th to 8th 2010

- Dr. S. Karthikeyan acted as a resource person in the Application of Nanomaterial's In one day state level conference on novel trends in chemistry Organized by department of Chemistry, Arulmigu Paalaniandavar Arts College for women, palani during Jan 30th 2014
- Dr. S. Karthikeyan appreciated for presenting the paper titled on process making activated carbon using high susceptible agricultural waste *feronia limonia* (wood apple) wheel through the Centre for intellectual property rights, by Anna University, Coimbatore on 26th April 2009
- Dr. S. Karthikeyan has invited as a chief guest for the Inaugural function of Zonal Level Science Exhibition, 2012 Held at Tea Public Matriculation School Avinashi. During 18th and 19th OCT 2012
- Acted as a chair person in the International conference on chemical & Environmental Research (ICCER-2014) organized by the PG and Research Department Of Chemistry, at Jamal Mohammed college during 11th & 12th march 2014
- He has been awarded for his active voluntary contribution during the conduct of National Conference on Innovations in Indian Science, Engineering & Technology held at swadeshi science moment of India, Delhi on 27th Feb 2013
- Dr. S. Karthikeyan appreciated for presenting the topic titled on "scrutinizing the latest approaches in the sphere of Advanced Materials and Nanotechnology" CSIR Sponsored national level seminar, conducted by Department of mechanical engineering, P.A. College of Engineering and technology, Pollachi, Coimbatore, during 4th & 5th July 2019
- He has been appreciated for his dedicated participation during the conduct of Pulse Polio Eradication Programme by Rotary International, District-3202, in the year of 2014-15