

CURRICULUM VITAE

Dr. S. Kalaiselvan M.Sc., M.Phil., PhD., FMISRD.

Associate Professor

Department of Chemistry

Rathinam Technical Campus

Coimbatore, TN, India

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RESEARCH PROFILE

Google Scholar https://scholar.google.com/citations?user=6_g8I7oAAAAJ&hl=en

Research gate https://www.researchgate.net/profile/S_Kalaiselvan

ORCID <https://orcid.org/0000-0002-0792-2142>

Mendeley <https://www.mendelev.com/profiles/kalaiselvan-s/>

Publons <https://publons.com/author/1527746/dr-s-kalaiselvan#profile>

Researcher ID <https://publons.com/researcher/1527746/dr-s-kalaiselvan/>

Scopus ID <https://www.scopus.com/authid/detail.uri?authorId=56496947400>

LINKEDIN: [linkedin.com/in/dr-kalaiselvan-shanmugam-b99480134](https://www.linkedin.com/in/dr-kalaiselvan-shanmugam-b99480134)

CAREER OBJECTIVE

Aspiring to get a challenging position in an organization like your where I could demonstrate my skills and abilities for the betterment of the organization and for my professional growth.

PERSONAL DETAILS

Name	:	Dr S Kalaiselvan
Date of Birth & Age	:	21-03-1982 & 39
Gender	:	Male
Father name	:	Mr. N Shanmugam
Mother name	:	Mrs. S Baby
Nationality / Religion	:	Indian / Hindu
Passport Number	:	R1756560 (Valid:22/06/2027)
Blood Group	:	B ^{+Ve}
Languages Known	:	Tamil, English and Telugu
Address	:	2/ 233, Palani Road Kolumam (Po) Madathukulam Tirupur Pincode – 642 204

EDUCATIONAL QUALIFICATION

COURSE	INSTITUTION	UNIVERSITY	YEAR OF PASSING	CLASS OBTAINED
B.Sc (Chemistry)	Government.Arts College, Udumalpet.	Bharathiyar University, Coimbatore.	April-2002	I Class
M.Sc (Chemistry)	Gandhigram Rural University, Dindigul	Gandhigram Rural University, Dindigul	June-2006	I Class
M.Phil (Chemistry)	Madurai Kamaraj University, Madurai	Madurai Kamaraj University, Madurai	April-2008	Commended
Ph.D (Chemistry)	Anna University, Chennai	Anna University, Chennai	December -2016	Highly Commended

ACADEMIC EXPERIENCE

- ❖ Associate Professor: **Rathinam Technical Campus, Coimbatore** from Sept 2024 to till date: Department of Chemistry
- ❖ Assistant Professor: **M.Kumarasamy College of Engineering, Karur** from Feb 2021 to Till now Department of Chemistry
- ❖ Assistant Professor: **SNS College of Technology Coimbatore** from August 2017 to march 2020 Department of Chemistry
- ❖ Assistant Professor: **Hindusthan College of Engineering & Technology Coimbatore** from March 2007 to April 2017:: Department of Chemistry

RESPONSIBILITY HELD

- ❖ **Exam Cell Coordinator** (AU: 2012-2017 & Autonomous (Internal): 2017-2020)
- ❖ **Research Coordinator** (2018-2020)
- ❖ **Lab Incharge** (2007-2009 & 2015-2017)
- ❖ **Department Incharge** (2007-2008)

PROJECT PROFILE

- ❖ Synthesis, Characteristics and Antimicrobial Studies of Triazole and Related Compounds and Their Spectral Evidence.
- ❖ CNTs Synthesis from Plant derived oils & Study of effect of parameters with its applications in DSSC
- ❖ Plastic waste into pavers brick
- ❖ Biodiesel from used cooking oil utilizing hybrid catalyst

❖ Research Specialization (M.Phil & Ph.D)

- ❖ **M.Phil:** Synthesis, Characterization and Antimicrobial Studies of Trizole and Related Compounds and their Spectral Evidence.
- ❖ **Ph.D:** Structure and Morphological Studies of Multi-walled Carbon nanotubes Synthesized from Methyl esters of Plant derived oils by Spray Pyrolysis.

PROFESSIONAL MEMBERSHIP

- ❖ Life Member Of Association of Chemistry Teachers – **India (LM.No:762)**
- ❖ Fellow Member in International Society for Research and Development – **United Kingdom (Membership ID: F3140900977)**
- ❖ Fellow Member in International Scientific Research Organization for Science, Engineering and Technology (ISROSET)
- ❖ Active Member in Chemical Consultants Network - **United Kingdom (CCN) (UI 44481568)**
- ❖ Life Member in International Economics Development & Research - **Hong Kong (M.No: 90081158)**
- ❖ Member in International Journal of Development and Sustainability (IJDS) Membership ID :**M008472.**
- ❖ Associate Member In International Association Of Innovation Professionals – **United States (No: 53698539)**
- ❖ Associate member of Euro science – **France**
- ❖ Member in International Nano Science Community – **Hungary**
- ❖ Senior Member in Asia Society of Researchers - **Hong Kong (No: R218040901)**
- ❖ Member in International Association of Engineers (IAENG) (**No: 212903**) **Hong Kong**
- ❖ Member in International Association of Journals and Conferences (IAJC) **Membership ID: 8754073142**
- ❖ Senior Member in Institute of Research Engineers and Doctors- IRED **Membership ID: SNM10100059293**
- ❖ Member in i-Explore International Research Journal Consortium **Membership ID: 14269**
- ❖ Member in International Journal of Engineering & Techniques **Membership ID: IJET1729**
- ❖ Member in IFERP Chennai **Membership ID: PM8406082**

REVIEWER /EDITORIAL BOARD MEMBER IN JOURNALS

- ❖ Materials Science Poland
- ❖ Scripta Materilia & Materials Science Today Proceedings (Elsevier)
- ❖ Silicon (Springer) Netherland
- ❖ World Academy of Science, Engineering and Technology
- ❖ Materials Science Research India
- ❖ International Journal of Engineering and Techniques
- ❖ International Journal of Creative Research Thoughts
- ❖ Associate Editor in Scholars International Journal of Chemistry and Material Sciences

- ❖ Journal of peer scientist
- ❖ Elixir International Journal
- ❖ Global Journal (USA)
- ❖ Journal of Progressive Research in Modern Physics and Chemistry
- ❖ Journal of American Academic Research
- ❖ Indian Journal of Pharmacology
- ❖ International Journal of Engineering Research & Technology

List of Previously Approached Funding Proposal

- Department of Science and Technology (DST)
- Department of Biotechnology (DBT)
- Science and Engineering Research Council (SERC)
- Research and Development (AICTE)
- Indian Council of Medical Research (ICMR)
- Defense Research and Development Organization (DRDO)
- Tamil Nadu State Council for Science and Technology (TNSCST)

Awards / Recognition

- ❖ **Innovative Scientific Research & Dedicated Academician** (Chemistry)- Malaysia 2018
- ❖ **Young Scientist award** 2018 From IRDP Group of Journals, Chennai
- ❖ **Best Reviewer** of the Year 2018, Materials Science Research
- ❖ **Best Citizens of India** - International Publishing House, New Delhi
- ❖ Human Rights and Social Justice Mission District Chief Co-coordinator (Tirupur)
- ❖ **Best Assistant Professor** of the Year (Chemistry)-2020 by DHS Foundation, New Delhi in collaboration with CAMPBELL University, North Carolina, USA
- ❖ Recognized as **Best Reviewer** for the academic year 2024 from the Journal of Management research and Analysis
- ❖ Received Recognition of Reviewer **from Journal of Alloys and Compounds (Elsevier)** - Jan 2025
- ❖ Received Recognition of Reviewer **from Radiation Physics and Chemistry (Elsevier)** – Feb 2025
- ❖ Received **Certificate of Excellence** for Peer Review Recognition from BP International Publisher Mar 2025

PAPERS PRESENTED IN NATIONAL / INTERNATIONAL CONFERENCE

- ❖ Karthikeyan S., Mahalingam P., Mageswari S., **Kalaiselvan S** & Angulakshmi V.S., “Carbon Nanotubes from Unconventional Resources An Environment Friendly Nanotechnology” 4th International Congress of Chemistry and Environment held at Thailand from 21 to 23 Jan. 2010.
- ❖ Karthikeyan S., **Kalaiselvan S.**, Angulakshmi V.S & Mageswari S., “Synthesis and Characterization of Vapour Grown Carbon Fibers (VGCFs) and Its Applications of Polymer Composites” , International Conference on Innovative

- ❖ Research in Engineering and Technology (ICIRET -2010) held at Park College of Engineering and Technology Coimbatore from 12 to 14 Aug. 2010. (Oral Presentation)
- ❖ Karthikeyan S., **Kalaiselvan S.**, & Angulakshmi V.S “Synthesis and Characterization of Multiwalled Carbon Nanotubes (MWNTs) from Unconventional Resources” International Conferencen on Nanomaterials and Nanotechnology (NANO-2010) held at KSR College of Engineering and Technology Thiruchengode from 13 to 16 Dec. 2010. (Oral Presentation)
- ❖ Karthikeyan S., **Kalaiselvan S.**, Mageswari S., & Angulakshmi V.S “Synthesis and Characterization of Multiwalled Carbon Nanotubes (MWNTs) from Renewable Energy Resources and Its Adsorption Properties” National Conference on Recent Applications of Nanomaterials in Chemistry & Environment Research (RANCER 2011) held at Kongu Engineering College Erode from 18 to 19 Feb. 2011. (Oral Presentation)
- ❖ **Kalaiselvan S.**, Karthikeyan S., Mageswari S & Angulakshmi V.S “Multiwalled carbon nanotubes produced by Spray Pyrolysis using *Oryza Sativa* oil” National Conference on ADVANCES IN MATERIAL SYNTHESIS (AIMS-2013) held at Sree Sevugan Annamalai College, Devakottai-03 (Oral Presentation)
- ❖ Karthikeyan S & **Kalaiselvan S** “Morphology and structure of Multiwalled carbon nanotubes by catalytic Spray Pyrolysis using *Madhuca longifolia* oil as a carbon source” National conference on NANOMATERIALS CHARACTERIZATION held on 12th of July- 2013 at Sri Ramakrishna Arts & Science College, Coimbatore-641022. (Poster Presentation)
- ❖ **Kalaiselvan S.**, Babu Rajendran V & Karthikeyan S “Growth of Bamboo Like Carbon Nanotubes from Brassica Junceas Natural Precursor” International Conference on Chemical and Environmental Research (ICCER-2014) held at JMC, Trichy-620020. (Poster Presentation)
- ❖ **Kalaiselvan S** & Karthikeyan S “Production and characterization of Carbon Nanotubes from methyl esters of *Oryza Sativa* oil and its applications in composites” International Conference on Chemical and Environmental Research (ICCER-2014) held at JMC, Trichy-620020. (Oral Presentation)
- ❖ **Kalaiselvan, S**, Parthiban, N & Karthikeyan, S 2015, ‘Synthesis and Characterization of Multiwalled Carbon Nanotubes (MWNTs) by Spray Pyrolysis from Plant Derived Hydrocabon: An Efficient Renewable Precursor’, International Conference on Nanomaterials and Nanotechnology (NANO-2015) held at KSR College of Engineering and Technology Thiruchengode from 07 to 10 Dec. 2015.
- ❖ **Kalaiselvan, S**, Jothivenkatachallam, K & Karthikeyan, S 2016, ‘The Effect of Synthesis Temperature on the Growth of Carbon nanotubes from Eco-friendly Plant derived hydrocarbon’, National Conference on

Nanotechnology – Energizing The Future held at PSGR Krishnammal College for Women Coimbatore-04 On 7th & 8th Jan. 2016.

- ❖ **Kalaiselvan, S**, Jothivenkatachalam, K & Karthikeyan, S 2016, ‘Recent Trends in the Synthesis and Application of Carbon Nanotubes - A Concise Review’ INTCOMM-2016 held at Hindusthan College of Engineering and Technology Coimbatore-32 on 1st & 2nd February 2016.

- ❖ **Kalaiselvan, S**, Jothivenkatachalam, K, Mabelhebsuba, K & Karthikeyan, S 2016, ‘Effect of Reaction Temperature On the Yield and Diameter of Multi-Walled Carbon Nanotubes Synthesized from Methyl Esters of

Moringa Oliefera Oil Over Alumina Supported BiMetallic Catalyst’ International Conference on Materials, Design and Manufacturing Process ICMDM-2016 held at College of Engineering Guindy, Anna University Chennai from 17 to 19 February. 2016.

- ❖ **Kalaiselvan, S**, Jothivenkatachalam & Karthikeyan, S 2016, ‘A Brief Review on Recent Development in the Production and Applications of Carbon nanotubes’ National Conference on Research Advances in Materials Science and Applications” (RAMSA’16) held at Anna University, BIT Campus on 19th & 20th August 2016

- ❖ **Kalaiselvan, S** & Babu rajendran, A ‘Growth Of Carbon Nanotubes From Plant Derived Hydrocarbon – A Renewable Carbon Source’ AOP- 2017 Anna University, Trichy

- ❖ Babu rajendran, A & **Kalaiselvan, S**, ‘Adsorption of Acid dye (Acid Blue1) by Activated carbon from Agricultural solid waste Leucon leucocephala seed shell waste’ AOP- 2017 Anna University, Trichy

- ❖ **Kalaiselvan, S** ”Carbon nanotubes from plant based hydrocarbon and its applications in solar cells” National conference on Recent Trends and Advances in Greener Synthesis (RTAGS 2018)

- ❖ Babu rajendran, A & **Kalaiselvan, S** ”Synthesis and applications of carbon nanotubes” National conference on Recent Trends and Advances in Greener Synthesis (RTAGS 2018)

- ❖ Manjuladevi M & **Kalaiselvan S** ”Cations of UV-Visible and IR Spectroscopy in effluent Treatment” International Conference on Innovations in Chemical Science – 2019

- ❖ **Kalaiselvan S**, Multi-walled Carbon nanotubes Reinforced Composites for Biomedical Applications, International Conference on Emerging Trends in Materials for Energy and Biological Applications (ICEMBA-2020)

- ❖ **Kalaiselvan S**, Synthesis and DSSC applications of carbon nanotube from banana peel activated carbon mixed with used cooking oil, International Conference on Advanced Nanomaterials Cheettinad College of Engineering & Technology, Cheettinad College of Engineering & Technology
- ❖ **Kalaiselvan S**, Synthesis and Applications of Advanced carbon Materials in International Conference on Materials And Mathematical Sciences (ICMMS-2020), Organized by School of Advanced Sciences, Kalasalingam Academy of Research and Education
- ❖ Lawrence Justin A, Padmavathi R & **Kalaiselvan S** Study of the Physico Chemical Properties of Treated Water from Coimbatore Lake Using Ecobiosorbent International Conference on Physics and Chemistry of Materials in Novel Engineering Applications: PCM2020, Kumaraguru College of Technology, Coimbatore
- ❖ Attended & Presented Virtual Conference A Virtual Universal Conference on Multidisciplinary Research & Innovation organized by DHS FOUNDATION, New Delhi, INDIA in collaboration with CAMPBELL UNIVERSITY, North Carolina, USA
- ❖ Presented Paper **Polymer Nanocomposites Towards Multidimensionality** in the Two days International Virtual Conference on Chemical and Environmental Sciences organized by the Department of Chemistry, SPIHER, Chennai on 11th and 12th November 2020
- ❖ **Simplistic Production of Multi-Walled Carbon nanotubes from Greenery Hydrocarbon Source for Water Treatment Purpose** at International Conference on Green Materials and Renewable Energy (ICGMRE) Organized by Department of Applied Chemistry, Sri Venkateshwara College of Engineering, Chennai
- ❖ **Exploitation and Assessment of Eco-biosorbent for Removal Efficiency Using Underground Water** at International Conference on Green Materials and Renewable Energy (ICGMRE) Organized by Department of Applied Chemistry, Sri Venkateshwara College of Engineering, Chennai
- ❖ **Optimization of Multi-Walled Carbon Nanotubes Fabrication Using Genetic Algorithm (GA) and Response Surface Methodology (RSM)** at International Conference on Green Materials and Renewable Energy (ICGMRE) Organized by Department of Applied Chemistry, Sri Venkateshwara College of Engineering, Chennai

Conference Presented at Abroad with Proceedings Publication

1. Presented Research Paper Entitled **Ecological Friendly Synthesis of Multi-Walled Carbon nanotubes from Plant Based Hydrocarbons for Efficient Water Treatment**, International Ceramics and Composite Materials Symposium, held online and in-person on Nov 15-16/2024, Organized by Suleyman Demirel

University in Collaboratio with IKSAD Institute **Istanbul, Turkiye (Co-Author: Devi Sri M & Dharshini R)**

2. Presented Research Paper Entitled **Green Synthesis and Their Potential Application of Nano-Sized Particles in Photocatalytic Degradation Of Industrial Effluent**, International Conference on Gastronomy, Nutrition and Dietetics –V1, held online and in-person on Nov 20-21/2024, **Istanbul, Turkiye**

in Collaboration with Istanbul Arel University & IKSAD Institute **(Co-Author: Fathima Farhana J & Rizwana A)**
3. Presented Research Paper by a student (Devi Sri M) Entitled **Sustainable Food Product: A Key to A More Resilient Food System**, National Conference on Probiotics, Postbiotics and Biofortification: The Future of Human Health and Nutrition organized by the centre of Excellence in life Science, Department of Biotechnology, PSGR Krisnammal College for Women, Coimbatore held on December 12 & 13, 2024
4. Presented Research Paper Entitled, **Synthesis of Copper Nanoparticles from Biodegradable Waste** at International Multidisciplinary Environment and Hemp Congress May 20-22, 2024, Organized by OSTIM Technical University, IKSAD Institute, Ankara, Turkiye
5. Presented Research Paper by a student (Dharshini R) Entitled **Gut-Brain Axis and Mental Health**, National Conference on Probiotics, Postbiotics and Biofortification: The Future of Human Health and Nutrition organized by the centre of Excellence in life Science, Department of Biotechnology, PSGR Krisnammal College for Women, Coimbatore held on December 12 & 13, 2024
6. Presented Research Paper by a student (Swetha V) Entitled **Advance in Life Science and biotechnology Applications**, National Conference on Probiotics, Postbiotics and Biofortification: The Future of Human Health and Nutrition organized by the centre of Excellence in life Science, Department of Biotechnology, PSGR Krisnammal College for Women, Coimbatore held on December 12 & 13, 2024
7. Presented Research Paper Entitled **Stability Analysis of Prey Predator Model in Beddington-Deangelis Functional Response with Harvesting Factors** at 2nd Efes International Scientific Research and Innovation Congress held on Feb 21-23, 2025 – Izmir, Turkiye
8. Presented Research Paper Entitled **Millettia Pinnata Hydrothermal Synthesis of High Fluorescent Carbon Dots and Its Antibacterials and Bio-Imaging Applications** at 2nd EFES International Scientific Research and Innovation Congress held on Feb 21-23, 2025 – Izmir, Turkiye

9. Presented Research Paper Entitled **Agent-based Swarming Systems Theoretical Foundations Simulations and Applications in Pattern Formation and Turbulent Fluid Dynamics**, 4th International Paris Congress on Applied Sciences held on Feb 5-9, 2025- Paris, France
10. Presented Research Paper Entitled **Exploiting Data Mining Internet of Things and Smart Techniques to Produce Sustainable and Resources –Efficient Crops**, 1st International Black sea Agriculture and Animal Husbandry Congress held on January 7-8, 2025, Samsun, Turkiye
11. Presented Research Paper Entitled **Sustainable Development in Rural and Urban Areas Integrated Approaches for A Balanced Future**, 1st International Black sea Agriculture and Animal Husbandry Congress held on January 7-8, 2025, Samsun, Turkiye
12. Presented Research Paper Entitled, **A Novel Electrochemical Sensors for H₂O₂ Using Shiny Graphite Electrode with Tin Oxide Nanoparticle**, 5TH International Congress on Khazar Scientific Research and Innovations, Dec 26-28, 2024, Turkestan, Kazakhstan
13. Presented Research Paper Entitled, **Design, Development and Optimization of Carbon nanotubes Based Drug Delivery Platforms for Personalized Medicine: A Multi-Disciplinary Approach**, 5TH International Congress on Khazar Scientific Research and Innovations, Dec 26-28, 2024, Turkestan, Kazakhstan
14. Presented Research Paper Entitled, **Eco-Friendly PH Detecting Tape for Sustainable Environment Monitoring**, 5TH International Congress on Khazar Scientific Research and Innovations, Dec 26-28, 2024, Turkestan, Kazakhstan
15. Presented Research Paper Entitled, **Synergizing Sustainable Development and Urban Landscape Design for Resilient Cities**, 5TH International Congress on Khazar Scientific Research and Innovations, Dec 26-28, 2024, Turkestan, Kazakhstan
16. Presented Research Paper Entitled, **Sustainable Approach To Manganese Oxide Nanoparticles: Synthesis, Characterization and Applications With Corn Husk**, 8TH International Antalya Scientific Research and Innovative Studies Congress held on January 25-27, 2025, Antalya, Turkiye
17. Presented Research Paper Entitled, **Hybrid Nanostructure for Implantable Applications in Human Body**, 13th International Mardin Artuklu Scientific Research Conference, held on January 13-15, 2025. Mardin, Turkiye
18. Presented Research Paper Entitled, **Synthesis of Copper Nanoparticles Utilizing Biodegradable Waste from Sugarcane Bagasse**, 5TH International Congress on

19. Presented Research Paper Entitled, **Carbon nanotubes based Drug Delivery Platforms for Personalized Medicine**, at International Conference on Advanced Materials for Sustainable Technology (ICAMST 2025) on 23 & 24 January 2025, PSGR Krishnammal College for Women, Coimbatore, TN, India
20. Presented Research Paper Entitled, **Performance and Structural Analysis of FWCNTs and Carbon Coated Counter Electrodes in Dye- Sensitized Solar Cells with Mathematical Applications**, at International Conference on Advanced Materials for Sustainable Technology (ICAMST 2025) on 23 & 24 January 2025, PSGR Krishnammal College for Women, Coimbatore, TN, India
21. Presented Research Paper Entitled, **Flexible Indium (III) MOF Catalyst Designed for Sustainable Aza- heterocycle Synthesis: A Green Strategy Utilizing Cyclophosphazene Hexacarboxylates** at International Conference on Advanced Materials for Sustainable Technology (ICAMST 2025) on 23 & 24 January 2025, PSGR Krishnammal College for Women, Coimbatore, TN, India

PAPERS PUBLISHED IN REPUTED (INTERNATIONAL) JOURNALS

- ❖ Karthikeyan, S, **Kalaiselvan, S**, Manorangitham, D & Maragathamani, D 2013, 'Morphology and Structural Studies Of Multi-Walled Carbon nanotubes By Spray Pyrolysis Using Madhuca Longifolia Oil', **J.Environ.Nanotechnol.** 2(4), 15-20 (2013). <http://dx.doi.org/10.13074/jent.2013.12.132040>.
- ❖ **Kalaiselvan, S**, Karthik, M, Vladimir, R & Karthikeyan, S 2014, 'Growth of Bamboo Like Carbon Nanotubes from Brassica Junceas Natural Precursor', **Journal of Environ.Nanotechnol.**, vol.3, no.2, pp. 92-100.
- ❖ **Kalaiselvan, S**, Anitha, K, Shanthi, P, Syed Shabudeen, PS & Karthikeyan, S 2014, 'Morphology of Entangled Multiwalled carbon Nanotubes by catalytic Spray Pyrolysis using *Madhuca longifolia* oil as a precursor', **Rasayan Journal of Chemistry**, vol.7, no.4, pp 333-339.
- ❖ Mageswari, S, **Kalaiselvan, S**, Syed Shabudeen, PS, Sivakumar, N & Karthikeyan, S 2014, 'Optimization of growth temperature of multiwalled carbon nanotubes fabricated by chemical vapour deposition and their application for arsenic removal', **Int. Journal of Material science Poland, Springer**, vol. 32, no. 4, pp 709-718.
- ❖ **Kalaiselvan, S**, Gopal, K & Karthikeyan, S 2016, 'Synthesis and characterization of multiwalled carbon nanotubes using Brassica Juncea oil as carbon source', **Carbon – Sci. Tech.**, vol. 8, no. 1, pp. 25-31

- ❖ **Kalaiselvan, S, Karthikeyan, S & Manivannan, G** 2015, ‘Growth and Structural Studies of Carbon nanotube From Unconventional Natural Precursor by Spray Pyrolysis Approach’, **International Journal of Applied Engineering Research**, vol. 10, no. 21, pp. 242197-42201.
- ❖ **Kalaiselvan, S, Jothivenkatachallam, K & Karthikeyan, S** 2016, ‘The Effect of Catalyst composition on the Growth of Multi-walled Carbon nanotubes from Methyl esters of Oryza sativa oil’, **J. Environ. Nanotechnol.**, vol. 5, no. 1, pp. 33-38.
- ❖ **Kalaiselvan, S, Angulakshmi, V.S, Mageswari, S & Karthikeyan, S** Carbon nanotubes from plant derived hydrocarbon – an Efficient renewable precursor, **J. Environ. Nanotechnol.**, Volume 7, No. 1 pp. 41-47
- ❖ **Kalaiselvan, S, Balachandran, K, Karthikeyan, S & Venckatesh, R** ‘Renewable precursor based MWCNTs synthesized by spray pyrolysis method for DSSC application’, **Silicon-Springer** (2016). doi:10.1007/s12633-016-9419.
- ❖ **Angulakshmi, V.S, Mageswari, S, Kalaiselvan, S, & Karthikeyan, S** Application of Box Behnken design to optimize the reaction conditions on the synthesis of Multiwalled Carbon Nanotubes, **J. Environ. Nanotechnol.**, Volume 7, No. 1 pp. 30-36
- ❖ **J Manivannan S Kalaiselvan & N Velmani** Comparative Study of Polyol with Varying Hydroxyl Values in Polyurethane Coatings, **International Journal for Research in Engineering Application & Management**, Volume 04, No. 7 pp 74-77, 2018
- ❖ **S. Kalaiselvan N Mathan Kumar & J Manivannan** Production of Multilayered Nanostructure from Zingiber Officinale by Spray Pyrolysis Method, **Global Journal of Science Frontier Research: B Chemistry**, Volume 18, No 03, 2018.
- ❖ **S. Kalaiselvan & A, Babu Rajendran** Carbon nanotubes Synthesis Properties – A Concise Review, **Journal of Applied Sciences and Computations**, Volume 6, Issue 2, 2019
- ❖ **S. Kalaiselvan et al.** Waste Water Treatment Using Air Stripper and Natural Adsorbent, **International Journal Of Research and Analytical Reviews**, Volume 6, Issue 1, 2019
- ❖ **S. Kalaiselvan et al.,** Construction and efficiency investigation of biogas plant, **International Journal of Advanced Science and Research**, Volume 4, Issue 3, 2019.

- ❖ Adsorption of Acid Dye (Acid Blue1) by Activated Carbon from Agricultural Solid Waste *Leucon Leucocephala* Seed Shell Waste.
Material Science Research India
- ❖ Lawrence Justin A, Padmavathi R & **Kalaiselvan S** Study of the Physico Chemical Properties of Treated Water from Coimbatore Lake Using Ecobiosorbent, **AIP Conference Proceeding**
- ❖ Free Radical Scavenging Activity of Dihydrocaffeic Acid: A Quantum Chemical Approach, **Asian Journal of Chemistry**
- ❖ Padmavathi R, **Kalaiselvan S** & Sharmila Lydia I Utilization of Solar Energy for Photodegradation of Basic Violet 10 Using Tin Oxide Doped ZnO, **Journal of Ovonic Research, Romania**
- ❖ Growth of MWCNTs from *Azadirachta Indica* Oil for Optimization of Chromium (VI) Removal Efficiency Using Machine Learning Approach, **Environmental Science and Pollution Research**
- ❖ Optimization of Hexavalent Chromium Ion Removal from Electroplating Wastewater onto CMAC Using Factorial Experimental Design Analysis **Indian Journal of Environmental Protection**
- ❖ Current Updates On Covid-19 Vaccine Research and An Overview Of Therapeutic Drug Research, **Journal of biosciences biotechnology research asia**
- ❖ Antioxidant and antimicrobial studies of silver nanoparticles synthesized via chemical reduction technique, **Materials Today: Proceedings [Elsevier]**
- ❖ *Syzygium Cumini* Leaf Extract Exploited in the Green Synthesis of Zinc Oxide Nanoparticles for Dye Degradation and Antimicrobial Studies **Materials Today: Proceedings [Elsevier]**
- ❖ Impact of Assorted Temperature on Yield and Surface Morphology of Multiple Layers of Carbon nanotubes by Spurt Pyrolysis Technique **Material Science Forum (Trans tech Publisher Switzerland) Vol 1119, pp 101-110, 2024**
- ❖ Box-Behnken Design for Photocatalytic Degradation of Sudan Black B by Catalyst–Embedded Multi-Walled Carbon nanotubes, **J.Environ.Nanotechnol., Vol 13(1), pp 213-225, 2024**

- ❖ **Kalaiselvan, S, Angulakshmi, V.S., & Mageswari, S.** Upshot of temperature on multi-walled carbon nanotubes synthesized Via CVD aided spray pyrolysis and its application towards lead ion removal from waste water. *Discov. Chem.* (Springer) **1**, 50 (2024).

Journal Publications Communicated

1. A Holistic Analysis of Vegetable Oil Refinery Wastewater: Characteristics, Environmental Impact, and Advanced Remediation Strategies Using Biomaterial-Based Treatment Approaches - **Scientific Reports (Springer)**
2. Developments on Corrosion Inhibitors and Nano Containers for Self-healing Epoxy Coatings – A Review – **Polymer Bulletin (Springer)**
3. Exploring [[EQUATION]] -Fuzzy Bi-ideals in LA-Rings: A Lattice-Theoretic Approach", **Journal of Mathematical Sciences (Springer)**
4. Integration of Semi-Interpenetrating Polymer Networks and Quantum Dot-Polymer Nanocomposites for Low-Cost Flexible OLED Display **Journal of Polymer and Composites**
5. Integration of Sustainable and Net-Zero Concepts in Shape Memory Polymer Composites to Enhance Environmental Performance , **Journal of Polymer and Composites**

SELECTED MOOCs (ONLINE COURSE) COMPLETED

- Understanding By Design from *District Institute of Education & Training, Salem*
- Household Electrical Devices and appliances Organized by Department of Physics, *AVS College of Arts & Sciences, Salem*
- Medical Laboratory Techniques Organized by Department of Microbiology & Biotechnology, *AVS College of Arts & Sciences, Salem*
- Basics Principles of Spectroscopics Organized by Department of Chemistry, *AVS College of Arts & Sciences, Salem*
- **Certificate Course in Entrepreneurship** (CCE) from CSC Academy
- Protection Techniques from *AMCAT*

S. No.	Name of the Course	Percentage	Duration of the Course	Offered by / Organization (Platform Name)
1	Computer Architecture	77.50	11 weeks	Princeton University /Coursera
2	Material Behaviour	92.5	6 weeks	Georgia Institute of Technology /Coursera

S. No.	Name of the Course	Percentage	Duration of the Course	Offered by / Organization (Platform Name)
3	The Science of Stem Cells	82.0	5 weeks	American Museum of Natural History /Coursera
4	Introduction to Molecular Spectroscopy	93.0	4 weeks	University of Manchester /Coursera
6	COVID-19 Contact Tracing	94.9	1 week	Johns Hopkins University/Coursera
7	Introduction to Psychology	94.2	6 weeks	Yale University /Coursera
8	Fundamentals of Engineering Exam Review	88.2	8 weeks	Georgia Institute of Technology/Coursera
9	The Challenges of Global Health	78.6	5 weeks	Duke University / Coursera
10	Ecology: Ecosystem Dynamics and Conservation	84.0	5 weeks	American Museum of Natural History /Coursera
11	Introduction to Augmented Reality and ARCore	90.0	4 weeks	Google AR & VR /Coursera
12	Data Science Math Skills	84.6	4 weeks	Duke University /Coursera
13	Epidemics, Pandemics and Outbreaks	87.9	4 weeks	University of Pittsburgh /Coursera
14	Dairy and Food Process and Products Technology	70	12 weeks	NPTEL IIT Kharagpur
15	Ecology and Society	60	12 weeks	NPTEL IIT Guwahati
16	Non-Conventional Energy Resources	67	12 weeks	NPTEL IIT Madras
17	Enhancing Soft Skills and Personality	76	8 weeks	NPTEL IIT Kanpur
18	Structural Analysis of Nanomaterials	72	4 weeks	NPTEL IIT Roorkee
19	Nature and Properties of Materials	66	8 weeks	NPTEL IIT Kanpur
20	English Language for Competitive Exams	70	12 weeks	NPTEL IIT Madras

BEST PAPER & PRESENTATION AWARD RECEIVED

- ❖ **Best paper award** at International Conference on Green Materials and Renewable Energy (ICGMRE) Organized by Department of Applied Chemistry, Sri Venkateshwara College of Engineering, Chennai
- ❖ **Best paper presentation award** at MODELING OF CRYSTAL GROWTH PROCESSES AND DEVICES” (MCGPD), SSN Research Centre (SSNRC), SSN Institutions
- ❖ **Best paper award** at International Conference – CHEMSMAT Department of Chemistry, St. Joseph's College, Trichy.

PATENT PUBLISHED / GRANTED

- ❖ A Comparative Study to Analyze the Impact of Nano Materials and Their Energy Delivery to the Solar Panels
- ❖ Machine Learning Based Approach to Analyze the Optical Properties of Bismuth Borate Glasses on Various Metals for Laser Applications
- ❖ Artificial Intelligence based Automatic Prediction System to predict and Diagnosis of various heart diseases to prevent at early stage with affordable rate using Data Mining and Deep Learning Algorithms
- ❖ Artificial Intelligence based Automatic Health care system to recognize fruits, vegetables and calorie estimation for Healthy life using Deep Learning Algorithm
- ❖ Vegetable Quality Analyzing Device **Design No: 379718-001 Dated:12/04/2024 (Design Grant)**

RECOGNIZED Ph.D. SUPERVISOR

- ❖ Recognized Supervisor for guiding Ph.D. and M.S (by research) by Anna University, Chennai. (Ref. No.4070020)
- ❖ Area of Specialization: Nanotechnology Carbon nanomaterials Solar Cells Applications Polymer Technology

INTERNATIONAL/ NATIONAL CONFERENCE ORGANIZED

- ❖ Organized One Day National Conferences on Recent Trends and Advances in Greener Synthesis (**RTAGS JAN 2018 Edition First**)
- ❖ Organized One Day National Conferences on Recent Trends and Advances in Greener Synthesis (**RTAGS JAN 2019 Edition Second**)
- ❖ Organized One Day National Conferences on Recent Trends and Advances in

RESOURCE PERSON INVITED TALK / FDP / GUEST LECTURE

- ❖ Delivered Guest Lecture on **Applications of Nano Composite Materials in Mechanical Engineering** At RMPT College, Udumalpet, TN, India
- ❖ Delivered FDP Talk on Synthesis, **Morphological Studies & Applications of Nanostructured Materials** At MK Jain College For Women, Tirupattur, TN, India
- ❖ Guest lecture On **Advanced Carbon Materials and its Everyday Applications** at Karpagam Institute of Technology (KITZ 2015), Coimbatore, TN, India
- ❖ Delivered Guest Lecture on **Applications of Nanostructured Materials in Biotechnology and Medicine** At Kathir College of Arts and Science, Coimbatore TN, India
- ❖ Guest lecture On **Introduction to Fuel Cell Chemistry**, Department of Aeronautical Engineering, Annasaheb Dange College of Engineering and Technology, Ashta, Maharashtra

BOOKS & BOOK CHAPTER PUBLICATIONS

- ❖ Stupendous nanomaterials – A Carbon nanotubes Synthesis, Characterization and Applications (**InTech**)
- ❖ Vapor-Grown Carbon fiber Synthesis, Properties and Applications (**InTech**)
- ❖ Applications of UV-VISIBLE & FT-IR Spectral Analysis in Effluent Treatment (**Omics International**)
- ❖ Engineering Chemistry (**Global Publisher**)

Book Chapter Communicated

1. Microbiota and Its Impact on Disease Pathogenesis: Insights into Gut Health and Beyond IKSAD –Turkey
2. Zoonotic Studies – Zoonotic Disease Transmission Human – Animal Interface – IKSAD -Turkey

FACULTY DEVELOPMENT PROGRAMME COMPLETED

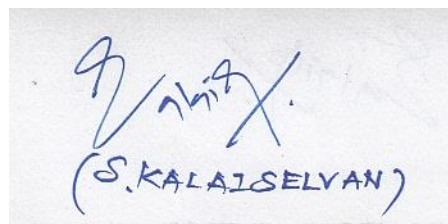
- ❖ Faculty Development Programme on Structural Analysis of Nanomaterials through NPTEL 2018 (0.5 Week)
- ❖ Faculty Development Programme on Nature and Properties of Materials from NPTEL 2018 (One Week)

- ❖ Faculty Development Programme on Non Conventional Ener, Resources from **NPTEL** 2018 (1.5 Weeks)
- ❖ Faculty Development Programme on Enhancing Soft Skills and Personality from **NPTEL** 2019 (1.5 Weeks)
- ❖ Faculty Development Programme on English language for Competitive exams from **NPTEL** 2019 (One Week)
- ❖ One Week Online Faculty Development Programme on “**Recent Advances And Research Avenues In Material Science**” (**RRM-2020**), Organized by Department of Chemistry, School of Advanced Sciences, Kalasalingam Academy of Research and Education
- ❖ Three days online International Faculty Development Programme on **Recent Advances in Applied Chemical Sciences**” Organised by the Department of Chemistry, SNS College of Technology, Coimbatore.
- ❖ Three Days Online Faculty Development Programme on **Emotional Intelligence** Organized by KG College of Arts & Science, Coimbatore
- ❖ One Week Faculty Development Programme on **Advanced Materials Research** Organized by BIET & Indian Ceramic Society
- ❖ One Week Online Faculty Development Programme on **Advancement in Science and it’s Applications in Engineering** Organized by Hyderabad Institute of Technology & Management, Hyderabad.
- ❖ Five Days FDP on **Innovative Teaching Learning Methodologies** conducted by Coimbatore Institute of Technology – Teaching Learning Centre
- ❖ Four Days International FDP on **Solar Energy Applications** organized by Mechanical Department Hindusthan College of Engineering & Technology, Coimbatore
- ❖ Participated in the 14-days Online Faculty Development Programme on “**MATERIALS SCIENCE & NANOTECHNOLOGY (FDP-MSNT-2020)**” organized by Department of Chemistry, B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai.
- ❖ One Week FDP on **Impacts of Nanomaterials Applications in environment** Organized by department of Physics- Mepco Schlenk Engineering College, Sivakasi
- ❖ Participated & Completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on “**Sensors Technology**” from 2020-10-1 to 2020-10-5 at **NIT Jamshedpur**.
- ❖ AICTE Sponsored Six Days Online Short-Term Training Programme (STTP) on “**Enhancing Research and Development through Project Based**

- ❖ **Learning to Achieve Outcome Based Education in Engineering"** from 22.10.2020 to 29.10.2020 organized by Department of Mechanical Engineering, Sri Krishna College of Technology, Coimbatore
- ❖ Participated & Completed successfully AICTE Training And Learning (ATAL) Academy Online FDP "**Robotics**" from 2020-12-14 to 2020-12-18 at **Ramrao Adik Institute of Technology.**
- ❖ Participated & Completed successfully AICTE Training And Learning (ATAL) Academy Online FDP "**Energy Engineering**" from 2020-12-21 to 2020-12-25 at **Government College of Engineering, Thanjavur.**
- ❖ Participated in the Two days Online Faculty Development Programme (FDP) on "**Current Trends in Advanced Materials, Nanotechnology and Energy(CTANE -2020)**" from 28.11.2020 to 29.11.2020.
- ❖ Participated & Completed successfully AICTE Training And Learning (ATAL) Academy Online FDP "**Robotics**" from 2020-12-14 to 2020-12-18 at **Ramrao Adik Institute of Technology.**
- ❖ Participated & Completed successfully AICTE Training And Learning (ATAL) Academy **Online Elementary** FDP on "**Recent Trends in Chemical and allied Industries**" from **2021-06-21** to **2021-06-25** at **Government Polytechnic Daman.**
- ❖ Participated & Completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Challenges and Innovations in Different Energy Storage Technologies** at JSS ACADEMY OF TECHNICAL EDUCATION from 16/12/2024 to 21/12/2024.
- ❖ Participated & Completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Urban Development of Smart Cities and Mobility** at Shri Balasaheb Mane Shikshan Prasarak Mandals Ashokrao Mane Group of Institutions Vathar from 30/12/2024 to 04/01/2025.

DECLARATION

I hereby declare that the information furnished above is true to the best of my knowledge and belief.



A handwritten signature in blue ink, appearing to be 'S. Kalaiselvan', with the name written in parentheses below it: (S. KALAISELVAN).

Yours truly,