



KINGS
COLLEGE OF ENGINEERING
AUTONOMOUS

Approved by AICTE, New Delhi
Affiliated to Anna University, Chennai
Recognized under 2(f) & 12B, UGC
NAAC Accredited Institution

Department of Science and Humanities

Name : Dr.P.SARAVANAN		
Designation	:	Professor
Qualification	:	M.Sc., PGDCA, M.Phil., B.Ed., PhD.,
Area of Specialization	:	Chemistry
Experience	:	Teaching : 20 Years 11 Months
	:	Industry : Nil
Conference Publication	:	National : 31
	:	International : 19
No. of workshop / FDP attended	:	Workshop : 12, FDP : 10, ATAL FDP :02 NITTTR STTP : 04
Publication	:	National : 11
	:	International : 20
Patent Publication	:	01
Book Publication	:	06
Membership	:	1. Life member in Association of Chemistry Teachers (ACT), Mumbai. (LM 920) 2. Life member in Indian Society for Technical Education (ISTE), New Delhi (LM 98997)
Achievements	:	1. Received 'BEST TEACHER AWARD' for the year 2009-10 by the Mohamed Sathak A.J College of Engineering, Chennai. 2. Received many times 'BEST RESULT AWARD' by the Institutions.

Conference Publications :

National Conference: 31

1. Presented a paper in National conference on "Frontiers of Chemistry" organized by SRM University, Chennai during 24th -25th, January, 2008.
2. Presented a paper in National Level Seminar on "Extensive Dimensions in Chemistry" organized by Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur on 28th, February, 2008.
3. Presented a paper in National conference on "Advances in Chemicals for Textile polymers- Application and Quality Assurance" organized by PSG College of Tech, Coimbatore during 12th - 13th, February, 2009.
4. Presented a paper in UGC Sponsored National conference on "Recent Advances in Chemistry" organized by AVC College of Engineering, Mayiladuthurai during 27th - 28th, February, 2009.
5. Presented a paper in National conference on Recent Advances in "Textile and Electrochemical Sciences. (RATES-2009)" organized by Alagappa University, Karaikudi during 4th - 5th, December, 2009
6. Presented a paper in National conference on "Recent Advancements in Science and Humanities (RASH 2011)" organized by United Institute of Technology, Coimbatore during 18th - 19th, March, 2011.
7. Presented a paper in UGC Sponsored National Seminar on "Recent Trends in Synthetic Methods and Chemistry of Natural products. (SMNP-2011)" organized by Annamalai University, Chidambaram during 14th - 15th October, 2011.
8. Presented a paper in DRDO Sponsored National conference on Recent "Developments in Green Chemistry" organized by SSK College of Engineering and Technology, Coimbatore on 20th, December, 2011.
9. Presented a paper in UGC Sponsored National conference on "Emerging Trends in Chemistry" organized by Bishop Heber College, Trichy on 11th, January, 2012.
10. Presented a paper in UGC Sponsored National conference on "Recent Trends in Polymer and Green Chemistry" organized by Rajah Serfoji Govt. Arts College, Thanjavur during 2nd - 3rd, February, 2012.
11. Presented a paper in 14th CRSI National Symposium in Chemistry (NSC-14) organized by National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram during 3rd - 5th February, 2012.
12. Presented a paper in National Conference on "Natural resources and Human Health" organized by Enathi Rajappa Arts and Science College, Enathi, Pattukkottai during 29th -30th October, 2012
13. Presented a paper in 15th CRSI National Symposium in Chemistry (NSC-15) organized by Banaras Hindu University Varanasi during 1st -3rd February, 2013.
14. Presented a paper in UGC Sponsored National Conference on "Advanced Materials for the Emerging Technologies (CAMET-2013)" organized by Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore during 11th -12th July, 2013.
15. Presented a paper in State Level Seminar on "Recent Trends in Chemistry (RTC-13) organized by Kamadhenu College of Arts and Science, Dharmapuri on 21th September, 2013.

16. Presented a paper in DST-FIST & UGC-SAP Sponsored National seminar on "Chemistry education and research & National convention of chemistry teachers (NCCT-13)" organized by Annamalai University, Chidambaram during 8th -10th November 2013.
17. Presented a paper in National Seminar on "Modern Advances in Chemistry" organized by E.R.K, Arts and Science College, Erumiyampatti, Dharmapuri-636 905 on 28th February, 2014.
18. Presented a paper in National Seminar on "Recent Trends in Chemistry" organized by Sri Venkateswara College of Arts and Science for Women, Peraurani, Thanjavur on 22nd July, 2014.
19. Presented a paper in UGC Sponsored National Seminar on "New Opportunities and Challenges in Chemical Research" organized by A.V.V.M Sri Pushpam College, Poondi, Thanjavur during 29th - 30th, December, 2014.
20. Presented a paper in National Conference on "Recent Advances in Chemistry" organized by ERK Arts and Science College, Dharmapuri on 7th August, 2015.
21. Presented a paper in National Conference on "Recent Renaissance in Chemical Research (NCNCR-2015)" organized by SRM University, Ramapuram, Chennai during 28th – 29th August, 2015
22. Presented a paper in National Conference on "Chemistry of Heterogeneous Emerging Materials" orga
23. Presented a paper in TEQIP Sponsored National Conference on "Research Advances in Materials Science and Applications (RAMSA'16)" organized by Anna University, Bharathidasan Institute of Technology, Trichy during 19th – 20th August, 2016.
24. Presented a paper in 46th ISTE Annual National and National Conference on "Intelligent Technologies for Better Tomorrow" organized by Gulsar Group of Institutes, Khana, Ludhiana, Punjab during 10th -12th February, 2017.
25. Presented a paper in National Seminar on " Modern Trends in Chemistry" organized by Department of Chemistry, Sengamala Thayaar Educational Trust Women's College, Manargudi on 20th December, 2017
26. Presented a paper in National Seminar on Recent Trends in Smart Materials (NSSM-2018) organized by Department of Science and Humanities, Kings College of Engineering on 17th February, 2018.
27. Presented a paper in National level Conference on "Emerging Trends in Chemistry" organized by Department of Chemistry, JEPPIAR SRR Engineering College, Padur, Chennai on 2nd August , 2018
28. Presented a paper in National Seminar on Recent Trends in Smart Materials (NSSM-2019) organized by Department of Science and Humanities, Kings College of Engineering on 29th March, 2019.
29. Presented a paper in National Conference on "Multidisciplinary Research in Science and Humanities Department of Science and Humanities" organized by Arasu Engineering College on 24th March, 2021.
30. Presented a paper in National Seminar on "Green and Sustainable Chemistry" organized by Department of Science and Humanities, Arasu Engineering College on 7th April, 2021.
31. Presented a paper in National Conference on "Chemical , Environment, Energy and Engineering Research" organized by Department of Science and Humanities, Arasu Engineering College on 17th December, 2021.

International Conference: 19

1. Presented a paper in International conference on "Global Textile Vision" organized by SSM College of Engineering, Kumarapalayam during 28th-30th August, 2009.
2. Presented a paper in International conference on "Advances in Engineering and Technology" organized by EGS Pillay Engineering College, Nagapattinam during 27th-28th May, 2011.
3. Presented a paper in DST-FIST,DST-PURSE & UGC-SAP Sponsored International conference on Recent Advances in "Textile and Electrochemical Sciences (RATES-2013)" organized by Alagappa University, Karaikudi 21st -23rd March, 2013.
4. Presented a paper in International conference on "Emerging Trends in Chemical Sciences (IETC-2013)" organized by VIT University, Vellore during 5th-7th , December, 2013
5. Presented a paper in DST-SERB Sponsored International conference on "Innovations in Science, Engineering and Technology for Sustainable Development" organized by Muthayammal Engineering College, Rasipuram during 30th -31st , March, 2018.
6. Presented a paper in 4th International Conference on "Recent Advancements in Chemical, Environmental and Energy Engineering (RACEEE 2019)" organized by Department of Chemical Engineering, SSN College of Engineering, Chennai, India during 14th and 15th February 2019.
7. Presented a paper in International Conference on "Recent Applications in Advanced Materials" organized by Department of Physics and Chemistry, ERK Arts and Science College, Erumiyampatti, Dharmapuri during 11th and 12th July 2019.
8. Presented a paper in International Conference on Emerging Trends and Innovations in Chemistry" organized by Department of Chemistry, Sengamala Thayaar Educational Trust Women's College, Manargudi on 20th August, 2019.
9. Presented a paper in International E-Conference on "Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World" organized by Government Vidarbha Institute of Science & Humanities, Amravati, India during 15th - 17th May, 2020.
10. Presented a paper in Virtual International Conference on Multifunctional Advanced Materials, (VICMAM-2021)' organized by VM's Degree College in collaboration with Association of Chemistry Teachers (ACT) during 9th and 10th August, 2021.
11. Presented a paper in e-International Conference on Recent Trends in Smart Materials" organized by Kings College of Engineering on 25th June, 2022
12. Presented a paper in International Conference on "Environment, Functional Materials Applied Mathematics and Language"(ICEFAL'2022) organized by Nehru Institute of Technology, Thirumalayampalayam, Coimbatore
13. Presented a paper in International Conference on "Current Trends in Advanced Functional Materials (CTAFM-2023) organized by Department of Chemistry, Saranathan College of Engineering, Panjapur, Trichy during 26th-27th, September, 2023.
14. Presented a paper in International Conference on "Recent Trends in Engineering, & Science (ICRTES-2024)"organized by Centre for Promotion of Research (CPR), Kings College of Engineering during 02nd -03rd February 2024.
15. Presented a paper in International Conference on "Molecular Basics of Cancer and Prevention" organized by School of Arts and Science, Ponnaiyah Ramajayam Institute of Science and Technology (PRIST), Thanjavur during 07th-08th , February 2024.

16. Presented a paper in International Conference on "Functional Nanomaterials for Energy, Environmental Biomedical Applications (ICFN-2024)" Department of Physics and Chemistry in Association with IQAC & Raman Research Foundation, Trichy, Sengamala Thayaar Educational Trust Women's College, Manargudi on 12th September, 2024.
17. Presented a paper in International Conference on "Recent Trends in Chemistry and Energy Science (RTCES-2024)" organized by Department of Chemistry, Sarasvathi Narayanan College, Madurai on 13th September 2024.
18. Presented a paper in International Conference on Sustainable Technologies in Engineering and Sciences (ICSTES-25) organized by Kings College of Engineering during 08th – 09th, May, 2025.
19. Presented a paper in International Conference on New –Gen Technologies for Sustainable Development (ICNGTS 2025) organized by Nehru Institute of Engineering and Technology, Coimbatore during 27th -29th March, 2025.

Workshop / FDP attended:

Workshop: 12

1. Attended Workshop on "Realms of Electrochemistry" organized by SSN College of Engineering, Chennai on 3rd March, 2012.
2. Workshop on "Art of counseling" organized by Kings College of Engineering, Punalkulam, Thanjavur during 27-28th December, 2013.
3. Attended Workshop on "Faculty Development for Teacher" organized by Kamadhenu College of Arts and Science, Dharmapuri on 6th September, 2014.
4. Attended IAS, INSA & NAS Sponsored Lecture workshop on "Recent Trends in Chemistry" A.V.V.M organized by Sri Pushpam College, Poondi, Thanjavur during 26-27th of September, 2014.
5. Attended TWQIP II Sponsored Lecture workshop on "Chemistry for Sustainable Green Environment" organized by Anna University (BIT Campus), Tiruchirappalli during 11th -12th March, 2016.
6. Attended National level Workshop on Advancements in Chemical Sciences" organized by Sri Sairam Institute of Technology, West Tambaram, Chennai on 18th July 2016.
7. Attended National Level Workshop on "Revealing Advances in Material Science" organized by Sri Sairam Institute of Technology, West Tambaram, Chennai on 19th July 2016.
8. Attended One day seminar on "Solar Fuel for Carbondioxide Emission Free Environment" organized by Department of Science and Humanities, E.G.S. Pillay Engineering College, Nagapattinam on 21th January, 2019.
9. Attended DST-SERB Sponsored Workshop on "Crafting Competitive Grant Proposals" organized by Dhanalakshmi Srinivasan University, Trichy during 09th . 10th, 2022
10. Attended DST-SERB Sponsored Workshop on "Advanced Electrochemical Techniques" organized by Bharathiar University, Coimbatore on 26th September, 2022
11. Attended One Day International Virtual Workshop on Water-Energy-Nexus" organized by VIT Institute of Technology, India and University of Birmingham, UK, Coimbatore on 07th November, 2022.
12. Attended Special One day workshop on "Patent Writing" organized by Central Electrochemical Research Institute (CECRI), Karaikudi on 27th July, 2023.

FDP : 10

1. Attended Faculty Development Programme on “Instructional Design and Delivery” organized by Mohamed Sathak A.J College of Engineering, Chennai during 19th – 21st March, 2009.
2. Attended AICTE Sponsored FDP on “Student Induction Programme” (Level 0), organized by Arasu Engineering College, Kumbakonam during 17th -19th, May 2019.
3. Attended Online FDP on “Futuristic Perspectives of Nano Materials in Biomedical Applications and Energy Storage Devices” organized by RMD Engineering College, Chennai during 11th and 12th May 2020.
4. Attended International Online Faculty Development Programme on Advancements in Applied Chemistry” organized by St.Joseph’s College of Engineering, Chennai during 6th- 8th July, 2020
5. Attended Online Faculty Development Programme on “Modern Trends and current Research in Chemistry” organized by Sathiyabama University, Chennai during 8th-13th July, 2020.
6. Attended Faculty Development Programme on “Advances in Analytical Techniques” organized by SRM University, Chennai during 25th -30th. July, 2022
7. Attended FDP on “Advances in Analytical Techniques” organized by SRM Institute of Science and Technology, Ramapuram, Chennai during 25th – 30th July, 2022.
8. Attended FDP on “Recent Trends in Chemicals and Petrochemical Industries” organized by JCT College of Engineering and Technology, Coimbatore during 21st – 25th, November, 2022.
9. Attended Faculty Development Programme on "Outcome Based Education" IQAC Cell, Kings College of Engineering on 27th August, 2024.
10. Attended Five days Faculty Development Programme on "Renewable and Non Renewable Energy Sources and their Impact on Current Energy Scenario" organized by Nehru Institute of Technology, Coimbatore during 27th- 3rd August , 2024.

ATAL FDP :02

1. Attended AICTE Training And Learning Academy (**ATAL**) Faculty Development Programme on “The Digital: Innovation in Neurodegenerative Disorder Diagnostics” organized by SASTRA Deemed University, Thanjavur" during 16th – 21th December, 2024.
2. Attended AICTE Training And Learning Academy (**ATAL**) Faculty Development Program on “Artificial intelligence for Science and Engineering” organized by National Institute of Technology Nagaland during 17th – 22th February, 2025.

NITTTR STTP : 04

1. Attended Short Term Online Training Programme on “Quality Assurance through Accreditation” organized by NITTTR, Chennai during 16th- 20th November, 2020.
2. Attended Short Term Training Programme through ICT Mode on “Drinking Water Purification Technologies” organized by NITTTR, Kolkata during 20th- 01st October, 2021.
3. Attended Short Term Training Programme through ICT Mode on NEP-2020” organized by NITTTR, Kolkata during 08th-12th August, 2022 .
4. Attended Short Term Training Programme on “NEP 2020” (ICT Mode) organized by NITTTR, Kolkata during 08th -12th September, 2022.

Publications :30

1. **P.Saravanan**, G.Chandramohan " Dyeing of Silk with Eco-friendly Natural Dye obtained from Barks of *Ficus Religiosa L*" Universal Journal of Environmental Research and Technology, Volume 1, Issue 3, pp: 268-273, 2011.
2. **P.Saravanan**, G.Chandramohan "A Study on the Eco-Friendly Natural Dye Obtained from the Barks of *Ficus religiosa. L* on Cotton Fabric" World Journal of Applied Environmental Chemistry, Volume 1, Issue 1, pp: 30-34, 2011.
3. **P.Saravanan**, G.Chandramohan and S.Saivaraj "A Study on the Eco-Friendly Natural Dye Extracted from Flowers of *Lantana camara L* on Silk and Wool fabrics" Asian Journal of Research in Chemistry, Volume 5, Issue 3, pp: 418-421, 2012.
4. **P.Saravanan**, G.Chandramohan, S.Saivaraj and D.Deepa, "Extraction and application of eco-friendly natural dye obtained from the barks of *Odina woder* on cotton fabric" Journal of Natural Products and Plant Resources, Scholars Research library, Volume 3, Issue 2, pp: 80-85, 2013.
5. **P.Saravanan**, G.Chandramohan, J. Mariya Jancy Rani and D.Deepa "GC-MS analysis of bioactive components of *Odina woder (Anacardiaceae)*" International Journal of pharmaceutical Research and Development, Volume 5, Issue 5, pp: 64-69, 2013.
6. **P.Saravanan**, G.Chandramohan, S.Saivaraj and D.Deepa, "A Study on Extraction and Application of Eco – Friendly Natural dye from Barks of *Odina woder* on Silk fabric", International Journal of Current Research, Volume 5, Issue 5, pp:1070-1073, 2013.
7. **P.Saravanan**, G. Chandramohan,, P.Shanmuga Sundaram and P.Sumathi,, "A Study on the Extraction and Application of Eco – Friendly Natural Dye Extracted from Leaves of *Acalypha Indica Linn* on Silk Fabric, International Journal of Textile and Fashion Technology, Volume 3, Issue 5, pp:1-8, 2013.
8. **P.Saravanan**, G. Chandramohan, J. Maria Jancy Rani, P. Shanmuga Sundaram", Effect of Chitosan and Mordants on Dyeability of Cotton Fabrics with Natural Dye from Barks of *Ficus Religiosa Linn*", International Journal of Recent Trends in Science And Technology, Volume 9, Issue 1, pp: 72-75, 2013.
9. **P.Saravanan**, G.Chandramohan, S.Saivaraj and D.Deepa, "Extraction and Application of Eco – Friendly Natural dye obtained from Leaves of *Acalypha indica Linn* on Cotton Fabric", International Research Journal of Environment Science, Volume 2, Issue 12, pp: 1-5, 2013.
10. **P.Saravanan**, G Chandramohan, J.Mariajancyrani and K. Kiruthika jothi, "Eco-friendly dyeing of cotton fabric with a natural dye extracted from flowers of *lantana camara linn.*" International Journal of Bioassays, Volume 3, Issue 1, pp: 1653-1656, 2014.
11. J. Mariajancyrani*, G. Chandramohan, **P.Saravanan** and A. Elayaraja, " Isolation and antibacterial activity of terpenoid from *Bougainvillea glabra choicy* leaves", Asian Journal of Plant Science and Research, Volume 3, Issue 3, pp: 70-73, 2013.
12. J. Mariajancyrani, G. Chandramohan, **P.Saravanan**, S. Saivaraj, " In-Vitro Antioxidant Potential of *Delonix regia* Leaves", Scholars Academic Journal of Pharmacy, Volume 2, Issue 6, pp: 468-471, 2013.
13. R. Vijayalakshmi, R. Venkatachalam, T. Periyathambi, **P. Saravanan**, "Biosorption of Reactive Red 198 from an Aqueous Solution Using *Morinda Tinctoria*", International Journal of Recent Trends in Science And Technology, Volume 9, Issue 1, pp: 36-40, 2013.

- 14 **P.Saravanan**, G.Chandramohan, J.Mariajancyrani, P.Shanmugasundaram, "GC-MS analysis of phytochemical constituents in ethanolic bark extract of ficus religiosa linn", International Journal of Pharmacy and Pharmaceutical Science", Volume 6, Issue 1, pp: 457-460, 2014.
- 15 **P.Saravanan**, G. Chandramohan, J. Mariajancyrani and K. Kiruthika jothi, " Eco-friendly dyeing of wool fabric with a natural dye extracted from barks of *Odina woder*", Der Chemica Sinica, Pelagia Research Library, Volume 5, Issue 1, pp: 28-33, 2014.
- 16 **P.Saravanan**, G.Chandramohan and J.Tennis anthuvan, "Effect of chitosan and mordants on the dyeability of cotton fabrics with an Ecofriendly natural dye from the flowers of *Lantana camara*", Corrosion & Dye, Elixir International Journal, Volume 72, pp: 25726-25728, 2014.
- 17 J. Mariajancyrani, G. Chandramohan, P. Brindha, **P. Saravanan**," GC-MS Analysis of Terpenes from Hexane Extract of *Lantana camara*", International Journal of Advances in Pharmacy, Volume 3, Issue 1, pp: 37-41, 2014.
- 18 G.Chandramohan, D.Deepa, **P.Saravanan** and S.Kalyanasundaram, "Kinetic and mechanistic study on the oxidation of isatin by peroxomonosulphate in acetonitrile medium", Archives of Applied Science Research, Scholars Research Library, Volume 5, Issue 1, pp: 28-33, 2014.
- 19 **P.Saravanan**, G Chandramohan, J.Mariajancyrani and S.Saivaraj, "Effect of chitosan and mordants on the dyeability of cotton fabrics with a natural dye from the barks of *Odina woder* Roxb", Journal of the Indian Chemical Society, Volume 92, pp:1003-1007, 2015.
- 20 **P.Saravanan**, G.Chandramohan, K.Sivakumaran, "Study on the Extraction and Applications of Eco – friendly Natural dye from leaf of *Jatropha curcas* on cotton fabric", International Journal of Advanced Chemical Science and Applications, Volume 3, Spl. Issue 1, pp:50-55, 2015.
- 21 J.Mariajancyrani, G Chandramohan, K.Santhakumar, S.Saivaraj and **P.Saravanan**, "Steroids and antioxidant activity from *Lantana camara* leaves ", Journal of the Indian Chemical Society, Volume 92, pp:597-599, 2015.
- 22 **P. Saravanan**, "GC-MS analysis of ethanolic flower extract of *Lantana camara* Linn (Verbenaceae)", International Journal of Current Research in Chemistry and Pharmaceutical Sciences, Volume 4, Issue -11, pp:34-42, 2017.
- 23 S. Saivaraj, G. Chandramohan and **P. Saravanan**, "Ultrasonic dyeing of cotton fabric with aqueous extract of *terminalia arjuna*", International Journal of Advance Research (IJAR), Volume 6, Issue 5, pp: 1145-1154, 2018.
- 24 S. Saivaraj, G. Chandramohan and **P. Saravanan**, " Wool Dyeing with Eco-friendly Natural Dye Extracted from barks of *Terminalia arjuna*", International Journal of Creative Research Thoughts (IJCRT), Volume 06, Issue 2, pp: 951-961, 2018.
- 25 S. Saivaraj, G. Chandramohan and **P. Saravanan**, " Silk Dyeing with Eco-friendly Natural Dye Extracted from barks of *Terminalia arjuna*", Journal of Emerging Technologies and Innovative Research (JETIR), Volume 05, Issue 6, pp: 371-378, 2018.
- 26 S. Saivaraj, G. Chandramohan and **P. Saravanan**, "Extraction of eco-friendly natural dyes from barks of *Terminalia arjuna* (roxb.) wight & arn and their application on cotton fabrics", The Journal of Bioprocess Technology, Volume 104, pp: 537-543, 2018.
- 27 S. Saivaraj, G. Chandramohan and **P. Saravanan**, " Dyeing of cotton with eco-friendly natural dye extracted from barks of *Terminalia arjuna* L.", International Journal of Academic Research and Development, Volume 3, Issue 3, pp: 303-307, 2018.
- 28 S. Saivaraj, G. Chandramohan and **P. Saravanan**, A.Elavarasan, "Ultrasound Assisted Enhancement in Natural Dye extraction from *Pterocarpus Marsupium* Lin. for Natural Dyeing of

Cotton", International Journal of Research and Analytical Reviews (IJRAR), Volume 6, Issue 2, pp:121-133, 2019

- 29 S.Saivaraj, G. Chandramohan, **P.Saravanan** and A.Elavarasan, " Eco Friendly ultrasonic natural dyeing of wool fabric with natural dyes obtained from wrightia tinctoria", International Journal of Scientific Research and Reviews, Volume 8, Issue 2, pp:2484-2497, 2019
- 30 D.Deepa, G.Chandramohan, **P.Saravanan**, " Kinetic and Mechanistic Investigation on the oxidation of Indole-3-Carboxylic Acid in Acetic acid medium", The International Journal Analytical and Experimental Modal Analysis, Volume XI, Issue IX, pp:453-467, 2019.

Patent Publications : 01

1. Published Patent on "Eco-Friendly Materials and Sustainable Design in Electronic" on 17.05.2024 (Patent Application No : 202441036340 A and Patent Office Journal No :20/2024).

Book Publications : 06

1. Published Engineering Chemistry- I (R-2008,R-2013 & R-2017) by Sri Murugan Publications, Thanjavur (ISBN No:978-81-907949-8-5)
2. Published Engineering Chemistry- II (R-2008,R-2013 & R-2017) by Sri Murugan Publications, Thanjavur (ISBN No: 978-81-907949-6-1)
3. Published A Manual of Practical Chemistry by Sri Surya Publications, Thanjavur
4. Published Engineering Chemistry by Kings Publications, Punalkulam (ISBN No: 978-93-850572-4-3)
5. Published Environmental Sciences and Sustainability by Sri Krishna Hi-Tech Publishing Company Pvt. Ltd., Chennai (ISBN No: 978-81-980760-3-8)
6. Published Engineering Chemistry by Sri Krishna Hi-Tech Publishing Company Pvt. Ltd., Chennai (ISBN No: 978-81-9897778-3-0)