



## RESUME

**Jamal Mohamed College (Autonomous),  
Tiruchirappalli-20  
PG & Research Department of Chemistry (Aided)**



**1 Name** Dr. J. SIRAJUDEEN

**2 Date of birth** 01-06-1970

**3 Addresses:**

**Residential:**

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**4 Designation** Associate Professor

**5 Educational Qualifications:**

S.No.	Examination Passed	University / College	Year of Passing
1.	M.Sc. (Chemistry)	Bharathidasan University, Trichy	1992
2.	M.Phil. (Chemistry)	Tamil University, Thanjavur	1999
3.	B.Ed (Chemistry)	Annamalai University, Chidambaram	1995
4.	Ph.D (Chemistry)	Bharathidasan University, Trichy	2003

**6 Experiences:**

**Undergraduate** : 26 years  
**Postgraduate** : 26 years  
**M.Phil** : 13 years

**7 Areas of Specialization** : Organic chemistry, Environmental Chemistry  
& Phytochemistry

**8 Languages known** : Tamil, English, Urdu & Hindi

## 9 Subjects Taught:

<b>Under graduate</b>	:	Inorganic, Organic and Physical Chemistry
<b>Postgraduate</b>	:	Inorganic, Organic and Physical Chemistry
<b>M. Phil</b>	:	Purification Techniques

## 10 Research Supervision:

		<b>AWARDED</b>	<b>PURSUING</b>
<b>M.Phil</b>	:	55	02
<b>Ph.D</b>	:	11	02

## 11 Details of Publications:

1. Studies on the effect of sugar mill effluent on ground water quality at Pettavaithalai area, Tiruchirappalli, *Indian Journal of Environmental Protection*, **23, 663-666, 2003.**
2. Bacteriological Analysis of ground water in and around Pettavaithalai area, Tiruchirappalli, Tamil Nadu, *Journal of Ultra Scientist of Physical Sciences* **Vol.3, 83 – 86, 2005.**
3. Ground water conservation from industrial activities based on adsorption technique, *Oriental Journal of Chemistry*, **Vol.20; (2), 539- 542, 2004.**
4. Enumeration of total *coliform* in ground water of Pettavaithalai area, *Pollution Research*, **24(2), 283, 2005.**
5. Risk Assessment of Physico-Chemical contaminants in Ground Water of Pettavaithalai area, Tiruchirappalli, Tamil Nadu, **DOI: 10.1007/S10661-006-9198-5 ©Springer. 2006,**
6. Removal of Heavy metals from sugar mill effluent using low cost adsorbent (fly ash) *Journal of Indian Chemical Society*, **Vol 83, 944, 2006.**
7. Heavy metal concentration of Ground water in Pettavaithalai area, Tiruchirappalli, Tamil Nadu, *J. Ecotoxicol. Environ. Monit.*, **16(5):443-446, 2006.**
8. Effect of some Indian Traditional plants on few common pathogen. Advances research in Applied science, *International Journal pelagia research library*, **1(3),205-211, 2010 .**
9. Heavy metal contamination of ground water near south bank canal between Karur and Tiruchirappalli district, Tamil nadu, India. *Der chemical sinica International Journal pelagia research library*, **3(1),210-217, 2012.**

10. Studies on heavy metal pollution of ground water sources between Tamil nadu and Pondicherry, India. *Advances in applied science , International Journal pelagia research library*, **3(1),424-429, 2012.**
11. Seasonal variation of heavy metal contamination of ground water in and around Uyyakondan channel Tiruchirappalli district, Tamil Nadu. *Der chemical sinica International Journal pelagia research library***3(5), 1113-1119, 2012.**
12. Assessment of heavy metal pollution in ground water near proximity of south bank canal, Tamil nadu, India in *Asian journal of experimental chemistry* **7(1), 26-30, 2012.**
13. Removal of chromium (VI) from aqueous solution by using *Citrus limetta* Peelas an adsorbent Der Chemica Sinica, *pelagia research library*, **4(2):133-143, 2013.**
14. Water quality index of ground water around Ampikapuram area near Uyyakondan channel Tiruchirappalli District, Tamil Nadu, India, *Scholar Research Library*, **5 (3):21-26,2013.**
15. Statistical approach and assessment of physico-chemical status of ground water in near proximity of South Bank Canal, Tamil Nadu, India , *Scholar Research Library*, **5 (2):25-32,2013.**
16. Phenomenal influence of effluents released from uyyakondan channel on ground water quality in and around palakarai area Tiruchirappalli District, Tamil Nadu, *Journal of Environmental Research and Development*, **8(1)299-308, 2013.**
17. Application of water quality index for groundwater quality assessment on Tamil Nadu and Pondicherry state, India. *Journal of Environmental Research and Development*, **8-3, 2014.**
18. Water quality index of groundwater of Karumandapam area near Koraiyar River Tiruchirappalli District, Tamil Nadu, India. *World Journal of Pharmacy and Pharmaceutical Sciences*, **3(5), 1351-1361, 2014.**
19. Evaluation of Pharmacognostic,Physicochemicl Studies and Heavy Metal Analysis of Medicinal Plant Solanum Erianthum D .Don, *World Journal Of Pharmacy and Pharmaceutical Sciences*.**3(5) 1601-1606, 2014**
20. Water quality assessment of groundwater resources between Tamil nadu and Pondicherry State, India, *World Journal Of Pharmacy and Pharmaceutical Sciences*, **3(7), 881-893, 2014.**
21. Physico-chemical contamination of groundwater in and around Tirunelveli district, Tamil Nadu, *Advances in applied science , International Journal pelagia research library*,**5(2),49- 54,2014.**
22. Water Quality Index of Ground water in and around Tirunelveli District, Tamil Nadu, India. *World Journal of Pharmacy and Pharmaceutical Sciences*, 2014. **3(10), 653-661, 2014.**

23. Natural Clay material a versatile adsorbent for the removal of fluoride from ground water. Proceeding of *International symposium on integrated water resources management Feb 19-20, Kozhikode Kerala 2014*.
24. Evaluation of Antibacterial and Antifungal activity of medicinal plant *Solanum erianthum*. *Journal of drug discovery*, **9(22)**, 35-39, 2014.
25. Phytochemical studies and antibacterial activities of *Amaranthus spinus.L.*. *World Journal of Pharmacy and Pharmaceutical Sciences*, **3(12)**, 1692-1697, 2014.
26. Photocatalytic Degradation of textile dye direct blue 86 bio-synthesized ZnO nanoparticles by modified solution- combustion method. *World Journal of Pharmaceutical Research*, **4**, (2)1228-1238, 2015.
27. A Study on Groundwater Pollution Using water Quality Index in and Around Edamalaipatti Pudhur area Near Koraiyar River, Tiruchirappalli District, Tamil Nadu, India. *World Journal of Pharmaceutical Research* **2**,( 2),1259-1270, 2015.
28. Assessment of physic-chemical parameters and water quality index of Viralimalai area near Koraiyar River Pudukkottai District, Tamil Nadu,India, *Der chemical sinica* (6):13-24,2015.
29. Heavy metal Pollution index of Groundwater of Fathima nagar area near Uyyakondan channel Tiruchirappalli district, Tamil Nadu,India. *World Journal Of Pharmacy and Pharmaceutical Sciences*, **4**, (1), 967-975, 2015.
30. Phytochemical Invitro antibacterial and antifungal analysis of leaf extract of *solanum erithanum D.Don.*, *World Journal of Pharmaceutical Research*. **4(1)**,1805-1811,2015.
31. Removal of Cr(VI) and Ni(II) from Its Aqueous Solutioin By Using Activated Carbon Prepared From the Plant *Phyllanthus Emblica.L.*. *World Journal Of Pharmacy and Pharmaceutical Sciences*,**4(08)**,994-1002,2015 ISSN: 2278-4357.
32. Effect of pH and Adsorbent dosage on the removal of Hexavalent chromium from its aqueous solution by activated carbon of pachygone ovat. *World Journal Of Pharmaceutical Sciences*,**4(08)**, 1988-1990 ,2015 ISSN: 2321-3310.
33. Studies on Heavy Metal Pollution Index of Groundwater of Edamalaipatti Pudhur Area near Korai River Tiruchirappalli District Tamil Nadu, India. *International Journal for Scientific Research & Development* Vol.3, Issue 08, 2015.ISSN: 2321-0613.
34. Synthesis and Pharmacological Evaluation of Novel Heterocyclic Compound. *.World Journal of Pharmaceutical Research*. Vol 5, Issue 1,589-598 ISSN 2277-7106.
35. Synthesis and pharmacological evaluation of novel Heterocyclic compound., *International Journal for Scientific Research & Development* Vol. 3, 696- 699, 2015 ISSN (online): 2321-0613.

36. Physico Chemical Characteristics of Groundwater of Cuddalore District, Tamilnadu, South India. *Journal of Chemistry and Chemical Sciences*, **Vol.5 (10), 542-549, October 2015. ISSN 2319-7625.**
37. Impact of heavy metal on ground water of guddalore district, tamilnadu. *International journal of nano corrosion science and engineering* **2(5) 2015, 236 – 244 ISSN: 2395 - 7018**
38. Seasonal Variation of Heavy Metal Analysis Of Ground Water In And Around Senthurai Taluk In Ariyalur District, Tamilnadu. *Journal of Advanced Applied Scientific Research*, **ISSN:2395-7018,December-2015**
39. Quantitative Determination of Total and Fecal Coliforms in Groundwater between Tamil nadu and Pondicherry States, India. *Journal of Environmental Science and Pollution Research*, **2(1), (2016), 57-59.ISSN: 2455- 0272**
40. Variation in Physico Chemical Characteristics of Groundwater Quality between taluks of Cuddalore district, Tamil Nadu. *International Journal of Recent Scientific Research*, **Vol,7, Issue,5,pp. May 2016, ISSN: 0976 – 3031**
41. Removal of toxic lead metal from wastewater by using bio-adsorbent. *An international journal of Scientific Transactions in Environmental and Technovation*,**Vol-10,Issue-1,sep 2016. ISSN: 0973-9157**
42. Statistical Study On Physico Chemical Characteristics of Groundwater in and around Panjapur area near Korai River, Tamil Nadu, India. *International Journal of advanced applied scientific research*. **ISSN:2454 – 3225, January 2017**
43. Ground water quality using physic- chemical analysis in and around Senthurai Taluk at Ariyalur District, Tamilnadu. *International Journal of advanced scientific and technical research*. **ISSN:2249 – 9954, January 2017**
44. Correlation Analysis Of Physico-Chemical Properties Of Ground Water In And Around Malaiyeedu Area Near Kundaru River Pudukkottai District ,Tamil Nadu, India, *International Journal of Current Research*,**ISSN:0975-833X,June 2017**
45. Physico-Chemical Characteristics Of Ground Water In And Around Ariyalur District Tamil Nadu, India, *World Journal Of Pharmacy And Pharmaceutical Sciences*, **ISSN: 2278-4357 March 2017**
46. A study on physic-chemical status and spatial distribution of pollutants in ground water proximity to uyyakondan channel using modeling software-gis *International Journal of advanced applied scientific research*. **ISSN:2454 – 3225, January 2017**
47. ZnO: Eu<sup>3+</sup> Synthesized By Combustion Technique From Green Source, Characterization and Photoluminescence Studies. *Elsevier* **4 (2017) 11837-11847**
48. Photocatalytic and photoluminescence studies of ZnO nonmaterials by Banana peel powder *Elsevier* **4(2017) 11827-11836**
49. Green medical synthesis of MgO Nano-Flakes and its electro – chemical applications *Elsevier* **2017**

50. In Vitro Anti – Diabetic Activity of *Solanum Erianthum* Iaetsd *journal for advanced research in applied sciences* ISSN NO : 2394 – 8442 March 2018
51. A study on the ground water quality in and around karur district, tamil nadu, india. *European journal of biomedical and pharmaceutical sciences* ISSN No 2349-8870 February 2018
52. GC-MS Analysis from hydrocoholic extract of *Solanum Erianthum* *European Journal of biomedical and pharmaceutical sciences* ISSN 2349-8870 January 2018
53. Use of WQI and hydrogeochemical facies analyses to assess the suitability of groundwater between Tamilnadu and Pondicherry states, India. *International journal of basic applied research* ISSN 2249-3352 November 2018
54. Seasonal variation of heavy metal contamination of groundwater in and around Karur District, Tamil Nadu. *International journal of pharmacy and biological sciences* ISSN 2321-3272 January 2019
55. Assessment of physico – chemical analysis of ground water quality in and around Karur District, Tamilnadu, India. *International journal of research and analytical review* ISSN 2348 – 1269 March 2019.
56. Water quality index of groundwater near the polluted urban pond of tiruchirappalli district, Tamil Nadu, India. *International journal of pharmacy and biological sciences* ISSN 2321 -3272 (print), ISSN 2230-7605 (Online) February 2018.
57. Preliminary phytochemical analysis of *Crotalaria Verrucosa* leaves. *Asian journal of Research in Chemistry and Pharmaceutical Sciences*. ISSN : 2349-7106 January 2019
58. In- vitro antimicrobial activity of *Crotalaria Verrucosa* Medicinal Plant. *Asian journal of Research in Chemistry and Pharmaceutical Sciences*. ISSN : 2349-7106 June 2019
59. In vitro anti-diabetic activity of *Solanum Erianthum*. *International journal of research and analytical reviews*, 2019, Volume 6, Issue 1, 41-44.
60. GCMS analysis from hydroalcoholic extract of *Solanum Erianthum*. *Adalya journal*, 2019, Volume 8, Issue 11, 682-689.
61. Assessment of physico-chemical contaminants in ground water using water quality index in and around Thenpennai River, villupuram district and Tamil nadu, India. *Adalya Journal* Volume 8, Issue 10, October 2019 ISSN No: 1301-2746
62. A study on ground water pollution using water quality index in and around Thenpennai River, villupuram district, Tamil nadu, India. *Adalya Journal* Volume 8, Issue 10, October 2019 ISSN No: 1301-2746.
63. Assessment of physico-chemical pollutants in groundwater of Thenpennai river, Villuppuram District, Tamil Nadu, India. *Malaya Journal of Matematik*, Vol. 5, No. 2, ISSN NO: 4295-4300, 2020
64. Water quality index of groundwater pollution of Mungilthurai Pattu area Villuppuram district, Tamil Nadu, India. *Malaya Journal of Matematik*, Vol. 5, No. 2, ISSN NO: 2118-2122, 2020

65. Assessment of physico-chemical contaminants in groundwater of Thenpennai river, no Villuppuram district, Tamil Nadu, India. Malaya Journal of Matematik, Vol. S, No. 2, ISSN NO: 2123-2129, 2020
66. Impact on Groundwater quality in and around Omalur Taluk, Salem District, Tamilnadu, India, Asian Journal of Organic and Medicinal Chemistry, April 2022, Vol. 7, No.2, 282-296.
67. Analysis of Groundwater quality based on WQI and SAR in and around Salem District, Tamilnadu, India, Bulletin of Environment, Pharmacology and Life Sciences, Volume 1 April 2022.
68. Water Quality Index of Groundwater proximity Ramanathapuram District, Tamilnadu, India, Bulletin of Environment, Pharmacology and Life Sciences, Volume 1 April 2022.
69. Analyzing the quality and stability of ground water for irrigation and human use in Salem district, Tamil Nadu, India, Using a Hydrological Technique, International Journal of Zoological Investigations, Volume 8, December 2022, 48-56.
70. Evaluation of groundwater quality in and around Ramanathapuram district, Tamil Nadu, India by using Hydrogeochemical Facies Analysis and Wilcox Diagram, European Journal of Molecular & Clinical Medicine, Volume 10, Issue 01, 2023, 2681-2689.

## **12 Details of Papers Presented:**

1. Paper presented in the UGC Sponsored National conference on “Hydrochemical, Biochemical studies and Environmental pollution” held at Moulana Azad College, Aurangabad, Maharashtra. **7-8 October 2002.**
2. Paper presented in the International Conference on “Sustainable Development and Management of Natural Resources” held at Holy Cross College, Tiruchirappalli, Tamilnadu. **15-17 March 2003.**
3. Paper presented in the UGC Sponsored National Symposium on “Environmental friendly Textile Processing” held at AVVM, Sri Pushpam College, Poondi, Thanjavur, Tamilnadu. 19-20 February 2004.
4. Paper presented in the UGC sponsored State Level Seminar on “Emerging Trends in Chemistry” Jamal Mohamed College, Tiruchirappalli paper entitled “Removal of Heavy metals from rice husk” **on 9<sup>th</sup> March 2006.**
5. Paper presented in the UGC sponsored State Level Seminar on “Frontier Studies in Chemistry” Jamal Mohamed College, Tiruchirappalli paper entitled “Heavy Metals Concentration of Ground Water in Lalgudi Area ” **on 9<sup>th</sup> and 10<sup>th</sup> February 2010.**
6. Paper presented in the UGC sponsored State Level Seminar on “Frontier Studies in Chemistry” Jamal Mohamed College, Tiruchirappalli paper entitled “Synthesis And Characterization of Mannich Base” **on 9<sup>th</sup> and 10<sup>th</sup> February 2010.**
7. Paper presented in the National conference on current Trends in Chemistry held at Dept. of Chemistry, Bharathiar University Coimbatore. entitled “Impact of Tsunami on Ground water of the coastal areas of Nagapattinam District” **on 2-3<sup>rd</sup> December 2010.**

8. Paper presented in the Inter National conference on IV<sup>th</sup> World Aqua congress at New Delhi titled “Scavenging action of Cyano bacteria on the industrial effluent” held between **08.12.2010 and 10.12.2010**
9. Paper presented in the National conference on “Exploration of the National Bio-active Compounds from three Marine resources” Bharathidasan University, Tiruchirappalli entitled “Phytochemical analysis of *Catharanthus Roseus.L*” on **10<sup>th</sup> and 11<sup>th</sup> August 2011**.
10. Paper presented in the National seminar on Enhancement of quality in research publications and recent research in water, alternative energy resources, materials and health at Auxilium College, Vellore entitled “Phenomenal Influence Of Effluents From Uyyakondan Channel On Ground Water Quality In And Around Puthur Area Tiruchirappalli District, Tamil Nadu, on **15<sup>th</sup> and 16<sup>th</sup> Decemper 2011**.
11. Paper presented in the National seminar on Enhancement of quality in research publications and recent research in water, alternative energy resources, materials and health at Auxilium College, Vellore entitled “Assessment of physico- chemical status of ground water in Lalabet area near south bank canal, Karur district, Tamil nadu,, on **15<sup>th</sup> and 16 th Decemper 2011**.
12. A paper presented in the National seminar on new innovative ideas in science and technology at Karur College of engineering entitled “Assessment of heavy metal concentration of ground water in and around cantonment, Uyyakondan channel, Tiruchirappalli district, Tamil nadu” on **march 2011**.
13. A paper presented in the National conference on Current trend in chemistry Research at Jamal Mohamed College, Tiruchirappalli entitled “Assessment of Ground water quality in and around Ampikapuram area, Tiruchirappalli district, Tamil Nadu” on **27<sup>th</sup> and 28<sup>th</sup> feb2013**.
14. A paper presented in the National conference on Current trend in chemistry Research at Jamal Mohamed College, Tiruchirappalli entitled “Physico Chemical analysis of ground water samples of Karaikal area, Tamil Nadu” on **27<sup>th</sup> and 28<sup>th</sup> feb2013**.
15. A paper presented in the National conference on Current trend in chemistry Research at Jamal Mohamed college, Tiruchirappalli entitled “Pollution status and Water quality analysis of ground water of Tamil Nadu and Pondicherry state, India” on **27<sup>th</sup> and 28<sup>th</sup> Feb. 2013**.
16. A paper presented in the National conference on Current trend in chemistry Research at Jamal Mohamed College, Tiruchirappalli entitled “Antimicrobial and Phytochemical analysis of a medicinal plant” on **27<sup>th</sup> and 28<sup>th</sup> feb 2013**.
17. A paper presented in the National conference on Current trend in chemistry Research at Jamal Mohamed College, Tiruchirappalli entitled “Structural Identification of the Phyto Constituents of the Chloroform Extract of *Catharanthus roseus. L* Using GC-MS” on **27<sup>th</sup> and 28<sup>th</sup> feb 2013**.
18. A paper presented in the International conference on Chemistry in synergy with materials and Biology at Bishop Heber College, Tiruchirappalli Entitled “Drinking water quality management through statistical studies for sub canal cauvery river Tamil Nadu India” on **Jan 2014**.



19. A paper presented in the National conference on Water Research Management in Tamil Nadu Jamal Mohamed College, Tiruchirappalli entitled “water quality index of Ground water of Karumandapam area, Tiruchirappalli district, Tamil Nadu” **on 6<sup>th</sup> March 2014.**

20. A paper presented in the International conference on Chemical and environment and Chemistrys and Biology at Jamal Mohamed College, Tiruchirappalli Entitled “Evaluation of Groundwater quality using multiple linear regression and structural equation modelling” **on 11<sup>th</sup> and 12<sup>th</sup> March 2014.**

21. A paper presented in the International conference on Chemical and environment and Chemistrys and Biology at Jamal Mohamed College, Tiruchirappalli Entitled “Phytochemical Studies and Antimicrobial Activities of Amaranthus spinosus.L” **on 11<sup>th</sup> and 12<sup>th</sup> March 2014.**

22. A paper presented in the National conference on Advancement in Materials Science. Coimbatore Institute of Technology. “A Study on Groundwater Pollution Using Water quality index in and around Edamalaipatti Pudhur area near Koraiyar River, Tiruchirappalli District, Tamil Nadu, India” **on 26<sup>th</sup> and 27<sup>th</sup> September 2014.**

23. A paper presented in the International conference on Chemical and Materials. BIT campus Anna University, Tiruchirappalli “Heavy Metal Pollution index of Groundwater of Fathima Nagar area near Uyyakondan Channel Tiruchirappalli District, Tamil nadu, India” **on 14<sup>th</sup> & 15<sup>th</sup> Nov 2014.**

24. A paper presented in the International conference on Chemical and Materials. BIT campus Anna University, Tiruchirappalli “Assessment of Physico – Chemical Parameters and Water Quality Index of Viralimalai area Near Koraiyar River Pudukkottai District, Tamil Nadu, India” **on 14<sup>th</sup> & 15<sup>th</sup> Nov 2014.**

25. A paper present in the Two Day National Conference of “Current Scenario In Material Chemistry(CSIMC2015)”Jamal Mohamed College Tiruchirappalli “ A Sdtudy On Spatial Distribution Of Pollutions In Ground Water Proximity To Uyyakondan Channel Using GIS” **on 09<sup>th</sup> & 10<sup>th</sup> Feb 2015.**

26. A paper present in the Two Day National Conference of “Current Scenario In Material Chemistry(CSIMC2015)”Jamal Mohamed College Tiruchirappalli “ Heavy Metal Pollution Index Of Groundwater Of Karumandapam Area Near Koraiyar River Tiruchirappalli District, Tamil Nadu, India. **On 09<sup>th</sup> & 10<sup>th</sup> Feb 2015.**

27. A paper present in the Two Day National Conference of “Current Scenario In Material Chemistry(CSIMC2015)”Jamal Mohamed College Tiruchirappalli “ Water Quality Index Of Ground Water In and Around Tirunelveli District, Tamil Nadu, India. **On 09<sup>th</sup> & 10<sup>th</sup> Feb 2015.**

28. A paper present in the Two Day National Conference of “Current Scenario In Material Chemistry(CSIMC2015)”Jamal Mohamed College Tiruchirappalli “ Adsorption Of Hexa valent Chromium Chemistry On Activated Carbon Prepared From Phyllanthus Acidus.L **On 09<sup>th</sup> & 10<sup>th</sup> Feb 2015.**

29. A paper present in the Two Day National Conference of “Current Scenario in Material Chemistry (CSIMC2015)”Jamal Mohamed College Tiruchirappalli “Phytochemical Analysis And Antimicrobial Activity Of Andrographis Paniculata.l. **On 09<sup>th</sup> & 10<sup>th</sup> Feb 2015.**

30. A paper presented in the International conference on Chemical and Environmental Research“Statistical study on physico chemical characteristics of groundwater in and around Panjapuir area near korai river, Tamil nadu, india”. **On 17<sup>th</sup> December 2015.**
31. A paper presented in the International conference on Chemical and Environmental Research “Phenomenal influence of Effluents in and around urban Uyyakondan channel of Tiruchirappalli District, Tamil nadu, India”. **On 17<sup>th</sup> December 2015.**
32. A paper presented in the International conference on Chemical and Environmental Research Photocatalytic degradation of textile dye C.I. Direct Orange 39 by using ZnO nanoparticles prepared from pachygone ovate. **On 17<sup>th</sup> December 2015.**
33. A paper presented in the International conference on Chemical and Environmental Research“ASTudy on Heavy Metal Contamination of Groundwater in and around Tirunelveli District, Tamil nadu, India”. **On 17<sup>th</sup> December 2015.**
34. A paper presented in the International conference on Chemical and Environmental Research “Assessment of Groundwater Quality proximity to south bank canel area between Karur and Tiruchirappalli District, Tamil nadu,India”. **On 17<sup>th</sup> December 2015.**
35. A paper presented in the International conference on Chemical and Environmental Research “A Study on Physico – Chemical Parameters of Groundwater Quality Sendurai Taluk in Ariyalur District, Tamil nadu, India”. **On 17<sup>th</sup> December 2015.**
36. A paper presented in the International conference on Chemical and Environmental Research “Identification and Characterisation of Jamun ( Eugeniacumini) Aqueous Extract by Using GC- MS study”. **On 17<sup>th</sup> December 2015.**
37. A paper presented in the International conference on Chemical and Environmental Research “Synthesis and Characterisation of some Hetrocyclic Compound”. **On 17<sup>th</sup> December 2015.**
38. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry,Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Assessment And Fore-Cast Of Physico-Chemical Parameters Of Ground Water Using Modeling Software Proximity To South Bank Canal Area Between Karur And Tiruchirappalli, Tamil Nadu, India. **On 7<sup>th</sup> January 2017.**
39. A paper presented in the International conference on Chemical and Environmental Research. . Organized by the Department of Chemistry,Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Physico-Chemical Analysis of Groundwater around Pennai river Villuppuram District, Tamilnadu, India. **On 7<sup>th</sup> January 2017.**
40. A paper presented in the International conference on Chemical and Environmental Research. . Organized by the Department of Chemistry,Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Statistical Study On Physico Chemical Characteristics of Groundwater in and around Panjapur area near Korai River, Tamil Nadu, India. International Journal of advanced applied scientific research. **On 7<sup>th</sup> January 2017.**
41. A paper presented in the International conference on Chemical and Environmental Research. . Organized by the Department of Chemistry,Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Phytochemical Screening and Antimicrobial Activity Of *Phyllanthusniruri*. **On 7<sup>th</sup> January 2017.**

42. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Applications Of Water Quality Index For Groundwater Quality Assessment On Senthaneerpuram And Sempttu Areas, Tiruchirappalli District, Tamilnadu, India. **On 7<sup>th</sup> January 2017.**

43. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. A study on physico- chemical status and spatial distribution of pollutants in ground water proximity to uyyakondan channel using modeling software – gis. **On 7<sup>th</sup> January 2017.**

44. A paper presented in the International conference on Chemical and Environmental Research. . Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Phenomenal Influence Of Effluents In and around Urban Uyyakondan Channel Of Tiruchirappalli District And Pollutant Migration Study By Ground Water Modeling Software. **On 7<sup>th</sup> January 2017.**

45. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Assesment Of Heavy Metal Contamination Of Ground Water In and around Ciththoor Area Near South Vellaru River, Pudukkottai District, Tamil Nadu. **On 7<sup>th</sup> January 2017.**

46. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Assessment of pollution status on groundwater in and around Tirunelveli district. **On 7<sup>th</sup> January 2017.**

47. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Equilibrium Modeling And Kinetic Studies On The Removal Of Pb(II) From Aqueous Solution By Activated Carbon (Acpo) Prepared From Pachygone Ovata Leaves. **On 7<sup>th</sup> January 2017**

48. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Assessment of physicochemical characteristics of ground water of karur district, Tamil Nadu, India. **On 7<sup>th</sup> January 2017.**

49. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Hydrochemical Analysis Of Groundwater In And Around Musiri Town At Tiruchirappalli District, Tamil Nadu. **On 7<sup>th</sup> January 2017.**

50. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Seasonal variation of heavy metal concentration of ground water in and around Senthurai taluk in Ariyalur District – Tamilnadu. **On 7<sup>th</sup> January 2017.**

51. A paper presented in the International conference on Chemical and Environmental Research. . Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Synthesis And Biological Studies On 1,2,4-Triazine Derivatives **On 7<sup>th</sup> January 2017.**

52. A paper presented in the International conference on Chemical and Environmental Research. Organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. Determination of Concentrations of Selected Essential Metals in Raw Cow's Milk: Dodoma District, Tanzania **On 7<sup>th</sup> January 2017.**

53. A paper presented in the National conference on Advances in Functional Materials . Water Quality Index of Groundwater of Thirukkivilur Area Villuppuram District, Tamil Nadu India. **On 5<sup>th</sup> August 2017.**

54. A paper presented in the National conference on Advances in Functional Materials. Preliminary Phytochemical Screening on *Crotalaria Verrucosa*. **On 5<sup>th</sup> August 2017.**

55. A paper presented in the International conference on Newer Engineering concepts & Technology-2K18. Organized by K. Ramakrishnan college of Technology, Trichy. Hydrochemical facies and assessment of ground water quality in and around kavinadu area puddukkottai district, tamilnadu **On 23<sup>rd</sup> & 24<sup>rd</sup> March 2018.**

56. A paper presented in the Two- Day National conference on New vistas in material science. . Organized by the Department of Chemistry, J J College of Arts and Science (Autonomous), Pudukkottai, Tamil Nadu. Drinking water quality management through statistical studies for sub canal of Cauvery river, Tamil Nadu, India **On 8<sup>th</sup> & 9<sup>th</sup> March 2018.**

57. A paper presented in the International conference on Recent Trends in Nanomaterials for energy, Environmental and Engineering Applications. Organized by K. Ramakrishnan college of Technology, Trichy. Hydrochemical facies and assessment of ground water quality in and around kavinadu area puddukkottai district, tamilnadu **On 14<sup>th</sup> & 15<sup>th</sup> March 2019.**

58. Appraise of groundwater proximity of Tiruchirappalli District, Tamil Nadu in the International Conference on "Influence of Chemistry in the Transition towards Green Economy" organized by Post Graduate & Research Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore during 1<sup>st</sup> & 2<sup>nd</sup> March 2023.

59. Evaluation of groundwater quality in and around Gandarvakkottai, Pudukkottai District, Tamil Nadu in the Two Days International Conference on " Materials and Biological Researchers (ICMBR-2023)" organized by PG & Research Department of Chemistry with IQAC (Internal Quality Assurance Cell), Dr. R. K. S. College of Arts & Science, Kallakurichi on 2<sup>nd</sup> & 3<sup>rd</sup> March 2023.

60. Exploration of groundwater quality in and around Eraiyur Sugar Factory, Perambalur District, Tamil Nadu in the Two Days International Conference on " Materials and Biological Researchers (ICMBR-2023)" organized by PG & Research Department of Chemistry with IQAC (Internal Quality Assurance Cell), Dr. R. K. S. College of Arts & Science, Kallakurichi on 2<sup>nd</sup> & 3<sup>rd</sup> March 2023.

61. Assessment of groundwater quality in and around Tiruchirappalli District, Tamil Nadu in the National Conference on "Materials and Mathematical Sciences (NCMMS-2023) Organized by School of Advanced Sciences (SAS), Kalasalingam Academy of Research and Education, Krishnankoil held on 30<sup>th</sup> & 31<sup>st</sup> March 2023.

### **13 Details of Seminars / Conferences / Workshops Attended:**

1. International seminar on "Placer Deposits" held at Tamil university, Thanjavur, Tamilnadu. 14-20 December 1999.

2. National seminar on “Coastal Resources Management & Conservation” Tamil University, Thanjavur, 21<sup>st</sup> to 22<sup>nd</sup> December 1999.
3. National seminar on “Atomic Energy, Ecology and Environment” Jamal Mohamed College, Tiruchirappalli, Tamil Nadu. 8-9 February 2001.
4. Participated in the UGC Sponsored National Symposium on Recent Trends in Heterocyclic Chemistry (NSRTHC-2004) Conducted by PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli-20 during 24 & 25 September 2004.
5. Participated in the seminar sponsored under Autonomous Grant “Advanced Topics in Chemistry” held on 13, 14 March 2007, organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu.
6. National seminar on “Recent Advances in Chemistry”, Periyar University, Salem. 1<sup>st</sup> and 2<sup>nd</sup> March, 2007.
7. Attended the International Conference on Frontiers in Nano Science Technology and Applications FIN STA-14 at Sri Sathya Sai Institute of Higher learning, Puttaparthi Andrapradesh.
8. Participated in the TEQIP II sponsored two day seminar on “Challenges and Opportunities in Chemical and Environmental Research (Chemera 2016)” organized by Department of Chemistry, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli August 11- 12, 2016.
9. Participated in the one day National seminar on “Challenges and Changes in the Evaluation System” organized by the Internal Quality Assurance Cell of Jamal Mohamed College (Autonomous), Tiruchirappalli – 20 on **26<sup>th</sup> February 2019**.
10. Has served as a Organizing Committee Member in the State level Intercollegiate Extravaganza Symphoria 19 organized by the PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli -20, on **13<sup>th</sup> February 2019**.
11. Participated in the workshop on Quality enhancement of research: New paradigm in Trans – disciplinary approaches and IPR. Organized by Internal quality Assurance Cell (IQAC) and Innovation and Incubation centre, Jamal Mohamed College, (Autonomous) Tiruchirappalli -20, **On 6<sup>th</sup> September 2019**
12. Participated in the one day workshop on Draft National education policy 2019. Organized by the Erode arts and science college, (Autonomous), Erode – 638009. **On 29.06.2019**.
13. Participated a One Day State level Symphoria ‘19 Organized by PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 13<sup>th</sup> February 2019.
14. Participated in the “Orientation Programme on MOOC’s and e-Learning” organized by Department of Library, Jamal Mohamed College (Autonomous), Tiruchirappalli on 29<sup>th</sup> January 2020.
15. Participated a One Day State level Jam Chem FIST’20 Organized by PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 27<sup>th</sup> February 2020.

16. Participated in the FDP on “E-Content Development” organized by the Internal Quality Assurance Cell (IQAC), Jamal Mohamed College (Autonomous), Tiruchirappalli from 30.06.2020 to 04.07.2020.

17. Participated in the webinar on “Patent Filing Process and Challenges” organized by the Intellectual Property Rights Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli on 30.09.2021.

18. Participated in the Short Term FDP on “Digital Teaching and Learning” Organized by PG and Research Department of Chemistry, under the DBT star college scheme, Jamal Mohamed College (Autonomous), Tiruchirappalli from 24.01.2022 to 29.01.2022.

19. Participated a One day FDP on “Prevalence of fluoride and its optical detection” Organized by PG and Research Department of Chemistry, under the DBT star college scheme, Jamal Mohamed College (Autonomous), Tiruchirappalli on 24.01.2023.

20. Participated in the five days online FDP on “Recent Trends on Research and Development in Chemistry” Organized by PG and Research Department of Chemistry, Theivanai Ammal College for Women(Autonomous), Villupuram, Tamilnadu, India from 13.02.2023 to 17.02.2023.

#### **14 MAJOR RESEARCH PROJECT:**

- ✓ Sanctioned by Ministry of Environment and Forests, New Delhi (MOEF) of total grant of Rs.16, 24,200/- in July 2010, titled “**Seasonal influence of effluents released in Uyyakondan channel on the ground water quality of Tiruchirappalli District, Tamil nadu and the management Strategies**”.
- ✓ Sanctioned by University Grants Commission (UGC), Hyderabad of total grant of **Rs. 4,80,000/-** during the period (2017 to 2019) , titled “ **A Study on the Spatial Distribution on Pollutants using GIS in Groundwater near the polluted urban pond of Tiruchirappalli – Tamilnadu**”.

#### **15 Patents got**

- 1) Phytochemistry
- 2) Nano synthesis

#### **16 Details of chairing as resource person:**

1. Acted as a resource person on **29 February 2012** for one day national seminar on Bio-Knowledge for Better Environment at Syed Hameeda Arts and Science College, Keelakkarai, Ramanathapuram.(Dist).
2. Acted as a resource person on **28<sup>th</sup> July 2012** titled Chemistry in everyday life at Cauvery College for Women, Tiruchirappalli.
3. Acted as a resource person on **18<sup>th</sup> December 2014** for faculty development programme at University College of Engineering Thirukovalai, Thiruvarur District.

4. Acted as a resource person on **4<sup>th</sup> April 2015** titled Job opportunities in Chemistry at Deivanai Amman College for women, Vilupuram.
5. Acted as a resource person on **27 March 2017** delivered a lecture on Water Technology at Ariyalur Government College, Ariyalur.
6. Acted as a Chair Person on **9<sup>th</sup> March 2018** on New Vistas in Material Science at J. J. college of arts and science (Autonomous), Pudukkotai.
7. Acted as a resource person on **13<sup>th</sup> July 2018** titled The Hazards of the use of plastic and Water Treatment Technology at J .J. college of arts and science (Autonomous), Pudukkotai.
8. Acted as a Judge on “CHEM-FIESTA 19” organized by the PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli -20, held on 18 September 2019.
9. Acted as a Resource Person and delivered a lecture on “Spectroscopy” in a workshop on “UV-Visible & IR Spectroscopy” Organized by the PG and Research Department of Chemistry, Thanthai Periyar Govt Arts & Science College (Autonomous), Tiruchirappalli-23 on 05<sup>th</sup> April, 2022.
10. Acted as a Resource Person and delivered a special lecture on “Water Technology in Pharma Sector” at Periyar College of Pharmaceutical Sciences, Tiruchirappalli on 28<sup>th</sup> July, 2023.
11. Acted as a Resource Person and delivered a special lecture on “Water Quality Analysis” at Holy Cross College (Autonomous), Tiruchirappalli of Pharmaceutical Sciences on 28<sup>th</sup> October, 2023.

**17 Details of in charge / Participation in extracurricular Activities: (NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):**

1. Acted as a Vice President of chemistry association from 2008 –2011(3 years).
2. Department Library in- charge from 2012 to 2015.
3. College Student Admission Committee 2017-2018
4. IQAC Core Member from 2019 to 2022.
5. Coordinator – Department of Microbiology from 2020-2022.
6. Deputy-Coordinator IQAC 2023 to till date

**18. Seminars / Conferences / Workshops Convener:**

1. Acted as Convener at International Conference on “Chemical and Environmental Research” Organized by the Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, On 7<sup>th</sup> January 2017.
2. Acted as Convener at A State Level Workshop on “Production and Formulation of Bioinoculants” Organized by the Department of Microbiology, Jamal Mohamed College (Autonomous), Tiruchirappalli, On 31<sup>st</sup> March 2022.

3. Acted as Convener at International Conference on “Future Challenges of Microbes in Environment (ICFCME-2023) Organized by the Department of Microbiology, Jamal Mohamed College (Autonomous), Tiruchirappalli, in association with Microbiologists Society, India held on 23<sup>rd</sup> February 2023.

### **19. Awards Received:**

✚ Received **Young Investigator Award** Sponsored by Society for Scientific Research on 22<sup>nd</sup> January 2016 at Yercaud Salem.

✚ Received **Jamal Research Excellence Award** under the category **Best Senior Researcher (Faculty of Science)** during the year (2023-2024) Sponsored by Jamal Mohamed College (Autonomous), Tiruchirappalli.

### **20. Details of Books and Chapter:**

- Published a book entitled ‘Water Chemistry’.
- Published a book chapter entitled as “Recent Development in Chemical Sciences, GIS and Piper Trilinear Diagram Analytical Tools Using to Assess the Ground Water Quality between Tamil Nadu and Pondicherry State, India” in Chyren Publication, Haryana – 121102.