

## RESUME

<b>1</b>		<b>Name: Dr. K. LOGANATHAN</b>			
<b>2</b>	Date of Birth	04.11.1979			
<b>3</b>	Designation	Associate Professor of Chemistry			
<b>4</b>	Address for	<b>Office</b> Post Graduate and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli – 20, India			
	<b>Residence</b> 4/173, 3 <sup>rd</sup> cross, Ayanar Nagar, Gundur, Tiruchirappalli–7, India Phone: 9788789693				
<b>5</b>	Educational Qualifications	M.Sc., M.Phil., Ph.D.			
<b>6</b>	Teaching Experience	<table style="display: inline-table; border: none;"> <tr> <td style="text-align: center;"><u>UG</u> 19 years</td> <td style="text-align: center;"><u>PG</u> 19 years</td> <td style="text-align: center;"><u>M.Phil.</u> 11 years</td> </tr> </table>	<u>UG</u> 19 years	<u>PG</u> 19 years	<u>M.Phil.</u> 11 years
	<u>UG</u> 19 years	<u>PG</u> 19 years	<u>M.Phil.</u> 11 years		
Research Experience	15 Years				
<b>7</b>	Areas of Specialization	Synthetic Organic Chemistry			
<b>8</b>	Languages Known	Tamil, English			
<b>9</b>	Subjects Teaching	Undergraduate: Nuclear Chemistry Postgraduate: Group Theory M.Phil.: Applications of spectroscopy			
<b>10</b>	Research	Completed      Pursuing			
	Supervision M.Phil.	19                      -			

### Minor Research Project

Agency	Title	Amount	Duration
UGC, New Delhi	Synthesis, characterization and Pharmacological importance of pipeidopyrimidines	70,800/-	2 years, 2009-2011

### Orientation/ Refresher Course

S. No.	Name of the Training	Name of the sponsoring agency	Place and Date
1	Orientation Programme	UGC-Academic Staff College	Bharathidasan University, Trichirappalli, 02.03.2010 to 29.03.2010.
2	Refresher Course in Chemistry	UGC-Academic Staff College	Bharathidasan University, Trichirappalli, 20.11.2012 to 10.12.2012.
3	Refresher Course in Nanoscience	UGC-Human Resource Development Centre	University of Madras, Chennai 17.11.2015 to 07.12.2015.
4	Refresher Course in Basic Sciences	UGC Human Resource Development Centre	University of Calicut, Kerala 15.06.2017 to 05.07.2017.
5	ARPIT-2020: Online Refresher Course in Chemistry for Higher Education	Ministry of Human Resource Development	S.G.T.B. Khalsa College, University of Delhi 01.01.2020 to 31.03. 2021

### Publications:

1. K. Loganathan, K. Sithick Ali, M. Purushothaman, Synthesis, antimicrobial and antifeedant activity of 2-acetyl-6-(substituted cinnamoyl)-5-methyl-3-(substituted styryl) benzo[1,2-b;5,4;b']difurans under PTC, *Indian J. Heterocyclic Chem.*, **2007**, 317, 16.
2. K. Loganathan, K. Sithick Ali, M. Purushothaman, A facile Synthesis of substituted benzopyrone and their antimicrobial / antifeedant activity, *Indian. J. Heterocyclic Chem.*, **2009**, 219, 16.
3. K. Loganathan, K. Sithick Ali, M. Purushothaman, Synthesis, characterization, biological importance of aminocyanopyridines, *Int. J. Chem Tech Res*, **2012**, 42, 479.
4. K. Loganathan, K. Sithick Ali, M. Purushothaman, J. A Selvin, A facile synthesis of coumarin derivatives as potent antimicrobial agent, *Int. J. Chem Tech Res*. **2014**, 6(1), 538.
5. K. Loganathan, K. Sithick Ali, M. Purushothaman, Synthesis and characterisation of 2-(substituted phenyl)azo-4,6-dipropionylresorcinol derivatives, *World J. Pharm. Res.*, **2015**, 4(6), 1694.
6. M. Purushothaman, K. Loganathan, K. Sithick Ali, Synthesis and characterization of azo derivatives of diacetylresorcinol, *J. Chem. Pharm. Res.*, **2015**, 7(4), 1452.
7. K. Loganathan, K. Sithick Ali, J. Gerad Rakesh, A. Mohan, R. Thulasibabu, Rajani Gopal Gad, M. Purushothaman, S. Silambarasan, A. Jamal Abdul Nasser, Small molecule antagonist for EGFR- a preliminary computational framework of azo derivatives as therapeutic agent for bladder cancer, *World. J. Pharm. Res.* **2015**, 4, (8), 1069.
8. K. Loganathan and K. Sithick Ali, *In silico* docking study of azo compounds of 4,6-dipropanoylresorcinol as EGFR antagonists, *J. Chem. Pharm. Res*, **2016**, 8(1), 542,.
9. K. Loganathan and K. Sithick Ali, Synthesis, characterization and biological studies of some azo compounds, *J. Chem. Pharm. Res.*, 8(5):895-899, 2016.
10. K. Loganathan, K. Sithick Ali, M. Purushothaman and S. Parimala Vaijayanthi, Synthesis and antimicrobial activity of some piperidopyrimidines, *Int. J. Res.Org.Chem.*, 2016, **6(2)**, 23.

### **Paper (s) Presentation:**

1. Paper Presented at the “National Seminar on Recent Trends in Chemistry” paper entitled “A novel synthesis of aminocyanopyridine derivatives and their biological importance” conducted by Annamalai University on 17 & 18 October, 2008.
2. Presented a research Paper entitled “Synthesis, characterization and antimicrobial activities of 4,6-disubstituted resorcinol derivatives at the state level seminar on new vistas in chemistry (NVC-2012), Organized by PG & Research Department Of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, Tamilnadu on 4<sup>th</sup> & 5<sup>th</sup> January 2012
3. Paper presented at National Conference on Current Trend in Chemistry Research (NCTCR- 2013) paper entitled “Synthesis, Characterization and Pharmacological importance of piperidopyrimidines ” Organized by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli-620 020, Tamilnadu on 27<sup>th</sup> & 28<sup>th</sup> February-2013.
4. Presented a research Paper entitled “Synthesis of aminocyano pyridines as potent antimicrobial agent” at the International Conference on Chemical and Environmental Research (ICCER- 2014), Organized by PG & Research Department Of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620020, Tamilnadu on 11<sup>th</sup> & 12<sup>th</sup> March 2014.
5. Presented a research Paper entitled ‘synthesis and characterization of 4,6-bis (dibromoacetyl)-2-bromoresorcinol at “Current Scenario in material Chemistry (CSIMC- 2015)” conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 during 9<sup>th</sup> and 10<sup>th</sup> February 2015.
6. Presented a research Paper entitled “In silico docking study of azo compounds of 4,6- dipropanoyl resorcinol as an EGFR antagonist” at the International Conference on Chemical and Environmental Research (ICCER-2015), Organized by PG & Research Department Of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, Tamilnadu on 17<sup>th</sup> December 2015.
7. Presented a research Paper entitled “EGFR antagonist :In silico docking study of azo compounds of 4,6-diacetylresorcinol” at the International Conference on Chemical and Environmental Research (ICCER-2017), Organized by PG & Research Department Of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, Tamilnadu on 7<sup>th</sup> January 2017.
8. Presented a research Paper entitled “In silico docking comparative study of rule of five and rule of three on the azo compounds of 4,6- diacetylresorcinol” at the 4<sup>th</sup> International Conference on Chemical and Environmental Research (ICCER-2018), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, Tamilnadu on 19<sup>th</sup> December 2018.
9. Presented a research Paper entitled “Crystal structure of 4H-pyran derivative: 2-amino-4-(2,5-dimethoxyphenyl) 6-methoxy-4H-pyran-3,5-dicarbonitrile” at 5<sup>th</sup> the International Conference on Chemical and Environmental Research (ICCER-2020), Organized by PG & Research Department Of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, Tamilnadu on 8<sup>th</sup> January 2020.
10. Presented a research Paper entitled “Crystal structure, DFT and Hirshfeld surface analysis of 2-amino-4-(4-chlorophenyl)-7-hydroxy-4H-benzo[1,2-b]pyran-3-carbonitrile” at “6<sup>th</sup> International conference on chemical and environmental research (ICCER - 2020)” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 12-11- 2020
11. Presented a research Paper entitled “In silico ADME properties of polyphenols of corn silk” at “7<sup>th</sup> International conference on Innovations in chemical and environmental research (ICICER - 2022)” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 25-05- 2022.

### **Seminars, Conferences, Symposia and Workshop Attended:**

1. UGC sponsored National Symposium on recent trends in heterocyclic chemistry (NSRTHC- 2004) Conducted by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, Tamilnadu, during 24<sup>th</sup> and 25<sup>th</sup> September 2004.
2. TANSCHC and UGC sponsored Three-day workshop on “Curriculum Development and Evaluation” Organized by UGC – Academic Staff College, Bharathidasan University, conducted at Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, during 2<sup>nd</sup> and 4<sup>th</sup> March 2006.
3. Attended UGC sponsored State Level Seminar on “Emerging Trends in Chemistry(SLSETC 2006)” held on March 9, 2006, at Jamal Mohamed College, Tiruchirappalli, Tamilnadu.
4. Attended a seminar on “Advanced Topics in chemistry” during 13 and 14, March, 2007, at PG& Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamilnadu.
5. Attended a National Conference on Recent Trends in Chemistry-2007 Organized by PG & Research Department of Chemistry, Bishop Heber College, Tiruchirappalli-17 on 12 October, 2007
6. Attended a seminar on “Modern Techniques in Chemistry” during 5<sup>th</sup> and 6<sup>th</sup> March, 2008, at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli
7. Attended a national conference on emerging trends in chemical research (NCETCR-2008) conducted by Annamalai University on 17 & 18 October, 2008.
8. Attended a “workshop on synthetic and structural chemistry” conducted by Annamalai University on 21 and 22 March , 2009.
9. Attended UGC sponsored State Level Seminar on “Frontier Studies in Chemistry” held on February 9 and 10, 2010 at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamilnadu.
10. Participated NAAC sponsored National Seminar on “Quality Enhancement in Teaching, Research and Extension in Higher Education Institutions -Prospects and Problems” organized by IQAC, Jamal Mohamed College, Tiruchirappalli -20, during 15<sup>th</sup> & 16<sup>th</sup> April 2010.
11. Attended a “workshop on advances in molecular science (WAMS-2010) organized by PRIST University, Thanjavur, on 16<sup>th</sup> and 17<sup>th</sup> July 2010.
12. Participated UGC sponsored State Level Seminar on “Recent Trends in Chemical Research (RTCR-2010)” conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 during 5<sup>th</sup> and 6<sup>th</sup> October 2010.
13. Attended the Seminar on “Creating Competitiveness to excel in higher education – a TQM approach” organized by IQAC, Jamal Mohamed College, Trichy, on 8<sup>th</sup> December 2010.
14. Attended the seminar on “Recent Developments in Chemistry” held on 29<sup>th</sup> August 2011 at School of Chemistry, Bharathidasan University, Tiruchirappalli-24.
15. Participated in the State Level Seminar on “New Vistas in Chemistry” (NVC-2012) organized by Department of Chemistry, Jamal Mohamed College, Trichy on the 4<sup>th</sup> & 5<sup>th</sup> January 2012.
16. Participated “National Conference on Current Trend in Chemistry Research” (NCTCR- 2013) conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20, during 27<sup>th</sup> & 28<sup>th</sup> February 2013.

17. Participated “international conference on chemical & environmental research (ICCER- 2014) conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli-20, during 11th and 12th March 2014.
18. Participated “state level workshop on structural bioinformatics and protein 3D structure visualization” conducted by PG & Research Department of Biotechnology and Bioinformatics, Bishop Heber College, Tiruchirappalli -17, during 28th July 2014.
19. Participated two-day national conference on “Current Scenario in material Chemistry (CSIMC- 2015)” conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 during 9<sup>th</sup> and 10<sup>th</sup> February 2015.
20. Participated “international conference on chemical & environmental research (ICCER- 2015) conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli-20 on 17th March 2015.
21. Participated “a one day inter collegiate workshop on E- content development for teaching – learning” jointly organized by the internal quality assurance cell and JMC alumni association (Singapore chapter) Jamal Mohamed College, Tiruchirappalli -20 on 22nd December 2015.
22. Participated “International conference on “Chemical and Environmental Research” (ICCER- 2017) conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 on 7<sup>th</sup> January 2017.
22. Participated “National conference on “Recent advances in chemistry Research and its applications (NCRACRIA-17)” conducted by the PG & Research Department of Chemistry, Joseph’s College, Tiruchirappalli -2 on 19<sup>th</sup> January 2017.
23. Attended national conference on “Recent Developments in Chemistry (NCRDC-2018)” conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 on 20<sup>th</sup> January 2018.
24. Attended one day workshop on “Writing winnable project proposals” organized by IQAC, Jamal Mohamed College, Trichy, on 23<sup>rd</sup> June 2018.
25. Attended a seminar on “The MHRD Draft proposal for Higher Education Commission of India Act 2018” conducted by Aided College Teachers Association at Jamal Mohamed College, Tiruchirappalli -20 on 14<sup>th</sup> July 2018.
26. Participated “4<sup>th</sup> International conference on “Chemical and Environmental Research” (ICCER- 2018) conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 on 19<sup>th</sup> December 2018.
27. Participated Two-day workshop on Professional Development for academic leadership in curriculum design” organised by curriculum development Cell, Jamal Mohamed College, Tiruchirappalli -20 during 18<sup>th</sup> and 19<sup>th</sup> January 2019.
28. Participated “staff enrichment programme on ownership culture” organised by the Internal Quality Assurance Cell, Jamal Mohamed College, Tiruchirappalli -20 on 14<sup>th</sup> June 2019.
29. Participated workshop on “Quality Enhancement of Research: New Paradigm in Trans – Disciplinary and IPR” organised by the Internal Quality Assurance Cell and Innovation Incubation Centre, Jamal Mohamed College, Tiruchirappalli -20 on 6<sup>th</sup> September 2019.

30. Participated in the “Orientation Programme on Preparing course outcomes in the curriculum design” organised by the Curriculum Development Cell, Jamal Mohamed College, Tiruchirappalli -20 on 3<sup>rd</sup> January 2020.
31. Participated “5<sup>th</sup> International conference on “Chemical and Environmental Research” (ICCER-2020) conducted by the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli -20 on 8<sup>th</sup> January 2020.
32. Participated “Orientation Programme on MOOC’S and e-Learning” conducted by Department of Library, Jamal Mohamed College, Tiruchirappalli -20 on 29<sup>th</sup> January 2020.
33. Participated “International conference on “Emerging Trends in Materials for Energy and Biological Applications (ICEMEBA-2020) conducted by the Department of Science and Humanities, M. Kumarasamy College of Engineering, Karur, on 7<sup>th</sup> March, 2020.
34. Participated “Moodle Learning Management System training” conducted by Vidyavardhini College of Engineering and Technology and Spoken Tutorial Project, IIT Bombay on 01-03-20
35. Participated “Systematic literature review S.R.A.M. Model” conducted by S. R. Luthra rat, Gujarat Institute of Management, Surat from 23-04-20 to 26-04-20.
36. Participated “A virtual visit to the home of electrons” conducted by Department of Chemistry, SRM Institute of Science and Technology, Ramapuram Campus, Chennai on 02-05-20.
37. Participated “Cyber Security During Covid-19” conducted by Smt. K. G. Mittal College of Arts and Commerce [IQAC Committee] & Indian Accounting Association-Thane Branch on 03-05-20
38. Participated “Chemistry Behind MRI Contrast Agents” conducted by Department of Chemistry, Cauvery College for Women (Autonomous), Trichy – 18 on 04-05-20.
39. Participated “National Webinar on “Use of Elsevier Tools in Research Workflow” Conducted by National Webinar on “Use of Elsevier Tools in Research Workflow on 05-05-20
40. Participated “Nature and COVID crisis: A 21<sup>st</sup> century calamity” conducted by Guru Kashi University- India and Georgia state University- Atlanta on 05-05-20
41. Participated “Look beyond what you can with IR imaging” conducted by PerkinElmer, Inc. India, South Asia on 08-05-20
42. Participated “Scope of biotechnology in food industries” conducted by Department of Bio technology, Arunai Engineering College, Thiruvannamalai on 11-05-20
43. Participated “Opportunities for interdisciplinary research in utilization of solar thermal energy” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur on 13-05-20
44. Participated “Future of Entrepreneurship and Employment Opportunities” conducted by Department of Management Studies, Nehru Institute of Technology, Coimbatore from 13- 05-20 to 15-05-2020.
45. Participated “Accelerate your Analysis with Hyphenation Techniques” conducted by PerkinElmer, Inc. India, South Asia on 14-05-20.

46. Participated “International webinar on Human Trafficking and COVID-19” conducted by School of law, Sathyabama Institute of Science and Technology, Chennai and International Justice Mission on 14-05-20.
47. Participated “Tax planning for salaried employees” conducted by IQAC, Shri Shankarlal Sundarbai Shasun Jain College for Women and Shasun alliance with industries, Chennai. on 14-05-20.
48. Participated “Survival games played by bacteria” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur on 14-05-20.
49. Participated “A systematic approach towards molecular docking and drug design” conducted by Department of Chemistry, SRM Institute of Science and Technology, Ramapuram Campus, Chennai on 15-05-20.
50. Participated “International E-Conference on “Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World” conducted by Government Vidarbha Institute of Science & Humanities, Amravati, from 15-05-20 to 17-05-20
51. Participated “Stimuli-responsive smart fluorescent materials” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 15-05-20.
52. Participated “Modern teaching techniques” conducted by Dr. Zakir Husain college, Ilayangudi and Oneyes Technologies, chennai, on 17-05-20.
53. Participated “Foods, genes and diseases” conducted by Kongunadu Arts and Science College, Coimbatore, on 18-05-20.
54. Participated “Online FDP on My life, my pride, my career” conducted by Department of Accounting Finance, Patrician college of arts and science, Chennai and Audacious dreams foundation., on 18-05-20.
55. Participated “The Role of energy storage in building sustainable Future” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 18-05-20
56. Participated “Choices and current trends in drug product development” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 19-05-20
57. Participated “Essential oils- Bioperfumes” conducted by Kongunadu Arts and Science College, Coimbatore, on 21-05-20
58. Participated “Infectious Diseases – Immune response to infection” conducted by Kongunadu Arts and Science College, Coimbatore, on 22-05-20
59. Participated “Fundamental concepts in physical chemistry and online help” conducted by Department of Chemistry, SRM Institute of Science and Technology, Ramapuram Campus, Chennai, on 22-05-20
60. Participated “Life with natural products” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 22-05-20

61. Participated “Futuristic trends in nanoscience and technology” conducted by Kongunadu Arts and Science College, Coimbatore, on 23-05-20.
62. Participated “International level web conference on New pathways in Chemistry” conducted by Chembur Trombay Education Society’s N. G. Acharya & D. K. Marathe College of Arts, Science & Commerce, Chembur, Mumbai, from 23-05-20 to 24-05-20.
63. Participated “Antifungal Drug Resistance and Management” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 23-05-20
64. Participated “Vitamin D & its Role on Prevention of COVID 19” conducted by Department of Nutrition & Dietetics, PSG College of Arts and Science, Coimbatore, on 25-05-20
65. Participated “Gold nanoparticles-A milestone in cancer therapy” conducted by Kongunadu Arts and Science College, Coimbatore, on 26-05-20
66. Participated “Generation of solar cells” conducted by Kongunadu Arts and Science College, Coimbatore, on 26-05-20
67. Participated “Controlled release formulations” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 26-05-20
68. Participated “Trends and scopes of metal complexes as therapeutic agents” conducted by Kongunadu Arts and Science College, Coimbatore, on 27-05-20
69. Participated “Silicate coated upconverting nanoparticles for optical and diagnosis applications” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 27-05-20.
70. Participated “Emerging trends in interdisciplinary researches” conducted by Kongunadu Arts and Science College, Coimbatore, on 28-05-20
71. Participated “Analytical separation techniques” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 28-05-20
72. Participated “Metal complexes to metal nanoparticles for efficient catalysis” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 28-05-20
73. Participated “Gene and Drug Delivery Systems for Therapeutic Applications” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 29-05-20
74. Participated “Emerging opportunities in bioengineering and metal nanotechnology” conducted by School of chemical and Biotechnology, SASTRA Deemed to be University, Thanjavur, on 30-05-20.
75. Participated “Biobased polymers and their industrial applications” conducted by Department of Science and Humanities, SRM TRP Engineering College, Trichy, on 03-06-20
76. Participated “21st Century: Emerging technologies in chemistry” conducted by Dr. Zakir Husain college, Ilayangudi, on 08-06-20
77. Participated “Fast scanning Tri-range IR system with compact TGIR hyphenation” conducted by PerkinElmer, Inc. India, South Asia, on 11-06-20

78. Participated “Importance of spectroscopy in NET examination” conducted by Department of Chemistry and Physics, Government Arts College (A), Salem, on 12-06-20
79. Participated “One day online faculty development programme- Funding schemes and patenting scientific innovations” conducted by IQAC, PG and Research Department of Chemistry, Government Arts College, Trichy., on 13-06-20
80. Participated “International Faculty Development Program on Advanced Materials for Sustainable Development” conducted by Department of Science and Humanities, Dr. N.G.P. Institute of Technology, Coimbatore., from 15-06-20 to 19-06-20
81. Participated “Strategies to identify medicinally potent compounds from plants” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 17-06-20
82. Participated “Solution to pollution: Intellectual Remedies” conducted by Internal Quality Assurance Cell and Department of Chemistry, Loganatha Narayanasamy Government College, Ponneri., on 17-06-20.
83. Participated “Future of education” conducted by Skycampus, ICT Academy, on 18-06-20.
84. Participated “Photofunctional materials: Tuneable properties through surface anchoring” conducted by Chemistry Division, School of Advanced Sciences, VIT Chennai, on 20-06-20.
85. Participated “A live session on soil nutrients-its needs and importance” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 22-06-20.
86. Participated “One Week Faculty Development Programme On Advancements in Science and its Applications in Engineering” conducted by Department of Science & Humanities, Hyderabad Institute of Technology & Management, Hyderabad, Telangana, from 22-06-20 to 26-06-20.
87. Participated “Two-day faculty development program on digital class room” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, from 23-06-20 to 24-06-20.
88. Participated “How to improve teaching skills” conducted by MLR Institute of technology, on 24-06-20
89. Participated “Publication metrics: h-index, impact factor and citation databases” conducted by Department of Library, Mookambigai college of engineering, Pudukkottai., on 26-06-20
90. Participated “Quantum mechanics in understanding biological processes and drug discovery” conducted by LLB School in association with Schrodinger, on 27-06-20
91. Participated “Elemental carbon for new generation devices” conducted by Department of Science and Humanities, SRM TRP Engineering College, Trichy, on 29-06-20
92. Participated “International webinar on Photonics crystal fiber and its applications” conducted by Terna Engineering College, Navi Mumbai and Department of Electronics & Telecommunication, Electronics Engineering and Optiwave Canada, on 29-06-20
93. Participated “A simple perspective of Glycosciences” conducted by PG and Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli, on 30-06-20.

94. Participated “Faculty development programme on E-Content Development” conducted by Internal Quality Assurance Cell, Jamal Mohamed College, Tiruchirappalli, from 30-06-20 to 04-07-20
95. Participated “Methods and mechanism of CO<sub>2</sub> and H<sub>2</sub> adsorption in metal-organic frameworks” conducted by Chennai Institute of Technology, Chennai, from 01-07-20.
96. Participated “Tissue engineering and organ printing” conducted by Chennai Institute of Technology, Chennai, on 03-07-20
97. Participated “Covid 19- A mysterious infection-Limited evidence, unanswerable question” conducted by PG Department of Chemistry, Hajee Karutha Rowther Howdia College, Theni, on 04-07-20
98. Participated “Ailment therapy: Medicinal & traditional” conducted by Department of Chemistry, Dr. Zakir Husain College, Ilayangudi - 630 702, Sivagangai, on 05-07-20.
99. Participated “Chemistry & biology of virus, bacteria & parasites” conducted by Department of Chemistry, Dr. Zakir Husain College, Ilayangudi - 630 702, Sivagangai, on 19-07-20
100. Participated “Nanocrystalline materials for application in electrochemical power systems” conducted by Department of science and humanities, Fatima Michael College of Engineering and Technology, Madurai, on 21-07-20.
101. Participated “Intellectual Property Rights” conducted by Intellectual Property Rights Cell and PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, from 18-07-20 to 19-07-20.
102. Participated “Online faculty development programme on spectroscopic techniques” conducted by PG and Research Department of Physics, Jamal Mohamed College, Tiruchirappalli, from 03-08-20 to 05-08-20
103. Participated “National education policy-2020” conducted by Internal Quality Assurance Cell, Jamal Mohamed College, Tiruchirappalli, on 08-08-20
104. Participated “6th international conference on chemical and environmental research (ICCER- 2020)” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 12-11-2020
105. Participated “Industry -Institute Interaction Webinar on Optical and Electrical Modelling Software for Semiconductor Devices (OEMSSD - 2020)” conducted by Department of Chemistry, Bharathiar University, Coimbatore, on 15-12-2020
106. Participated “intellectual property rights with focus on patents & copy rights” conducted by Intellectual Property Rights Cell, Jamal Mohamed College, Tiruchirappalli, on 21-01-2021
107. Participated “Spectroscopical Studies in structural Analysis -Modern era Applications” conducted by Hyderabad Institute of Technology and Management (Approved By AICTE, Affiliated to JNTUH) Gowdavelly (Village), Medchal (Mandal), Ranga Reddy (Dist), Hyderabad, Telangana, on 25-01-21 to 29-01-2021.

108. Participated “One day online national workshop entitled ICT Tools for chemistry teachers” conducted by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education, on 22-02-2021
109. Participated “Drug delivery” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 06-07-2021
110. Participated “Implementation of academic bank of credits” conducted by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi, on 10-07-2021
111. Participated “Iron based MRI contrast agents” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 17-07-2021
112. Participated “Emerging Materials for Solar Hydrogen Production” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 27-07-2021.
113. Participated “Climate Change” conducted by UGC-HRDC-Bharathidasan University, Tiruchirappalli, on 11-08-2021
114. Participated “Nano- Big miracles with small particles” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 13-08-2021.
115. Participated “Teacher's e-Kit: A Four quadrant approach for development of OERs for higher education” conducted by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi, on 09-09-2021
116. Participated “National Webinar on “Achieving Excellence in Chemistry in India in 21st Century : Challenges and Opportunities” conducted by Department of Chemistry, Zakir Husain Delhi College, University of Delhi, on 18-01-2022.
117. Participated “National level hands on training in molecular docking using AutoDock” conducted by PG & Research Department of Biotechnology & Microbiology, National College (Autonomous), Tiruchirappalli, Tamilnadu, on 29-01-2022
118. Participated “FDP on Teaching and learning” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, from 24-01-22 to 29-01-2022.
119. Participated “International Seminar on "Emerging methodologies in biopolymer sciences" (ISEMBS - 2022)” conducted by Department of Chemistry, Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar, Thane, Maharashtra on 12-02-2022.
120. Participated “Experiential Learning as Envisaged in NEP-2020” conducted by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education on 19-07-2022
121. Participated “One day faculty development programme on Prevalence of fluoride and its optical detection” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on 24-01-2023.
122. Participated the Faculty Development Programme on “Preparation of winning research proposals” conducted by PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on 08-02-2023.

### Organisation of seminar/ conference/webinar

1. Organized 4<sup>th</sup> International Conference on Chemical and Environmental Research (ICCER-2018) in PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 19<sup>th</sup> December 2018.
2. Organized JMC CHEM webinar series 2021-2022 on “Nano-Big miracles with small particles” in PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 13<sup>th</sup> August 2021.
3. Organized Orientation Programme on Effective Teaching of Moral and Deeniyath Education (2022-2023) on 17<sup>th</sup> August-2022 and 18<sup>th</sup> August-2022 in Centre for Human Excellence, Jamal Mohamed College, Tiruchirappalli.
4. Organized Motivational Lecture on Life Skill Development Training Programme (2022-2023) from 29<sup>th</sup>-30<sup>th</sup> September 2022 in Centre for Human Excellence, Jamal Mohamed College, Tiruchirappalli.
5. Organized One-Day Orientation Programme on “Gender and Socialisation” on 21.12.2022 in Department of Women’s Studies, Bharathidasan University, Tiruchirappalli-21.
6. Organised Moral Essay writing competition 2023 on “ஈதலும் இசைபட வாழ் தலும் ” in Centre for Human Excellence, Jamal Mohamed College, Tiruchirappalli.

### Resource person

1. Acted as a resource person in the one-week certificate programme on spectroscopic and chromatographic techniques organized by Jamal Instrumentation Centre, Jamal Mohamed College, Tiruchirappalli from 9<sup>th</sup> march 2023 to 13<sup>th</sup> march 2023.

### MOOC's NPTEL courses completed

1. Organometallic Chemistry
2. Symmetry and Group Theory
3. Pericyclic Reactions and Organic Photochemistry

### YouTube Chemistry Videos

1. Easy way to draw and remember the structure of chlorophyll  
<https://www.youtube.com/shorts/HMb6k-goeXI>
2. IUPAC nomenclature of organic compounds  
<https://www.youtube.com/watch?v=jGEnl1wyA0c&t=91s>
3. Electron Spin Resonance Spectrum of Hydrogen atom  
<https://www.youtube.com/watch?v=ZelOFFkGyu0&t=27s>
4. Electron Spin Resonance Spectrum of Methyl radical.  
[https://www.youtube.com/watch?v=X\\_Y2FeRNP5U&t=61s](https://www.youtube.com/watch?v=X_Y2FeRNP5U&t=61s)
5. Hybridization and structure of Tetracarbonylnickel(0) complex  
[https://www.youtube.com/watch?v=MCKo2aQX\\_J4&t=1s](https://www.youtube.com/watch?v=MCKo2aQX_J4&t=1s)
6. Bridged structure of octacarbonyldicobalt  
<https://www.youtube.com/watch?v=T5sK81r1Cj0&t=72s>
7. Electron spin resonance spectrum of  $Mn^{2+}$   $d^5$  system in weak field complex  
[https://www.youtube.com/watch?v=mr\\_HGYeWNMI&t=4s](https://www.youtube.com/watch?v=mr_HGYeWNMI&t=4s)
8. Photoelectron spectrum of hydrogen molecule  
<https://www.youtube.com/watch?v=WgCpOh1QInc&t=123s>
9. Structure of diiron nonacarbonyl complex  $Fe_2(CO)_9$   
<https://www.youtube.com/watch?v=9ouryuWi9zE>

10. s-p mixing in nitrogen molecule  
<https://www.youtube.com/watch?v=QYOCiGTuSS4&t=71s>
11. Photoelectron spectrum of nitrogen molecule  
<https://www.youtube.com/watch?v= oqrZTPQU7U&t=155s>
12.  $^{19}\text{F}$  NMR spectrum of  $\text{PF}_5$   
<https://www.youtube.com/watch?v=pNumvcZO8IQ>
13.  $^1\text{H}$  NMR Spectrum of difluorophosphine,  $\text{PF}_2\text{H}$   
<https://www.youtube.com/watch?v=AbrMPqOm-wc>
14.  $^1\text{H}$  NMR Spectrum of difluorophosphine oxide, sulphide and selenide  
<https://www.youtube.com/watch?v=HsOQ-TNJG8o>
15.  $\text{P}_4\text{S}_3$  structure prediction by  $^{31}\text{P}$  NMR Spectroscopy  
<https://www.youtube.com/watch?v=XTyPaHnk72E>
16. Photoelectron spectrum of oxygen molecule  
<https://www.youtube.com/watch?v=yGK7Pu3NAxw&t=164s>
17. Photoelectron Spectrum of  $\text{HCl}$  molecule  
<https://www.youtube.com/watch?v=6QfGNGXLs6Y>
18. Photoelectron spectrum of carbon monoxide  
<https://www.youtube.com/watch?v=rojseTctdZA>
19.  $^1\text{H}$  NMR spectrum of 1,1-dichlorodisilane  
<https://www.youtube.com/watch?v=1Xdz5khWt-0>

#### Membership in Academic Bodies

- a. Member, **Board of Studies** of Chemistry Department, Jamal Mohamed College (Autonomous), Tiruchirappalli
- b. Member, Board of Studies of **Gender Studies**, Jamal Mohamed College (Autonomous), Tiruchirappalli
- c. Core Member of **Moral Education**, Centre for Human Excellence, Jamal Mohamed College (Autonomous), Tiruchirappalli
- d. Member of **Curriculum Development**, PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli.
- e. Examiner, UG Valuation Board, Bharathidasan University, Tiruchirappalli
- f. Examiner and question paper scrutiny board member- UG & PG Board, Periyar University, Salem,
- g. Examiner, UG Valuation Board, Many Autonomous Colleges.

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