



JAMAL MOHAMED COLLEGE

(Autonomous)

Accredited (3rd Cycle) with 'A' Grade by NAAC
DBT Star College Scheme & DST-FIST Funded
(Affiliated to Bharathidasan University)
Tiruchirappalli - 620 020, Tamilnadu.



PROFILE

PG AND RESEARCH DEPARTMENT OF CHEMISTRY

1. Name : **Dr. N. MUJAFARKANI**

2. Designation : Assistant Professor

3. Qualification : M.Sc., M.Phil., PGDCA., Ph.D.

4. Date of Birth : 23.04.1985

5. Address:

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6. Educational Qualifications:

| S. No. | Examination Passed | University / College | Year of Passing |
|--------|---------------------------|---|-----------------|
| 1. | B.Sc. (Chemistry) | M.S.S. Wakf Board College, (Madurai Kamaraj University), Madurai | 2005 |
| 2. | M.Sc. (Chemistry) | Jamal Mohamed College (Autonomous), (Bharathidasan University), Tiruchirappalli | 2007 |
| 3. | M.Phil. (Chemistry) | Jamal Mohamed College (Autonomous), (Bharathidasan University), Tiruchirappalli | 2008 |
| 4. | PGDCA | Bharathiar University, Coimbatore | 2011 |
| 5. | Ph.D. (Polymer Chemistry) | Jamal Mohamed College (Autonomous), (Bharathidasan University), Tiruchirappalli | 2017 |

7. Date of Joining : 18-06-2008

Teaching Experience : Undergraduate : 15 Years
Postgraduate : 15 Years
M.Phil. : 05 Years

8. Areas of Specialization : Polymer Chemistry, Material Science and Electro Chemistry**9. Languages known : Tamil and English [Arabic-Reading]****10. Subjects being handled:**

Under Graduate / Postgraduate : Inorganic Chemistry
Organic Chemistry
Organic and Physical Spectroscopy
Organometallic Chemistry
Polymer Chemistry
Nano and Green Chemistry
Instrumentation Techniques
Computer Applications in Chemistry

11. a) Details of Publications:

1. Journal of the American Ceramic Society, 94 (5), 1627–1633, 2011. [IF-4.186]
Title: Photoluminescence Efficiencies of Nanocrystalline versus Bulk $\text{Y}_2\text{O}_3\text{:Eu}$ Phosphor – Revisited.
2. Journal of the American Ceramic Society, 94 (8), 2696–2697, 2011. [IF-4.186]
Title: Reply to the Comment on “Photoluminescence efficiencies of nanocrystalline vs bulk $\text{Y}_2\text{O}_3\text{:Eu}$ phosphor – Revisited”.

3. Applied Organometallic Chemistry, 28(10), 773-784, 2014. **[IF-4.072]**
Title: Polymer-supported metal complexes as antibacterial agents: synthesis, characterization and thermal degradation kinetics.
4. Bioinorganic Chemistry and Applications, 2014, Article ID 764085, DOI./10.1155/2014/764085.**[IF-4.13]**
Title: Antimicrobial Applications of Transition Metal Complexes of Benzothiazole Based Terpolymer: Synthesis, Characterization, and Effect on Bacterial and Fungal Strains.
5. International Journal of Pharmaceutical Chemistry, 5(10), 359-366, 2015. **[IF-0.498]**
Title: Biological Investigations of Novel Terpolymer Ligand and Its Polychelates
6. Material Today: Proceedings, 47, 1920-1928, 2021 **(IF-1.46)**
Title: Thermal degradation investigations of newly synthesized terpolymeric polychelates

11. (b) Books / Chapters Publications:

Grafted Biopolymers as Corrosion Inhibitors: Safety, Sustainability, and Efficiency
 Chapter: Biopolymers Vs. Grafted Biopolymers: Challenges and Opportunities
 Publisher: WILEY VCH, New Jersey, USA (978-1-119-88136-0)

12. (a) Details of Papers Presentation on Conferences / Seminars / Workshops:

1. Presented a Paper in the **“National symposium on Frontier areas in Chemistry”** Sponsored by UGC, DST, DRDO & CSIR, organized by The American College, Madurai on 10th and 11th January 2008.
Title: A Study of inhibitive influence of N-Nitroso-3-methyl-2,6-diphenylpiperidin-4-one on the corrosion of mild steel in 1M HCl medium.
2. Presented a paper in the **“International Conference on Recent Trends in Materials and Characterization”**, organized by National Institute of Technology Karnataka, Surathkal, Mangalore on 14th and 15th February 2010.
Title: Hydrothermal Synthesis of Phosphor Materials.
3. Presented a Paper in the National Conference on “Recent Trends in Green Synthesis” **(RTGS-2011)** organized by the Department of Industrial Chemistry, School of Chemistry, Alagappa University, Karaikudi on 5th and 6th August 2011.
[Awarded as a best oral presentation]
Title: An Eco-Friendly Synthesis, Characterization and Chelation Ion-Exchange Properties of a Terpolymer Resin.

4. Presented a Paper in the UGC Sponsored National Seminar on **(POLYCAP'11)** "POLYMERS: Synthesis, Characterization and Applications" organized by the Department of Physics, Mannar Thirumalai Naicker College, Madurai on 21st and 22nd October 2011. **[Awarded as a best oral presentation]**
Title: Synthesis, Characterization and Chelation Ion-Exchange Properties of a Terpolymer Resin.
5. Presented a Paper in the State Level Seminar on **"Emerging Advancements in Biosciences"** jointly organized by the Department of Microbiology & Biotechnology, Jamal Mohamed College (Autonomous), Tiruchirappalli on 17th March, 2012.
Title: Antimicrobial Studies of a Novel Terpolymer Resin
6. Presented a Paper in the State Level Seminar on **"Current Research in Chemistry and Bio-Chemistry"** conducted by Department of Chemistry, AVVM Sri Pushpam College (Autonomous), Thanjavur held on 28th August, 2012.
Title: Cation Exchange Properties of a Terpolymer Resin
7. Presented a Paper in National Conference on **"New Vistas and Challenges in Chemistry"** organized by Sathyabama University, Chennai, sponsored with Department of Science and Technology (SERB), New Delhi on 23rd-25th January 2013.
Title: Cation Exchange Properties of a Novel Terpolymer Resin
8. Presented a Paper in National Conference on Current Trend in Chemistry Research **(NCTCR-2013)**, Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 27th & 28th February 2013.
Title: Studies on Chelation Ion-Exchange Properties of a Novel Terpolymer Resin
9. Presented a Paper in National Conference on Current Trend in Chemistry Research **(NCTCR-2013)**, Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 27th & 28th February 2013.
Title: Synthesis, Characterization and Application of Terpolymer Resin
10. Presented a Paper in an International Conference on Recent Advances in Textiles and Electrochemical sciences **(RATES-2013)** organized by Dept. of Industrial Chemistry, School of Chemical sciences, Alagappa University, Karaikudi on 21st - 23rd March 2013.
Title: Metal Ion Binding Properties of a Novel Terpolymer
11. Presented a Paper in an International Conference on Emerging Trends in Chemical Sciences **(IETC-2013)**, Organized by Advances Chemical Sciences, VIT University,

Vellore during 5th - 7th December 2013.

Title: Synthesis, Characterization and Microbial Activity of a Novel Terpolymer and Its Metal Complexes

12. Presented a Paper in an International Conference on Chemical and Environmental Research (**ICCER-2014**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu on 11th and 12th March 2014.
Title: Ion Exchange Studies of Novel Terpolymer Resin
13. Presented a Paper in the “Advancement in Materials Science” (**AMS-2014**) Sponsored by TEQIP II, organized by Department of Chemistry, Coimbatore Institute of Technology, Coimbatore on 26th and 27th September 2014.
Title: Studies on the removal of metal ions by the influence of chelating terpolymer resin
14. Presented a Paper in an International Conference on Chemical and Environmental Research (**ICCER-2015**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 17th December 2015.
Title: Synthesis, Structural and Metal Ion Uptake Studies of Chelating Novel Terpolymer Resin.
15. Presented a Paper in First Symposium on “**Advanced Functional Materials (FUNMAT-2016)**” organized by Functional Materials Division, CSIR-Central Electrochemical Research Institute, Karaikudi, during 26th-28th May 2016.
Title: Synthesis, Spectral and Thermal degradation studies of Novel Terpolymer and its Transition Metal Complexes
16. Presented a Paper in an International Conference on Chemical and Environmental Research (**ICCER-2017**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 7th January 2017.
Title: Synthesis, Characterization and Antimicrobial Screening of Newly Synthesized Terpolymer and Its Metal Complexes
17. Presented a Paper in National Conference on Recent Developments in Chemistry (**NCRDC-2018**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 20th January 2018.
Title: Studies on the Metal Ion uptake properties of *p*-Phenylenediamine based Terpolymer Resin

18. Presented a Paper in an International Conference on Synthetic Materials for Science and Engineering Applications (**SMSEA-2018**), Organized by Department of Science and Humanities, M.Kumarasamy College of Engineering, Karur, Tamilnadu on 11th April 2018.
Title: Synthesis, Characterization and Antimicrobial Screening of Newly Synthesized Terpolymer and Its Metal Complexes
19. Presented a Paper in National Conference on “**Advances in Applied Chemistry**”, Department of Chemistry, St. Joseph’s College (Autonomous), Tiruchirappalli-620002, Tamilnadu on 14-12-2018
Title: Novel Terpolymer ligand and its polychelates, Synthesis Characterization and Biological Evaluation
20. Presented a Paper in an International Conference on “**Recent Trends in Chemistry**”, Department of Chemistry, Dr. R.K. Shanmugam College of Arts and Science, Kallakurichi Tamilnadu on 10-01-2019
Title: Antimicrobial Applications of *p*-Semidine Based Terpolymer and Its Polychelates
21. Presented a Paper in an International Conference on “**Recent Trends in Bioinorganic Chemistry**”, Department of Chemistry, Loyola College (Autonomous), Chennai- 600 034. Tamilnadu on 18-02-2019.
Title: Preparation, Structural Characterization, Antibacterial and Antifungal Evaluation of 2-Aminopyrimidine Based Terpolymeric ligand and its Polychelates
22. Presented a Paper in 4th International Conference on Chemical and Environmental Research (**ICCER-2018**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 19-12-2018.
Title: *p*-Semidine-*p*-Nitroaniline-Formaldehyde Terpolymer Resin and its Chelating Ion-Exchange Properties
23. Presented a Paper in 4th International Conference on Chemical and Environmental Research (**ICCER-2018**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 19-12-2018.
Title: Polychelates of Terpolymer: Preparation, Characterisation and Antimicrobial Activity.
24. Presented a Paper in National Seminar on Recent Trends in Biological Nanochemistry (**RTBNC-2020**), Department of Chemistry, Dr.Zakir Hussain College, Ilayanudi-630702 Tamilnadu on 22-01-2020 to 23-01-2020.
Title: Antibacterial and Fungal Screening of Phenylenediamine Based Terpolymeric Ligand and Its Metal Complex.

25. Presented a Paper in One Day International Seminar on **Emerging Trends in Chemistry and Energy Science**, Department of Chemistry, Saraswathi Narayanan College, Madurai-625022, Tamilnadu on 07-02-2020.
Title: Removal of Heavy Metal Ions using a Chelating Terpolymer Resin Derived from *p*-Semidine, *p*-Phenylenediamine and Formaldehyde.
26. Presented a Paper in 5th International Conference on Chemical and Environmental Research (**ICCER-2020**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 08-01-2020.
Title: Antimicrobial Evaluation of Newly Synthesized Terpolymeric Ligand and Its Polychelate.
27. Presented a Paper in 6th International Conference on Chemical and Environmental Research (**ICCER-2020**), Organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 12th November 2020.
Title: 0.1 N HCl by Eco-friendly inhibitor *Artabotrys Hexapetalus*
28. Presented a Paper in the “**Virtual International Conference on Multidisciplinary Aspects in Chemistry** (ICMAC-2022)”, organized by the Department of Chemistry, Sri Ramakrishna College of Arts & Science, Coimbatore, Tamilnadu, on 20th & 21st January 2021.
Title: Synthesis, Structural Characterization and Biological Investigations of N-Phenyl-*p*-Phenylenediamine Based Terpolymer and Its Polychelate.
29. Presented a Paper in the Two days International Virtual Conference on “**Recent Trends in Functional Materials**”, organized by the Department of Chemistry Selvam Arts & Science College, Namakkal on 23rd & 24th March 2021.
Title: Kinetics of Thermal Degradation Analysis of *p*-Phenylenediamine Based Terpolymeric Ligand and Its Polychelates.
30. Presented a Paper in an International Conference on **Recent Advancements in Therapeutics**, organized by the Department of Biochemistry, Shrimati Indira Gandhi College, Tiruchirappalli, 17th August 2022.
Title: Evaluation of Antimicrobial Studies of Phenylhydrazine Based Terpolymeric Polychelate
31. Presented a Paper in an International Conference on **Future Prospects in Chemical Research**, organized by the PG and Research Department of Chemistry, Seethalakshmi Ramaswami College, Tiruchirappalli, on 21st December 2022 and 22nd December 2022.

Title: Metal Sorption Studies of Newly Synthesised Terpolymer Resin Derived from N-Phenyl-P-Phenylenediamine and Semicarbazide with Formaldehyde

32. Presented a Paper in an International Conference on **Recent Innovations in Materials Science and Spectroscopy (ICRIMS-2023)**, organized by Postgraduate and Research Department of Physics, Jamal Mohamed College (Autonomous), Tiruchirappalli-620020 in association with Indian Spectrophysics Association (ISPA), Chennai, on 10th January 2023.

Title: Synthesis, Spectral Characterisation and Antimicrobial Investigations of (8-Hydroxyquinoline-2-Aminopyridine-Formaldehyde) Terpolymer and Its Polychelate

33. Presented a Paper in an International Conference on **Environmental Management and Sustainable Development**, organized by the PG Department of Environmental Science, Holy Cross College, Tiruchirappalli, on 24th January 2023.

Title: Removal of Toxic Metal Ions using Amine Based Terpolymeric Resin by Batch Equilibrium Technique

12. (b) Details of Participation on Seminars / Conferences / Workshops / FDPs:

1. Participated in UGC sponsored State Level Seminar on **“Emerging Trends in Chemistry”** held on 9th March 2006, organized by PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli.
2. Participated in UGC Sponsored National Seminar on **“Frontier Areas in Chemistry”** organized by PG and Research Department of Chemistry, Thiagarajar College (Autonomous), Madurai, Tamilnadu, held on 1st and 2nd March 2007.
3. Participated in a seminar on **“Advanced Topics in Chemistry”** organized by PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, held on 13th and 14th March 2007.
4. Participated in a seminar on **“Modern Techniques in Chemistry”** organized by PG and Research Department of Chemistry at Jamal Mohamed College (Autonomous), Tiruchirappalli, held on 5th and 6th March 2008.
5. Participated in UGC sponsored State Level Seminar on **“Frontier Studies in Chemistry”** organized by the PG & Research Department of Chemistry at Jamal Mohamed College (Autonomous), Tiruchirappalli, held on 9th and 10th February 2010.
6. Participated in NAAC sponsored National Seminar on **“Quality Enhancement in Teaching, Research and Extension in Higher Education Institutions-Prospects and**

Problems” organized by Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli, during 15th & 16th April 2010.

7. Participated in UGC sponsored State Level Seminar on **“Recent Trends in Chemical Research (RTCR-2010)”** conducted by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli during 5th and 6th October 2010.
8. Attended in the Seminar on **“Creating Competitiveness to excel in higher education – a TQM approach”** organized by Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli on 8th December 2010.
9. Participated in the State Level Seminar on **“New Vistas in Chemistry” (NVS-2012)** organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 4th & 5th January 2012.
10. Participated in the one-day seminar on **“Teaching, Learning and Research in Higher Education – Excellence and Beyond Excellence”** organized by Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli during 7th March 2012.
11. Participated in the UGC Sponsored National Seminar on **“Current Scenario in Material Chemistry” (CSIMC-2015)** organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 9th & 10th February 2015.
12. Participated in 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 at Jamal Mohamed College (Autonomous), Tiruchirappalli on 22nd December 2015.
13. Participated in the National Symposium on **“Recent Developments in Chemistry (RDC-2016)”** organized by the Department of Physical Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai, on 4th June 2016.
14. Participated in the ‘RSC-NIT Trichy’ International Symposium on **“Heterogeneous Catalysis and Sustainable Chemistry”** organized by the Department of Chemistry, National Institute of Technology, Tiruchirappalli, during 5th November 2016.
15. Participated in the one-day Workshop on **“The Role of a Teacher in the Present Scenario”** organized by the Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli on 10th December 2016.

16. Participated in **Three-day NLP-Based Faculty Empowerment Programme** organized by Internal Quality Assurance Cell of the College on 17th, 19th & 20th June 2017.
17. Participated in Regional Workshop on **“Research Based Pedagogical Tools”** organized by Centre of Excellence in Science and Mathematics Education at Indian Institute of Science Education and Research (IISER), Pune and SRM University, Ramapuram, Chennai, on 7th to 9th September 2017.
18. Participated in the One Day National Workshop on **“Life Skills”**, organized by PG Department of Social Work, Jamal Mohamed College, Tiruchirappalli, during 8th February 2018.
19. Participated in the Staff Enrichment Programme on **Ownership Culture**, organized by Internal Quality Assurance Cell, Jamal Mohamed College, Tiruchirappalli, during 14-06-2019.
20. Participated in an International Seminar on **Advanced Materials**, Departments of Materials Science and Physical Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai-625021 held on 23-09-2019.
21. Participated in Orientation Programme on **Preparing Course Outcomes in the Curriculum Design**, organized by Curriculum Development Cell, Jamal Mohamed College, Tiruchirappalli, held on 03-01-2020.
22. Participated in an International Conference on **Challenges to Environmental and Health**, organized by PG and Research Department of Zoology, Jamal Mohamed College, Tiruchirappalli, on 30-01-2020.
23. Participated in Workshop on **Edmodo ICT Tool**, organized by the Internal Quality Assurance Cell, Jamal Mohamed College, Tiruchirappalli, held on 04-02-2020.
24. Participated in **Intellectual Property Rights and Prior Art Search for Research Development**, organized by Intellectual Property Rights Cell, Jamal Mohamed College, Tiruchirappalli, on held 05-02-2020.
25. Participated One week Faculty Development Programme on **“Transforming Education – The Google Classroom Way”**, Aachi Institute of Management & Entrepreneurial Development, Chennai-600 040 held on 01-06-2020 to 07-06-2020.

26. Participated National Level Live Faculty Development Programme (webinar) on **"Future of Examinations: Bloom's Taxonomy and Multiple Assessment Tools"**, G. T. N. Arts College (Autonomous), Dindigul held on 08-06-2020.
27. Participated One Week Faculty Development Program on **"Advancements in Science and it's Applications in Engineering"**, Department of Science & Humanities, Hyderabad Institute of Technology & Management Medchal, Hyderabad, Telangana held on 22-06-2020 to 26-06-2020.
28. Participated Faculty Development Programme on **"E-Content Development"**, Internal Quality Assurance Cell of Jamal Mohamed College, Tiruchirappalli held on 30-06-2020 to 04-07-2020.
29. Participated Faculty Development Programme on **"Innovation & Intellectual Property Rights"**, PG Department of Chemistry & APCian Research Forum, A.P.C. Mahalaxmi College for Women, Thoothukudi held on 06-07-2020.
30. Participated National Level online Faculty Development Programme on **"Chemistry in an era of change"**, K.Ramakrishnan College of Engineering, Tiruchirappalli-12 held on 13-07-2020 to 16-07-2020.
31. Participated Faculty Development Programme on **"Prospective Research for Sustainable Development"**, Department of Chemistry, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-89, in association with Association of Chemistry Teachers (ACT), Mumbai held on 20-07-2020 to 24-07-2020.
32. Participated in One Week Online International Faculty Development Programme on **"Facets of Teaching"**, Organized by Centre for National & International Academic Collaborations, Tamil Nadu Teachers Education University, Chennai, in association with Lakshmi College of Education, Dindigul, held on 14-06-2021 to 20-06-2021.
33. Participated in Faculty Enrichment Programme, Organized by IQAC, Jamal Mohamed College, Tiruchirappalli, held on 21-06-2021 to 25-06-2021.
34. Participated in Orientation Programme on **"Free E-Resources"**, organized by Department of Library in association with Internal Quality Assurance Cell, Jamal Mohamed College, Tiruchirappalli, held on 29-07-2021.
35. Participated in National Level Knowledge Enrichment Programme on **"Separation, Purification and Identification of Organic Compounds"**, organized by Department of Chemistry, Srimad Andavan Arts and Science College, Tiruchirappalli, held on

25-08-2021.

36. Participated in Five days Virtual Faculty Development Program on **“Contemporary Innovations for sustainable Development in Material Science”**, Department of Physics, Rathinam College of Arts and Science, Coimbatore, held on 06-09-2021 to 10-09-2021.
37. Participated in Five-day Virtual International Faculty Development Programme on **“Instrumentation Techniques and Advanced Materials”**, organized by Department of Chemistry in association with the Internal Quality Assurance Cell (IQAC) under UGC PARAMARSH Scheme, Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi, on 21-09-2021 to 25-09-2021.
38. Participated in Virtual National Faculty Development Programme on **“Evolution of Smart Materials”** organized by Department of Chemistry, S.T. Hindu College, Nagercoil-629 002, on 25-10-2021 to 30-10-2021.
39. Participated in the Five-Day International Online Faculty Development Programme on Emerging Trends in Nano Technology, organized by Department of Basic Science, Vishnu Institute of Technology (Autonomous), Bhimavaram, AP in association with Physical Research Laboratory (PRL), Ahmedabad, Gujarat, on 09-11-2021 to 13-11-2021.
40. Participated in the 5 Days Virtual International Faculty Development Program on **“Scope and Developments of Teaching & Research Strategies in Basic Science”**, organized by Sri Ramakrishna College of Arts & Science, Coimbatore, held on 22-11-2021 to 26-11-2021.
41. Participated in a Three-Day Virtual Faculty Development Programme on "Emerging Trends in Chemistry", organized by Department of Chemistry, Kongu Engineering College, Perundurai, Erode, held on 13-12-2021 to 15-12-2021.
42. Participated in 5 Days Virtual FDP on **“Developing in Emerging Technologies”**, organized by Department of Computer Science with Cognitive Systems (Integrated with TCS), Sri Ramakrishna College of Arts and Science (Autonomous), Coimbatore, held on 27-12-2021 to 31-12-2021.
43. Participated in the National Level Short Term Course on **“Academic & Research Report Writing”**, organized by PG and Research Department of Biotechnology & Microbiology, National College (Autonomous), Tiruchirappalli, held on 03-01-2022 to 08-01-2022.

44. Participated in the Faculty Development Programme on **“Digital Teaching and Learning”**, organized by PG and Research Department of Chemistry in association with IQAC, Jamal Mohamed College (Autonomous), Trichy-20, held on 24-01-2022 to 29-01-2022.
45. Participated in the National Level Hands on Training in **Molecular Docking using Auto Dock**, organized by PG and Research Department of Biotechnology & Microbiology, National College (Autonomous), Tiruchirappalli, held on 29-01-2022.
46. Participated in One Week Faculty Development Programme on **Research Essentials**, organized by Department of Computer Science & Engineering, Chandigarh University, Gharuan, Mohali, Punjab, held on 31-01-2022 to 05-02-2022.
47. Participated in One Day National Level Faculty Enrichment Programme on **“Why, What & How of Patents”**, organized by ASPIRE-the Entrepreneurship & Incubation Cell, St. Francis De Sales College, Bangalore, held on 07-02-2022.
48. Participated in the Two-Day Online Faculty Development Programme on **Astronomical Studies**, jointly organized by Chiguru Colab, Bangalore and PG & Research Department of Physics, Jamal Mohamed College, Tiruchirappalli, held on 07-02-2022 to 08-02-2022.
49. Participated in An Online Faculty Development Programme on **Intellectual Property Rights**, under DBT Star College Scheme jointly organized by the Postgraduate and Research Department of Physics and Institution’s Innovation Council, Jamal Mohamed College (Autonomous), Tiruchirappalli, on 09-02-2022.
50. Participated in One Week Faculty Development Programme on **‘Modern Innovations in Chemical Science and Technology’**, organized by Department of Chemistry, Syed Ammal Arts and Science College, Ramanathapuram, held on 15-02-2022 to 21-02-2022.
51. Participated in IP Training Program under National Intellectual Property Awareness Mission, Intellectual Property Office, India, held on 04-03-2022.
52. Participated in One Day National Level Faculty Development Programme on **“Intellectual Property Rights and Patent Filing”**, organized by Department of Botany, Pt. Jawaharlal Nehru College, Nawagarh, held on 05-03-2022.
53. Participated in Online Faculty Enrichment Programme on **“Needs and Metrics of Green Chemistry”**, organized by Postgraduate and Research Department of

Chemistry (under DBT Star College Scheme), Vivekananda College, Tiruvedakam West, Madurai-625 234, held on 31-03-2022.

54. Participated in National Level Virtual Faculty Development Programme on “Recent Advance in Chemical Sciences”, organized by PG and Research Department of Chemistry, Thiagarajar College (Autonomous), Madurai, on 26th September 2022.
55. Participated in 15 Days Online Programme entitled “Refresher Course on Selective Topics in Organic Chemistry-Phase-II, organized by Col. Dr. Jeppiaar Research Park, Centre for Ocean Research & Department of Chemistry, Sathyabama Institute of Science and Technology, Chennai, Tamilnadu, from 12th December 2022 to 28th December 2022.
56. Participated in Faculty Development Programme on Prevalence of Fluoride and its Optical Detection, organized by the PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 24th January 2023.
57. Participated in Faculty Development Programme on Preparation of Winning Research Proposal, organized by the PG and Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, on 8th February 2023.

13. Research Guidance

| | | |
|----------------------------|---|--------------------|
| M.Sc. (Completed) | - | 57 Students |
| M.Sc. (Ongoing) | - | 06 Students |
| M.Phil. (Completed) | - | 05 Students |
| M.Phil. (Ongoing) | - | 01 Student |

14. Honours and Awards

1. Received a **Best Oral Presentation Award** in the National Conference on “Recent Trends in Green Synthesis” (**RTGS-2011**) organized School of Chemistry, Alagappa University, Karaikudi on 5th and 6th August, 2011.
2. Received a **Best Oral Presentation Award** in the UGC Sponsored National Seminar on (**POLYCAP’11**) “POLYMERS: Synthesis, Characterization and Applications” organized by the Department of Physics, Mannar Thirumalai Naicker College, Madurai on 21st and 22nd October 2011.
3. Received a **Best Poster Presentation Award** in the International Seminar on Recent Trends in Bioinorganic Chemistry (**RTBIC-2019**), organized by the Department of Chemistry and Loyola Institute of Frontier Energy (LIFE), Loyola College (Autonomous), Chennai on 18th February 2019.

4. Received a **“Nation Choice Award”** (Best Teacher) from Glantor X, Bangalore, India, during the year 2020-2021.
5. Received **“Best Teacher Award”** from Institute of Scholars, India, during the year 2021-2022.

15. Research Projects:

SEED Money Project Received by JIIC – Jamal Innovation and Incubation Center, Jamal Mohamed College, Tiruchirappalli, during 2020-2021.

Title of the Project: Employing Batch Equilibrium Technique for the Removal of Heavy Metal Ions from Water using Chelating Terpolymer and Biological Evaluation of their Polychelates

16. Patents Published / Granted:

International Patent (Granted)

System for performing molecular modeling studies and density function theory calculations of new α -aminophosphonates with amlodipine as a potential inhibitor of the SARS-CoV-2 main protease (07.06.2022) Application Number: 20 2022 103 216.5

National Patent (Published)

Nanomaterial composites for electrochemical detection of phenol (23.07.2022)
Application Number: 202231042301 A

Method for manufacturing biodegradable polymeric nanoparticle drug (03.08.2022)
Application Number: 202241044520 A

17. Academic Responsibilities (Both College & Department)

- ❖ Member in the preparation of AQAR & SSR for NAAC (both College & Department)
- ❖ Serving as Microcell Member in IQAC since 2015
- ❖ Served as Sub-warden in Khajamian Hostel (2009-2010)
- ❖ Department Placement Officer since June 2015
- ❖ EC Member of Baithulmal Society (2017-2019)
- ❖ Member in the Alumni Registration Committee, Law and Order Committee and Regulation of Graduates Committee in the Graduation Day since 2011
- ❖ Member, Students Monitoring Committee (2017-2019)
- ❖ EC Member, JMC Alumni Staff Chapter, since 2021.
- ❖ In-charge in the preparation of Department Academic Audit Report (Internal & External) since 2009
- ❖ Acting as in-charge for the Preparation of Department Timetable since 2008
- ❖ Acting as Department Library in-charge since 2011

- ❖ Acted as in-charge in the Department Storekeeping (2013-2015)
- ❖ Tutor-in-charge for Post-Graduate Students since 2009
- ❖ Handling classes in Deeniyath Education Classes since 2008
- ❖ Handled Career Oriented Programme Classes
- ❖ Member of question setting and valuation board in Jamal Mohamed College, Trichy and Bharathidasan University, Tiruchirappalli.
- ❖ Member, Board of Studies in Department of Chemistry, Jamal Mohamed College
- ❖ Acted as Member of Organizing Committee in the State Level Intercollegiate Extravaganza "Symphoria '17" organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 31st January 2017.
- ❖ Acted as Member of Organizing Committee in the State Level Intercollegiate Extravaganza "Symphoria '18" organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 20th February 2018.
- ❖ Acted as Co-convener in the 4th International Conference on Chemical and Environmental Research (**ICCER-2018**), organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 19-12-2018.
- ❖ Acted as Member of Organizing Committee in the State Level Intercollegiate Extravaganza "Symphoria '19" organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 17th February 2019.
- ❖ Acted as Organizing Secretary in the Intradepartmental Extravaganza "Chem-Fiesta'19" organized by the Department of Chemistry (SF), Jamal Mohamed College (Autonomous), Tiruchirappalli on 19th September 2019.
- ❖ Acted as a Convener in the State Level Intercollegiate Extravaganza "Jam Chem Fest-2020", organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 27th February 2020.
- ❖ Acted as Organizing Secretary in the "National Level Five-day Online Course on Chemistry in Our Day-to-day Life", organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 04th June 2020 to 8th June 2020.
- ❖ Acted as Organizing Secretary in the National Level Webinar on "Drug Delivery", organized by PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, on 6th July 2021.

- ❖ Acted as Organizing Secretary in the Chem-Fiesta-2023 (State Level Intercollegiate Extravaganza), organized by the Department of Chemistry, Jamal Mohamed College, Tiruchirappalli-620 020 on 1st March 2023.
- ❖ Served as a Secretary in the Meelad Day Celebration-2023 organized by Centre for Human Excellence, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, on 7th March 2023.

17. Resource Person:

1. Acted as **Evaluator** in 25th National Children's Science Congress-2017 held at Sathyabama Institute of Science and Technology, Chennai on 8th to 10th December 2017.
2. Acted as a Resource Person and delivered a special lecture on "**Career Opportunities in Chemistry**" organized by the Department of Chemistry, Shevaroy's College of Arts and Science, Yercaud, on 3rd February 2018.
3. Acted as a Resource Person and delivered a special lecture in the Lecture Workshop on "**Recent Developments in Medicinal Chemistry**" organized by the Department of Chemistry, Dr. Zakir Husain College, Ilayangudi, on 3rd March 2018.
4. Acted as a Resource Person and delivered a special lecture in the Aroma Chemistry Club Valediction on "**Mission Goals for Chemistry Graduates**" organized by the Department of Chemistry, Theivanai Ammal College for Women, Villupuram, on 31st March 2018.
5. Delivered a special lecture Through Skype Mode on "**Spectral Techniques**" organized by the Department of Chemistry, Theivanai Ammal College for Women, Villupuram, on 22-01-2019.
6. Acted as a Resource Person and delivered a special lecture in the Lecture Workshop on "**Career Guidance**" organized by the Department of Chemistry, Holy Cross College, Trichy, on 23-01-2019.
7. Acted as a Resource Person and delivered a special lecture in the Lecture Workshop on "**Career Options for Chemistry Graduates**" organized by the Department of Chemistry, MSS Wakf Board College, Madurai, on 06-03-2019.

8. Acted as a Resource Person and delivered a special lecture on **“Spectroscopy- An Overview”** organized by the Department of Chemistry, Theivanai Ammal College for Women, Villupuram, on 06-07-2019.
9. Acted as a Resource Person and delivered a special lecture in the Chemistry Association Inaugural Function on **“Current Scenario in Chemistry”** organized by Department of Chemistry, Immaculate College for Women, Viriyur on 10-08-2019 (FN).
10. Acted as a Resource Person and delivered a special lecture on **“Basic Concepts of Spectral Studies”** organized by Department of Chemistry, Immaculate College for Women, Viriyur on 10-08-2019 (AN).
11. Acted as a Resource Person and delivered a special lecture on **“Wealth from Wastes”** organized by Tamilnadu Science Forum (27th National Children’s Science Congress), ER Higher Secondary School, Tiruchirappalli on 22-08-2019.
12. Acted as a Resource Person and delivered a special lecture on **“IR and NMR Spectral Studies”** organized by the Department of Chemistry, Vivekanandha Arts and Science College for Women, Tiruchengode, Namakkal on 28-09-2019 (FN).
13. Acted as a Resource Person and delivered a special lecture on **“Career Opportunities in Chemistry”** organized by the Department of Chemistry, Vivekanandha Arts and Science College for Women, Tiruchengode, Namakkal on 28-09-2019 (AN).
14. Acted as a Judge in **“Just-A-Minute”**, State Level Intercollegiate Extravaganza, Animalia-2K18, organized by PG Department of Zoology, Jamal Mohamed College, Tiruchirappalli, on 10-10-2019.
15. Acted as a **Judge** in the Science Exhibition, organized by Seventh-Day Adventist Matric Hr. Sec. School, Subramaniyapuram, Tiruchirappalli, on 15-10-2019.
16. Acted as a **Chair-Person** in 5th International Conference on Chemical and Environmental Research (ICCER-2020), Organized by PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, on 08-01-2020.
17. Acted as a **Judge** in Science Exhibition, National Science Day Celebrations, Organized by Jamal Mohamed College, Tiruchirappalli, on 28-02-2020.

18. Acted as a Resource Person and delivered a special lecture on **“Spectroscopy – An overview”** organized by the Department of Chemistry, Sri Kailash Women’s College, Thalaivasal, Salem, on 24th February 2021.
19. Acted as a Resource Person and delivered a special lecture on **“Career Paths for Chemistry Graduates”**, organized by Chemika Association Inauguration organized by the Department of Chemistry, Sacred Heart Arts and Science College, Perani, Villupuram, on 27th October 2021.
20. Acted as **Jury** in the event Science Quiz, Science Day Celebrations-2022, organized by Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020, held on 25th – 28th February 2022.
21. Acted as a Guest Speaker and delivered a Special lecture on **“Science in Our Day-to-day Life”**, in the celebration of National Science Day-2022, organized by Science Club of Shree Chadraprabhu Jain College, Minjur, Chennai, on 2nd March 2022.
22. Acted as a Resource Person and delivered a Special lecture on **“Recent Advance in Chemistry”**, organized by the Department of Chemistry, Sri Kailash Women’s College, Thalaivasal, Salem on 26th May 2022.
23. Acted as a Resource Person and delivered a invited talk on **“Biomedical Polymers: An overview”** in an One Day International Conference on Bio-Medical Applications, organized by the Department of Chemistry & Department of Microbiology, Ambiga College of Arts and Science for Women, Madurai on 10th August 2022.
24. Acted as a Resource Person and conducted Hands-on-Training on the Domestic Product Preparation for the members of women self-help group, Poonampalayam Village, Mannachanallur, Tiruchirappalli District under Unnath Bharath Abiyan Cell, on 18th October 2022.
25. Acted as a Resource Person and delivered a lecture on **“Goal Setting”**, organized by Placement Cell, Jamal Mohamed College, Tiruchirappalli on 24th January 2023 and 25th January 2023.
26. Acted as a Jury in National Science Fair, organized by Organization of Muslim Educational Institutions & Associations of Tamilnadu (OMIET) and hosted by Jamal Mohamed College (Autonomous), Tamilnadu, on 28th January 2023 and 29th January 2023.
27. Acted as a Judge in **“Hand Painting”**, Animalia-2K23 (A State Level Inter-College Competition), organized by the PG and Research Department of Zoology, Jamal Mohamed College, Tiruchirappalli-20, on 8th February 2023.

28. Acted as a Guest Speaker and delivered a Special lecture on **“Importance of Science in Our Daily Life”**, in Five Days International Virtual Seminar on Chemistry-2023, organized by the Department of Chemistry in association with IQAC, Shree Chadraprabhu Jain College, Minjur, Chennai on 21st February 2023.
29. 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 9th March 2023 to 13th March 2023.
30. Acted as a Resource Person and delivered a special lecture on **“Challenges and Opportunities for Chemists”** organized by the Department of Chemistry, MSS Wakf Board College, Madurai, on 14th March 2023.
31. Acted as a Resource Person and delivered a Special lecture in One-Day Workshop on **“Chromatographic Techniques”**, organized by the Department of Chemistry, Sri Kailash Women’s College, Thalaivasal, Salem on 28th March 2023.

18. Reviewer:

- ❖ Bioinorganic Chemistry and Applications, Hindawi Publications, United States
- ❖ International Research Journal of Pure and Applied Chemistry, Sciencedomain International, India
- ❖ Journal of Pure and Applied Microbiology, India

19. Membership in Professional Bodies:

Community Associate Member (32953131), American Chemical Society, USA
Life Member, Institute of Scholars, India.

20. Online Certificate Course:

1. Basics in Inorganic Chemistry (NPTEL), January - February 2020.
2. Principles and Applications of NMR Spectroscopy (NPTEL), January-March 2020.
3. Transition Metals Organometallics in Catalysis and Biology (NPTEL), January-April 2020.
4. 15 Days certificate Programme on Sustainable Materials and Technologies, Department of Chemistry, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Namakkal, held on 21-05-2020 to 04-06-2020.
5. ARPIT-2020 Online Refresher Course in Chemistry for Higher education (NPTEL), October 2021.
6. Transition Metal Organometallic Chemistry: Principles to Applications (NPTEL), August-October 2021.
7. Bioinorganic Chemistry (NPTEL), January-March 2022.
8. Biological Inorganic Chemistry (NPTEL), July-October 2022.

(N. MUJAFARKANI)