### Faculty Profile



Academic

Name : Dr.Mrs. M. Kalanithi

Designation : Associate Professor

Department : Chemistry

Date of Birth : 23.05.1968

Date of appointment: 17.08.1992

S. N	Degree	<b>University / Institution</b>	<b>Year of Completion</b>
1	B.Sc	Fatima College, Madurai	1988
2	M.Sc	St.Joseph's College, Trichy	1990
3	M.Phil	St. Joseph's College, Trichy	1991
4	B.Ed	Madurai Kamaraj University	1992
5	PGDCA	Jayaraj Annapackiam College For Women, Periyakulam	1995
6	Ph.D	Madurai Kamaraj University	2013

Total Experience: UG: 28 years PG: 10 years M.Phil: 06 years

Area of Specialization/Interest: Coordination chemistry and Spectral techniques

**Professional Affiliation:** 2011-2012: Member in Placement cell

2012-2013 : Member in IQAC and Placement cell 2013-2014 : Member in IQAC, Press and Notice

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2014-2018: Member Secretary for Academic

Council, Member in Research Committee, Curriculam

Committee Member

2014-2016 Discipline Committee

Member

2015-2016: Eco Club Coordinator, Discipline

Committee Member.

Curriculam Committee Member

2016-2018: NSS Programme Officer

2018-2019: NSS Proogramme Officer, Member

In Magazine Committee, Member

in Golden Jubilee Committee

2019-2020: Member in Curriculam Committee

And Golden Jubilee Committee

Member in Other Bodies: Question setter, Examiner for M.Phil project, Reviewer for Inorganic Chemistry Communications and European Journal of Chemistry, Reviewer and Associate Editor for International International Journal of Agricultural Sciences, Reviewer for Journal of Molecular Structure, Inorganic and nanometal Chemistry, ACS-Applied materials and Interfaces and Journal of Chilean Chemical society

## Research Publications:

## **International Publications:**

- 1. **M. Kalanithi**, M. Rajarajan, P. Tharmaraj, Synthesis, Spectral and biological Studies of transition metal chelates of N-[1-(3- aminopropyl)imidazole]-salicyaldimine, *Journal of Coordination Chemistry*, 64, 2011, 842-850. Impact Factor: 1.8
- 2. **M. Kalanithi,** M. Rajarajan, P. Tharmaraj, Spectral, biological screening, and DNA studies of metal chelates of 4-[N,N-bis-(3,5-dimethyl-pyrazolyl-1-methyl)]aminoantipyrine, *Journal of Coordination Chemistry*, 64, 2011, 1436-1445. Impact Factor: 1.8
- 3. **M. Kalanithi,** M. Kodimunthiri, M. Rajarajan, P. Tharmaraj, Synthesis, characterization and biological activity of some new VO(IV), Co(II), Ni(II), Cu(II) and Zn(II) complexes of chromone based NNO Schiff base derived from 2- aminothiazole, *Spectrochim. Acta Part A, Molecular and Biomolecular spectroscopy*, 82, 2011, 290-298. Impact Factor: 2.0
- 4. **M. Kalanithi,** M. Rajarajan, P. Tharmaraj, C.D. Sheela, Spectral, biological screening of metal chelates of chalcone based Schiff bases of N-(3-aminopropyl) imidazole, *Spectrochim. Acta Part A, Molecular and Biomolecular spectroscopy*, 87, 2012, 155-162 Impact Factor: 2.0
- 5. **M. Kalanithi,** Synthesis, spectroscopic characterization, analogesic, and antimicrobial activities of Co(II), Ni(II), and Cu(II) complexes of 2-[N,N-bis-(3,5-dimethyl-pyrazolyl-1-methyl)]aminothiazole, Springer Link, Medicinal Chemistry Research, ISSN Number 1054-2523 Impact Factor: 1.6
- 6. **M. Kalanithi,** Estimation of fluoride ion in ground water of some areas of Theni district by spectrophotometric method, International Journal of Environmental Sciences, 0976-4402, 252-259
- 7. **M. Kalanithi**, Spectral, NLO and antimicrobial studies of Co(II), Ni(II) and Cu(II) complexes of Schiff base ligands of 2-amino-6-nitrobenzothiazole. Journal of the Serbian Chemical Society, Vol. 84 (3) 267–275 (2019) Impact Factor: 0.897
- 8. **M. Kalanithi,** Synthesis, spectral, DFT calculation, sensor, antimicrobial and DNA binding studies of Co(II), Cu(II) and Zn(II) metal complexes with 2-amino benzimidazole Schiff base, Journal of Molecular structure, 1206 127725, (2020) Impact factor: 2.120
- 9. Dr. M. Kalanithi and G. Saraswathy (M.Phil 2017-18) published a paper titled " "Synthesis, Spectral, Electrochemical, Antimicrobial and DNA Binding/Cleavage Studies of Metal Complexes with Schiff Base of Fluoro Substituted Aniline" in Asian Journal of Chemistry. Vol. 32, No. 11 (2020), 2911-2916

#### National Publication:

- 1. **M. Kalanithi,** V. Shanmuga priya, M. Geetha Studies on transition metal complexes of 3-(salicyl)-pentane-2-4-diketimine Schiff bases, Journal of Science, Humanities and management vol.1 No15 (December 2013) ISSN 2347-9868
- M. Kalanithi, M. Rajarajan, P. Tharmaraj Synthesis, Characterization and Biological Screening Of metal Complexes Of Schiff Base Derived From 2-Amino-1,3,4 Thiadiazole-5-Thiol, Journal of Science, Humanities and management vol.1 No15 (December 2013) ISSN 2347-9868
- M. Kalanithi, S. Poornalakshmi, Comparison of Photo Catalytic Degradation of Methylene blue Using Nano-Sized CdO and PbO Catalysts, Journal of Science, Humanities and management vol.1 No15 (June 2015) ISSN 2347-9868
- 4. **M. Kalanithi**, Analytical and Antimicrobial studies of metal chelates of 1-(4-methyl phenyl) Azo- 4 hydroxy acetophenone Journal of Science, Humanities and management vol.1 No15 (December 2016) ISSN 2347-9868 146 151
- 5. **M. Kalanithi,** Synthesis, Characterization and Biological Studies of Cu(II) and Zn(II) complexes of Schiff bases 2-amino 6-nitro benzo thiozole and mixed ligands with 3,5- dimethyl pyrazol JAC JOSHAM Vol 4(2), June 2017, pp.27-36
- 6. **M. Kalanithi,** Synthesis, Spectral Characterization and Pharmaceutical Activity of Schiff base metal [Cu(II) & Zn(II)] complexes derived from Benzaldehyde derivatives, JAC JOSHAM Vol 5(2), June 2018, pp.13-21. 146 151

### Seminars/Conferences/Workshops Participated (Last seven Years):

S. No	Theme of seminar / Workshop / Conference	Date & Place
1.	IAS sponsored Lecture-Workshop on Recent Trends in Chemistry (RTC-5)	15 <sup>th</sup> & 16 <sup>th</sup> December 2011 Jayaraj Annapackiam College for Women, (Autonomous), Periyakulam.
2.	UGC sponsored National Seminar on Recent Trends in Chemistry	15 <sup>th</sup> & 16 <sup>th</sup> March 2012, H.K.R.H. College, Uthamapalayam
3.	UGC,CSIR,DST & TNSCST sponsored National Seminar on Emerging Trends in Chemistry	4 <sup>th</sup> & 5 <sup>th</sup> October 2012, C.P.A. College, Bodinayakkanur
4.	CSIR sponsored National Seminar on Advanced Materials	5 <sup>th</sup> & 6 <sup>th</sup> February 2013, Jayaraj Annapackiam College for Women, (Autonomous), Periyakulam.
5.	UBCHEA sponsored National consultation programme on Promoting Environment Education in Higher Education Institutions	7 <sup>th</sup> & 8 <sup>th</sup> February 2013, Lady Doak College, Madurai
6	Workshop on State Action plan-Agro climate Zone of UNFCCC	19 <sup>th</sup> March, Literates Welfare Association, Theni Dt
7.	"e- Content Development of Indigenous Teaching practices in Humanities and Social	Christ University, Bangalore.

	Sciences"	15 <sup>th</sup> - 17 <sup>th</sup> May 2014
8.	Workshop on E- Content Development for effective teaching and learning	Physics Department & IQAC –JAC .  11 <sup>th</sup> to 13 <sup>th</sup> September, 2014
9.	DST & UGC Sponsored National Seminar on Emerging Trends in Chemistry (ETC- 05)	18 <sup>th</sup> &19 <sup>th</sup> September, 2014 PG and Research Department, CPA College, Bodi,
10.	UGC sponsored National Seminar Recent Trends In Chemistry	13 <sup>th</sup> March, 2015.Recent Trends In Chemistry H.K.R.H College, Uthamapalam.
11.	National Seminar on Environmental Issues and Challenges for Sustainable Development	J.A. College and YLSDP 15 <sup>th</sup> – 17 <sup>th</sup> February 2016
12.	National Seminar on "Recent Trends in Chemistry" (RTC-7)	Jayaraj Annapackiam College For Women, Periyakulam, 11.01.2017 and 12.01.2017
13.	Orientation Training for NSS PO	Empanelled Training Institution- NSS, Avinashalingam University, Coimbatore. 3 <sup>rd</sup> to 9 <sup>th</sup> August 2016
14.	NAAC sponsored National conference on Quality Assurance and Quality Sustenance in Higher Educational Institutions: challenges and solutions	29 <sup>th</sup> and 30 <sup>th</sup> September 2016 JAC,PKM
15.	National Seminar on Recent Trends in Chemistry	23.01.2018 Jayaraj Annapackiam College For Women, Periyakulam
16.	National Seminar on Recent Trends in Chemistry	Jayaraj Annapackiam College For Women, Periyakulam. 10.12.2019

# Conference Presentations (Last seven Years):

Year	Title of the Paper	Seminar	Place &Date
2011- 2012	Studies of metal complexes of chalcones	UGC sponsored National Seminar on Recent Trends in Chemistry	15 <sup>th</sup> & 16 <sup>th</sup> March 2012, H.K.R.H. College, Uthamapalayam
2012- 2013	Studies of metal complexes of 2- [N,N-bis-(3,5-dimethyl- pyrazolyl-1- methyl)]aminothiazole	UGC,CSIR,DST & TNSCST sponsored National Seminar on Emerging Trends in Chemistry	4 <sup>th</sup> & 5 <sup>th</sup> October 2012, C.P.A. College, Bodinayakkanur
	Spectral, NLO, fluorescence and biological screening of metal chelates of chalcone based Schiff bases of N-(3-aminopropyl) imidazole	CSIR sponsored National Seminar on Advanced Materials	5 <sup>th</sup> & 6 <sup>th</sup> February 2013, Jayaraj Annapackiam College for Women, (Autonomous), Periyakulam.
	Studies of metal complexes of chromone based NNO Schiff	International Conference on	10-11 January 2014, Bishop Heber College,

2013- 2014	base derived from 2-amino-1,3,4 thiadiazole-5-thiol	Chemistry in synergy with Materials and	Trichy
2014- 2015	Photo Degradation of Methylene Blue by using Nano sized PbO and CdO Catalyst"	Biology  DST & UGC Sponsored National Seminar on Emerging Trends in Chemistry (ETC- 05)	CPA College, Bodi. 18 <sup>th</sup> and 19 <sup>th</sup> September, 2014
	Synthesis, Characterisation, Antimicrobial Activity and NLO Property of Copper(II) Complexes of AZO Benzene Derivatives	UGC sponsored National Seminar on Recent Trends in Chemistry (RTC-6)	JAC, PKM. 8 <sup>th</sup> and 9 <sup>th</sup> jan.2015
	Synthesis, Characterisation, Anti – microbial activity and NLO property of azo derivative.	Recent Trends In Chemistry	H.K.R.H College, Uthamapalam.13 <sup>th</sup> March, 2015.
2015- 2016	Synthesis, Spectral Studies and NLO property of metal Complexes of Azo derivatives of phenolic compounds	UGC sponsored International Conference on Recent Advances in Materials and Chemical Sciences	Gandhigram Rural Institute (DU), Dindigul 14 <sup>th</sup> Dec.2015
2016- 2017	Biosynthesis of Copper nanoparticles using Vitex Negundo leaf Extract	Saiva Bhanu Kshatriya College, Aruppukottai on 30 <sup>th</sup> September 2016.	ICMR, DBT, INSA sponsored International Conference on Cancer Biology: Drug Discovery and Novel Therapeutics
	Studies on Zn (II) and Cu(II) Complexes of Schiff Bases of 5- Amino 1,3,4,Thiadiazole 2-Thiol	St.Anne's Auditorium, JAC. 11 <sup>th</sup> and 12 <sup>th</sup> Jan.2017	National Seminar on Recent Trends in Chemistry (RTC-7), ISBN No: 978-81- 922846-4-4
2017- 18	Production And Characterization Of A Milk Clotting Enzyme From Moringa Oleifera Seed Extract	National Seminar on Recent Trends in Chemistry	Jayaraj Annapackiam College For Women, Periyakulam, 23.01.2018
2019-20	Synthesis, Spectral, UV Sensor, Electrochemical Study and Antimicrobial Activity of Fe(III, Co(II), Ni(II), Cu(II), Zn(II) Complexes Derived from Schiff Bases of 2-Thiophene Carboxaldehyde	National Seminar on Recent Trends in Chemistry	Jayaraj Annapackiam College For Women, Periyakulam, 10.12.2019
	Synthesis, Characterization and Photocatalytic Activity of BaWO <sub>4</sub> Nanoparticles	National Seminar on Recent Trends in Chemistry	Jayaraj Annapackiam College For Women, Periyakulam, 10.12.2019

Books Published: Allied Chemistry I -ISBN: 978-81-2344-024-9, 2020-2021.

#### **Served as Research Person:**

- 1.Served as judge for competition "Veetuku oru vingnani" organized by Puthiya Thalaimurai Media
- 2. Delivered a talk on Environmental issues in today's context in the seminar on Environmental Education organized by JAC-ECO club, Jayaraj Annapackiam College for women
- **3. Delivered a guest lecture on Spectroscopy at** Thassim Beevi Abdul Kader College for Women, Kilakarai
- 4. Delivered guest lecture in the seminar on **Group Theory Concepts & Applications and Quantum Theory I & II** respectively at Mother Teresa Womens University, Kodaikanal.
- 5. Delivered a lecture on **Water pollution** in the National Seminar on Environmental Issues and Challenges for Sustainable Development organized by **J.A. College and YLSDP**
- 6. Delivered a talk on "Activities of Red Ribbon Club" for NSS students
- 7. Served as Judge for the **Intercollegiate Programme EPISTEME-2017** organised by Thiravium College of Arts and Science, Periyakulam
- 8. Demonstrated the Preparation of Phenoyl, Ink and Candle to the Entrepreneur cell members
- 9. Delivered a talk on "Serendipity in Science" in Chemistry Association
- 10. Delivered motivation and orientation talks for NSS volunteers at J.A. College, Women
- 11. Delivered a lecture on **Nanoscience** at Marymatha college, Periyakulam
- 12. Delivered a lecture on **Climate change and energy innovations** in Physics association, J.A. College
- 13.Delivered a lecture on "Serendipity in Science" in the state level seminar at Mary Matha College

**Research Experience** : Funded research projects undertaken – 1 Minor Research Project : Period from 1-2-2007 to 28-2-2009

Title : Corrosion Inhibition by Oxyanions

Guideship : Approved guide for Mother Teresa Women's

University,

Kodaikanal

**Projects Guided** 

M. Phil Projects completed : 08M.Sc Projects completed : 08B.Sc Projects completed : 04

## Contact Details:

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