



Name: **Dr. R. Malarvizhi**

Designation: **Associate Professor**

Educational Qualification: **M.Sc., M.Phil., B.Ed., Ph.D.**

Sl.no.	Degree	University/ College	Year of passing
1.	B.Sc.	Bharathidasan University	1985
2.	M.Sc.	Bharathidasan University	1987
3.	M.Phil.	Bharathidasan University	1989
4.	B.Ed.	Annamalai University	1994
5.	Ph.D.	Bharathidasan University	2011

Experience:

UG: **20** years

PG: **12** years

M.Phil.: **6** years

Area of Specialization: **Physical organic chemistry**

Guided: M. Phil.: **2**

Research Papers Presented: **16**

Title of the seminar	Title of the Paper	Level	Sponsor	Date & venue
Applications of electron transfer processes.	Multiparameter approach on the solvation of adduct with bicyclo[3.3.1] nonane skeleton.	National	UGC & CSIR	5.1.2006 & 6.1.2006, Department of Chemistry, Gandhigram rural institute, Gandhigram, Tamilnadu
Frontiers in Environmental sciences and engineering in	Chemical composition and thermo sintering characteristics of coal ashes	National	IAEM, NEERI	15.9.2005-17.9.2005 Bharathiyar University, Coimbatore

India.				
Life through chemistry	A study on the reaction of the bicyclic adduct derived from 1,3,5-trinitrobenzene and the anion of 1-benzyl-1-(ethoxycarbonyl)-2-propanone with acids.	International	Department of chemistry and Life sciences, P.R. College	25.02.2006 & 26.02.2006 P.R. Engineering College Thanjavur
Life through Chemistry	Carbon-13 NMR, proton-proton cosy and FABMS studies on bicycle[3.3.1] nonane adducts	International	Department of Chemistry and Life sciences, P.R. College	25.02.2006 & 26.02.2006 P.R. Engineering College Thanjavur
Life through Chemistry	Linear salvation energy relationships- the effects of solvents on the electronic absorption spectra of bicyclo[3.3.1] nonane derivatives	International	Department of Chemistry and Life sciences, P.R. College	25.02.2006 & 26.02.2006 P.R. Engineering College Thanjavur
Recent Trends in Hetero atom chemistry	The adduct derived from the heterocyclic base-tetrahydro-1,4-oxazine as anticonvulsant agent.	National	UGC and CSIR	28.03.2007 & 29.03.2007 Annamalai University, Annamalai Nagar Chidambaram
Recent Trends in Hetero atom chemistry	Antimicrobial studies on the adduct derived from tetrahydro-1,4-oxazine and 2,4,6-trinitroresorcinol.	National	UGC and CSIR	28.03.2007 & 29.03.2007 Annamalai University, Annamalai Nagar Chidambaram
Recent Trends in Chemistry	FTIR study on the assessment of quality of soil in the areas near sugar industry in Erode District	National	UGC	12.10.2007 Bishop Heber College, Trichy 17.
Exploring the Research platform for pharmaceutical product and process development (p3D'08)	Maximal Electroshock study on N,N-Diethyl-2,4-dinitroamino benzene.	National	--	15.03.2008 & 16.03.2008 Anna University, Tiruchirappalli – 620 024
Exploring the Research platform for pharmaceutical product and process development (p3D'08)	Antibacterial studies on the donor – acceptor adduct of thiourea	National	--	15.03.2008 & 16.03.2008 Anna University, Tiruchirappalli – 620 024

Exploring the Research platform for pharmaceutical product and process development (p3D'08)	Toxicology study on some anticonvulsant agents	National	--	15.03.2008 & 16.03.2008 Anna University, Tiruchirappalli – 620 024
Recent advances in Chemistry	Synthesis and characterization of 2,2',4,4'-tetranitrodiphenyldisulphide	National	UGC	18.09.2009 Bishop Heber College Trichy.
Recent advances in Chemistry	Insecticidal activity of 2,2',4,4'-tetranitrodiphenyldisulphide on spiral white flies	National	UGC	18.09.2009 Bishop Heber College Trichy.
Emerging trends in Chemistry	Paper presentation on Linear solvation Energy Relationship- The effect of solvents on the electronic absorption spectra of some carbanionic sigma complexes	National	Department of Chemistry, Bishop Heber college, Trichy.	Bishop Heber college, Trichy. 11.1.2012
World Conference on Infectious Diseases	Synthesis, characterization and anti-microbial activity of 5-(2,4-dinitrophenyl)-6-hydroxypyrimidine-2,4(1H,3H)-dione monohydrate	International	WHO, DST, DBT, ICMR, PNSCST UNAIDS	18.12.2013 to 22.12.2013 Chennai Trade Convention Centre, Chennai
Recent trends in X-ray crystallography	New Barbiturate with 4-Methyl Morpholin-4-ium Cation Moiety in the Distorted Chair Conformation as an Antiepileptic Agent	National	UGC	08.10.2014 and 09.10.2014 Seethalakshmi Ramaswami College, Tiruchirappalli-2.

Research Papers Published:9

- D.KALAIVANI&R. MALARVIZHI, Linear solvation energy relationships-The effects of solvents on the electronic absorption spectra of carbanionic sigma complexes, Indian J.Science Arts and Commerce, Vol. 1, No. 2, Apr 2005, p.1-7.
- D.KALAIVANI&R. MALARVIZHI, Chemical composition and thermosintering characteristics of coal ashes. Indian J.Environmental Protection. Vol.28, No.5, May 2008, p.434-436. ISSN: 0253 – 7141.

- D.KALAIVANI&**R. MALARVIZHI**& R. SUBBALAKSHMI, Synthesis of a novel barbiturate from 1-chloro-2,4-dinitro phenyl barbiturate as an anticonvulsant agent. *Med.Chem.Res*, Vol.17, 2008, p.369-373.ISSN: 1054-2523 (Print) 1554-8120 (Online), I.F. 1.402.
- D.KALAIVANI,**R. MALARVIZHI**& R.SANTHI, Anticorrosion studies on carbon steel for environmental protection, *Journal of environmental protection*, Vol. 28, 10, Oct. 2008, 938-941.ISSN: 0253 – 7141.
- D.KALAIVANI& **R. MALARVIZHI**, Triethyl ammonium 2,4 – dinitrophenyl barbiturate. *ActaCryst*, E65, 2009, o2548.ISSN: 1600-5368, I.F-0.35.
- D.KALAIVANI,**R. MALARVIZHI** , K. THANIGAIMANI, &P.THOMAS MUTHAIAH, 2-methoxy anilinium – 3- hydroxy- 2,4,6-trinitrophenolate, *ActaCryst*, E67, 2011, o686.ISSN: 1600-5368, I.F-0.35
- D. KALAIVANI, **R. MALARVIZHI**& M. NETHAJI, Synthesis, Characterization, crystal structure and thermal behaviour of tertiary butyl 2,2-bis(2,4-dinitrophenyl) ethanoate, *Journal of Chemical Crystallography*, 2012, 42, 1098-1104, ISSN: 1074-1542, I.F-0.64.
- D.KALAIVANI, **R. MALARVIZHI**& J.GOMATHI, Identification of synthons from the packing pattern of 4-methyl morpholin-4-ium 5-(5-chloro-2,4-dinitrophenyl)-2,6-dioxo-1,2,3,6-tetrahydropyrimidin-4-olate, *The International Journal of Science and Technoledge*, Vol.2, Issue (10), October 2014, 39-42. ISSN 2321 919x.
- J. GOMATHI, **R.MALARVIZHI**& D.KALAIVANI, New barbiturate with 4-methyl morpholin-4-ium cation moiety in the distorted chair conformation as an antiepileptic agent, *Recent trends in X-ray crystallography*” with ISBN No.: 978-81-909490-0-2, pp. 188-202.

PATENTS

- Novel trialkyl ammonium 2,4 – dinitrophenyl barbiturates as anti convulsant agents. Indian Patent. Published in Patent office Journal issue No. 29 / 2008, Date of publication – 18 /07/2008.
- A novel method for the synthesis of insensitive high energy molecules; alkyl 2,2-bis (2,4– dinitrophenyl) ethanoates, Indian Patent , No 1570 / CHE /2009. Published in Patent Journal on 17/07/2009. Issue No 29/2009.

Research Projects: 2

Minor projects

P. investigator/ co-investigator	Title	Sponsor	Duration	Amount
P. investigator	A Study on the Novel reactions of Biological activities, Thermal stabilities and Crystal structure of bicyclic adducts derived from electron deficient nitroaromatics.	UGC	2007-2009	Rs. 47,000/-
co-investigator	Condensation – cyclization reactions of electron – deficient aromatics: Synthesis and characterization of solid adducts, formation and decomposition kinetics, linear salvation energy relationships and spectral & biological studies.	UGC	2005-2007	Rs. 78,000/-

Other positions held in the college:

- Vice President in the chemistry club and association.
- Member in admission committee.