

Thiruvalluvar Government Arts College, Rasipuram

DEPARTMENT OF CHEMISTRY

STAFF PROFILE

ABSTRACT



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| 1. Name | : Dr. K. SARAVANAN |
| 2. Designation | : Associate Professor |
| 3. Education Qualification | : M.Sc., B.Ed., M.Phil., Ph.D |
| 4. Teaching Experience | : 23 years and 5 months |
| 5. Research Experience | : 23 years and 5 months |
| 6. Area of Research | : Coordination / Solid State Chemistry / Crystallography |
| 7. University Guideship Approval No | : P/U/R.D 3/1046/2010 dated 23.12.10. |
| 8. Fellowship Awarded | : Bharathiar University Research Fellow |
| 9. Minor/Major Research Project | : Nil |
| 10. Research Paper Published | : 44 |
| 11. Seminar/ Conference/ Workshops | : Organized: 03 ; Attended: 33 |
| 12. Paper presented in Seminar/ Conference/ Workshops | : International: 08 ; National: 22 |
| 13. Journals Review | : International: 02 ; National: Nil |
| 14. Books Published | : Nil |

BIO - DATA

Name : Dr. K. SARAVANAN
 Designation : Associate Professor
 Father's Name : Mr. K. Kaliannan
 Date of Birth : 01 - 06 - 1974
 Nationality : Indian
 Religion : Hindu
 Community : B.C.
 Permanent Address : 40/103-1, Vakkanan kadu, Puduppatty,
 Puduppatty (post), Elur,
 Namakkal - 637018
 Phone No : Res : -
 Off : 04287 – 231802.
 Cell : 9443532908
 E-Mail ID : drksaravanan@tgac.ac.in
 Languages Known to Read / Write : Tamil and English

EDUCATIONAL QUALIFICATION:

Degree	University	Month & Year of Passing	Class/ Grade
UG	Bharathidasan	March 1994	First with Distinction
PG	Bharathidasan	March 1996	First
B.Ed	Bharathiar	May 1997	First
M.Phil	Bharathiar	May 1999	Awarded
Ph.D	Bharathiar	Sep 2003	Awarded

Date of Joining : 02 - 01 - 2003

Teaching Experience :

S. No	From DD/ MM / YY	To DD/ MM / YY	Name of the Institution	Total Years
1.	02/01/2003	05/07/2005	Kongunadu Arts and Science College (Autonomous), Coimbatore.	2 years & 6 months
2.	06/07/2005	08/07/2009	Sri Krishna College of Engineering and Technology (Autonomous), Coimbatore.	4 years
3.	09/07/2009	15/07/2010	Arignar Anna Government Arts College, Namakkal.	1 year
4.	16/07/2010	Till date	Thiruvalluvar Government Arts College, Rasipuram.	15 years & 11 months

Research Experience : 23 years 5 months

Topic of Research : Coordination / Solid State Chemistry / Crystallography

Research Guidance :

M.Phil - Awarded	:	24
M.Phil - Ongoing	:	00
Ph.D - Awarded	:	03
Ph.D - Ongoing	:	03

Courses Attended :

S. No	Name of the Course	From DD/MM/YY	To DD/MM/YY	Subject/ Title	Name of the University
1.	Orientation	09/07/2009	05/08/2009		Madras
2.	Refresher	06/09/2011	26/09/2011		Bharathiar
3.	Refresher	04/07/2018	24/07/2018		Bharathiar
4.	Refresher	22/06/2021	06/07/2021		GAD-TLC, under PMMMNMST

Member in Academic/ Editorial Board/ Reviewer in Journals :

1. Life member in Indian Society for Technical Education
2. Reviewer in "Journal of Physics and Chemistry of Solids"
3. Reviewer in "Rasayan Journal of Chemistry"
4. Doctoral Committee member for seven candidates doing Ph.D under Periyar University, Salem.

List of Publication : List enclosed

Papers Presented in Seminars/ Conferences/ National/ International: List enclosed

Participation in Seminar/ Conferences/ Workshop: List enclosed

Books Published: Nil

Seminar and Work shop organized: Nil

Special and Guest Lectures Delivered:

1. Delivered a guest lecture on "Corrosion and Corrosion Control" in Chemistry Association Meeting on 23-02-2011 at N.K.R. Government Arts College (Women), Namakkal.
2. Delivered a guest lecture for Faculty Development Programme at Mahendra Engineering College, Sponsored by Center for Faculty Development Programme – Anna University – Coimbatore on 27-12-2011.
3. Delivered a lecture in National Seminar on “Recent Trends in Biotechnology and Chemistry organized by the Department of Biotechnology and Chemistry, Jairam Arts and Science College, Salem on 25th September 2013.
4. Delivered a Special lecture on "Electronic Spectra" in the Department of Chemistry, Sri Vijay Vidyalaya College of Arts and Science, Dharmapuri on 24-05-2014.
5. Delivered a Guest lecture on "Introduction to Spectroscopy" in the Guest lecture programme held on 06-10-2015 at Sri Balamurugan Arts and Science College, Sathappadi,, Mettur.
6. Delivered a special lecture on "Term Symbols" for UG and PG students of Chemistry on 02-09-2016 at Arignar Anna Government Arts College, Namakkal.
7. Delivered an invited lecture on “Spectroscopy” for the students of chemistry on 31.08.2017 at Shri Sakthikailassh Women’s College, Salem.
8. Delivered a guest lecture in the Chemistry Association “FOTO FASMA-2017” on 11.10.2017 at Paavendhar College of Arts and Science, Attur.
9. Delivered an invited lecture and acted as a resource person for State level seminar on Emerging trends in Group theory and Spectroscopy organised by Department of Chemistry, P.M.P arts and Science College, Dharmapuri on 29.01.2018.
10. Acted as a resource person and delivered a lecture in National Science Day programme organised by Muthayammal Memorial College of Arts and Science, Rasipuram on 27.02.2021.

Research Scholar Details

(Copy of University Guide ship Approval Letter should be enclosed)

S. No	Name of the Research Scholar	Year of Joining	Title of the Project	Awarded/ Ongoing	Remarks
1.	Raja. G	March 2009	Vibrational spectra and conformational stability of organic polyatomic molecules by density functional theory calculations.	Awarded (May 2015)	
2.	Ambika. S	January 2013	Synthesis and characterization of catalytic properties of spinel - type mixed oxides in Co_3O_4 and $\text{Co}(\text{Al}, \text{Fe}, \text{Cr})_2\text{O}_4$.	Awarded (February 2022)	
3.	Yesodha. P	February 2016	Convective heat and mass transfer of chemically reactive fluid flow over a surface with activation energy	Awarded (June 2024)	
4.	Anbarasi. C	February 2017		Ongoing	
5.	Valarmathi. S	Aril 2019		Ongoing	
6.	Savitha. K	Aril 2019		Ongoing	

List of Enclosures

1. List of Publication
2. Papers Presented in Seminars/ Conferences/ National/ International
3. Participation in Seminar/ Conferences/ Workshop

1. List of Publication

1. Dipicolinate complexes of main group metals with hydrazinium cation.
K. Saravanan and S. Govindarajan, *Proc. Indian Acad. Sci. (Chem. Sci.)*, **114**(1) (2002) 25.
2. Preparation and thermal reactivity of hydrazinium 2,n-pyridinedicarboxylates (n = 3,4,5 and 6).
K. Saravanan and S. Govindarajan, *J. Therm. Anal. and Cal.*, **73** (2003) 951.
3. Preparation, characterization and thermal reactivity of divalent transition metal hydrazine pyridine-2,n-dicarboxylates (n = 3,4,5 and 6).
K. Saravanan, S. Govindarajan and D. Chellappa, *Synth. React. Inorg. Met.-Org. Chem.*, **34**(2) (2004) 353.
4. The chemistry of hydrazine derivatives. Bis- and tris(dipicolinate) complexes of lighter lanthanides with hydrazinium cation.
K. Saravanan and S. Govindarajan, *Synth. React. Inorg. Met.-Org. and Nano Metal Chem.*, **35** (2005) 143.
5. One-pot synthesis and crystal structure of diaquabis(hydrazonoglyoxylato) cadmium(II).
S. Yasodhai, V. Gomathi, B. Vinoba and **K. Saravanan**, *Journal of Coordination Chemistry*, **59** (14/20) (2006) 1615 - 1620.
6. Scaled Quantum Chemical Studies of the Structure, Vibrational Spectra and First-Order Hyperpolarizability of 4-Chloro-2-Fluoroaniline.
G. Raja, **K. Saravanan**, S. Sivakumar, M.E. Rajasaravanan and K. Balamurugan, *Int. J. Curent. Res.*, **3** (2010) 46.
7. Studies on Structures, Vibrational Frequencies and First-Order Hyperpolarizability of o-Chlorobenzoyl Chloride based on Density Functional Theory Calculations.
G. Raja, **K. Saravanan**, S. Sivakumar, M.E. Rajasaravanan and K. Balamurugan, *Int. J. Curent. Res.*, **3** (2010) 71.
8. Structure and Vibrational Spectroscopic studies of 1-Naphthol : Density Functional Theory Calculations.

- G. Raja, **K. Saravanan** and S. Sivakumar, *Elixir J. Vibrational Spectroscopy*, **33** (2011) 2208 - 2213.
9. Analysis on vibrational Spectra of Hexafluorobenzene based on Density Functional Theory Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, *Elixir J. Comp. Chem.*, **32** (2011) 2111.
 10. Ab Initio Molecular Orbital and Density Functional Theoretical Studies on 1-Naphtol.
G. Raja, **K. Saravanan** and S. Sivakumar, *Int. J. App. Phy and Mathematics*, **2** (2011) 118.
 11. Density Functional Theory studies on the structure and vibrational assignments of N, N-Dimethylaniline.
G. Raja, **K. Saravanan** and S. Sivakumar, *Elixir J. Comp. Chem.*, **44** (2012) 7341.
 12. Molecular and Electronic Structure of 1-Naphtol : Ab Initio Molecular Orbital and Density Functional Study.
G. Raja, **K. Saravanan** and S. Sivakumar, *App. Mech. and Materials*, **110** (2012) 1862.
 13. Deciphering Structural Fingerprints for Hexafluorobenzene with Density Functional Theory.
G. Raja, **K. Saravanan** and S. Sivakumar, *Asian Journal of Chemistry*, **25**(13) (2013).
 14. Harmonic Analysis of Vibrations of 4-Chloro-2-Fluroaniline: A Scaled Quantum Mechanical Approach.
G. Raja and **K. Saravanan**, *Oriental Journal of Chemistry*, **29**(2) (2013) 631 - 637.
 15. Structure and Vibrational Spectroscopic Studies of 1-Naphthol: Density Functional Theory Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, *Intern. J. Appl. Bioeng.*, **7**(1) (2013) 45.
 16. Structural Investigation on Pharmaceutical Intermediate o-Chlorobenzoyl Chloride: A DFT Approach.
G. Raja, **K. Saravanan** and S. Sivakumar, *Asian Journal of Chemistry*, **26**(3) (2014) 649.
 17. Molecular Structure and Vibrational Analysis of N, N-Dimethylaniline Based on DFT Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, *International Journal of ChemTech Research*, **7**(6) (2014) 2665 - 2668.

18. Reaction of Hydrazine Hydrate with Oxalic Acid: Synthesis and Crystal Structure of Dihydrazinium Oxalate.
R. Selvakumar, T. Premkumar, V. Manivannan, **K. Saravanan** and S. Govindarajan, *S. Afr. J. Chem*, **67** (2014) 52.
19. Quantum Chemical and Corrosion Inhibition Studies of an Organic Compound: 2,5 - Dichloroaniline.
G. Raja, **K. Saravanan** and S. Sivakumar, *Rasayan J. Chem.*, **8** (2015) 8.
20. Quantum Chemical and Investigations on Benzene Derivative: A DFT Study.
G. Raja, **K. Saravanan** and S. Sivakumar, *Rasayan J. Chem.*, **8** (2015) 37.
21. Structural, Optical and Catalytic Properties of CoAl_2O_4 Toward Liquid Phase Oxidation of Benzyl Alcohol.
S. Ambika, T. A. Sukantha, **K. Saravanan**, S. Gopinath, and P. Pachamuthu, *Advanced Science, Engineering and Medicine*, **9(5)**, (2017) 432 - 438.
22. Microwave combustion method: Effect of starch, urea and glycine as processing fuels in the Co_3O_4 nanostructures.
G. Raja, R. Saranya and **K. Saravanan**, *Optik-International Journal for Light and Electron Optics*, **153** (2018) 73.
23. Spectral and thermal studies on bivalent transition metal complexes of oxalic acid with morpholine.
C. Anbarasi, S. Kokila and **K. Saravanan**, *J. Environ. Nanotechnoogy*, **7 (3)** (2018) 18 - 21.
24. Preparation and characterization of nanocopper ferrite and its green catalytic activity in alcohol oxidation reaction.
S. Ambika, S. Gopinath, **K. Saravanan**, K. Sivakumar and T. A. Sukantha, *Journal of Superconductivity and Novel Magnetism*, **32(4)** (2019) 903 - 910.
25. Structural, morphological and optical properties and solar cell applications of thioglycolic routed nano cobalt oxide material.
S. Ambika, S. Gopinath, **K. Saravanan**, K. Sivakumar and C. Ragupathi, *Energy Reports*, **5** (2019) 305.
26. Improved catalytic performance of cobalt oxide for selective oxidation of benzyl alcohol.
S. Gopinath, G. Kumar, S. Narayanan, C. Ragupathi, S. Shravan Kumar, K. Sivakumar, **K. Saravanan** and S. Ambika, *SN Applied Sciences*, (2019) 1:520.
27. Spinel-Type Cobalt Oxide Nanoparticles: Synthesis, Characterization and Antibacterial Properties.

- S. Ambika, S. Gopinath, K. Sivakumar and **K. Saravanan**, *Advanced Science, Engineering and Medicine*, **12(7)** (2020) 859 - 863.
28. An Innovative Synthesis of Spinel-Structured and Ferromagnetic Behaviour of Fe_3O_4 Nanoparticles Antibacterial and Catalytic Activity Evaluated in the Selective Oxidation.
S. Ambika and **K. Saravanan**, *Sensor Letters*, **18(3)** (2020) 236 – 240.
29. Convective heat and mass transfer of chemically reacting fluids with activation energy along with Soret and Dufour effects.
P. Yesodha, M. Bhuvaneswari, S. Sivasankaran and **K. Saravanan**, *Materials Today Proceedings*, (2020)
30. Synthesis, Characterisation and Antimicrobial Studies of Triazolo – Acridinedione Derivatives
P. Shanmugasundaram, R. Sujatha, M. Vijey Aanandhi, **K. Saravanan** and P. Subbramanian, *High Technology Letters*, **27 (4)** 2021 89 – 97.
31. Convective mass and heat transfer of chemically reacting fluids with activation energy with radiation and heat generation.
P. Yesodha, M. Bhuvaneswari, S. Sivasankaran and **K. Saravanan**, *J. Thermal Engg.* **7(5)** (2021) 1130 - 1138.
32. Microwave Assisted Chemical Modification of Graphite Oxide for Supercapacitor Application
R. Siddharthan, P. Mahalingam, E. Kanagaraj, and **K. Saravanan**, *Asian Journal of Chemistry*, **33(11)** (2021) 2621 - 2625.
33. Growth and characterizations of pure and co doped piperazinium L-tartrate single crystals (PPLT) single crystals: Optical and NLO properties.
K. Savitha and **K. Saravanan**, *Journal of Crystal Growth*, **582** (2022) 126529.
34. Growth and characterizations of pure and Cu-doped imidazolium L-tartrate (IMLT) single crystals: optical and NLO properties
S. Valarmathi and **K. Saravanan**, *J. Mater Sci: Mater Electron*, **33** (2022) 7573 – 7586.
35. Synthesis, characterisation and antimicrobial evaluations of acetyloxyphenyl-1,2,3-triazolotetramethyl hexahydroacridinediones
P. Shanmugasundaram, R. Sujatha, M. Vijey Aanandhi, **K. Saravanan** and P. Subbramaniyan, *Rasayan Journal of Chemistry*, **15(2)** (2022) 946 - 953.
36. Effect of L-proline dopant on structural, optical, dielectric, and NLO properties of imidazolinium L-tartrate (IMLT) single crystals

- S. Valarmathi and **K. Saravanan**, *J. Mater Sci: Mater Electron*, **33** (2022) 18686 – 18698.
37. Impact of nickel doping on structural, optical, electrical, and third-order NLO behavior of piperazinium L-tartrate single crystals.
- K. Savitha and **K. Saravanan**, *Journal of Materials Science: Materials in Electronics*, **33(7)** (2022) 19174 – 19186.
38. Copper(II), Cobalt(II), Nickel(II) And Zinc(II) Complexes Obtained From Dipicolinic Acid And Morpholine: Synthesis, Characterization, Biological Evaluation And In Silico Studies.
- C. Anbarasi and **K. Saravanan**, *NeuroQuantology*, **20 (14)** (2022) 448 – 455.
39. MHD Darcy-Forchheimer Flow of Chemically Reacting Fluids Inrotating Frame with Nonlinear Radiation and Activation Energy.
- P.Yesodha and **K.Saravanan**, *Eur. Chem. Bull.* **12** (2023).
40. Synthesis, Characterization, In-Silico Drug Discovery And In-Vitro Biological Evaluation Of Morpholinium 2, 6-Pyridine Dicarboxylate
- C. Anbarasi, P. Shanmugasundaram and **K. Saravanan**, *Journal of Pharmaceutical Negative Results*, **14(1)** 2023.
41. Synthesis, Characterization, In-Silico Drug Discovery And In-Vitro Biological Evaluation Of Morpholinium Chelidamate Salts.
- C. Anbarasi, P. Shanmugasundaram and **K. Saravanan**, *Journal of Harbin Engineering University*, **44 (7)** (2023).
42. Synthesis, growth, and characterization of methyl orange dye-doped imidazolium L-tartrate (IMLT) single crystal and its multifaceted activities
- S. Valarmathi, **K. Saravanan** and M. Nagoor Meeran, *Journal of Materials Science: Materials in Electronics* **35(9)** (2024) 35:628
43. Investigations on Mo dye-doped PPLT single crystals for possible non-linear optical applications.
- K. Savitha, **K. Saravanan** and K. Sukanandam, *Journal of Materials Science: Materials in Electronics* **35(10)** (2024) 35:718
44. Copper(II), Cobalt(II), Nickel(II) and Zinc(II) complexes obtained from Chelidamic Acid and Morpholine: Synthesis, Characterization, Biological Evaluation And In Silico Studies
- C. Anbarasi and **K. Saravanan**, *Afr. J. Biomed. Res.* **27(3s)** (2024) 3981 – 3994.

2. Papers Presented in Seminars/ Conferences/ National/ International

International

1. Harmonic analysis of Vibrations of 4-Chloro-2-Fluoroaniline: A SQM approach.

G. Raja and **K. Saravanan**, International Conference on Recent Frontiers in Applied Spectroscopy Organised by Department of Physics, Annamalai University, Chidambaram during 22nd - 24th September 2010.

2. Molecular and electronic structure of 1-Naphthol: Ab initio molecular and density functional study.

G. Raja, **K. Saravanan** and S. Sivakumar, IEEE Sponsored International Conference on Applied Physics and Mathematics Organised by Department of Electronics and Communication Engineering RMK Engineering College, Chennai on 29th and 30th April 2011.

3. Quantum Chemical Investigations on Benzene Derivative.

G. Raja, **K. Saravanan** and S. Sivakumar, International Conference on Nanoscience and Nanotechnology Organised by Coimbatore Institute of Technology, Coimbatore jointly with Centre for Research and Advanced studies of IPN-Mexico during 6th - 8th July 2011.

4. Electronic Properties of Hexafluorobenzene using Quantum Chemical DFT. G. Raja, **K. Saravanan** and S. Sivakumar International Conference on Nanoscience, Engineering and Technology, Organised by Sathyabama University, Chennai during 28th – 30th November 2011.

5. Deciphering Structural Fingerprints for 1-Naphthol with Density Functional theory.

G. Raja, **K. Saravanan** and S. Sivakumar International Conference on Advanced Materials, Organised by Department of Physics PSG College of Technology, Coimbatore during 12th – 16th December 2011.

6. Structural Investigation on Pharmaceutical Intermediate: *O*-Chlorobenzoyl Chloride.

G. Raja, **K. Saravanan** and S. Sivakumar, Second International Conference on Challenges in Biotechnology and Food Technology, Organised by Department of Chemical Engineering Annamalai University, Chidambaram on 9th and 10th January 2012.

7. Structural, Vibrational spectroscopic and hyperpolarizability studies on *O*-Chlorobenzoyl Chloride: Density Functional theory calculations.

G. Raja, **K. Saravanan** and S. Sivakumar International Conference on Biological inorganic Chemistry, Organised by Department of Chemistry Periyar University, Salem during 20th – 22nd February 2013.

8. Biosynthesis of bimetallic Nanoparticles for SERS studies of selective Heterocyclics.

S. Ambika, S. Gopinath, **K. Saravanan**, K. Sivakumar and B. Karthikeyan, International Symposium on Research Innovation for Quality Improvement in Higher Education held at Research and Development Centre, Bharathiar University, Coimbatore on 10th and 11th October 2014.

National

1. Dipicolinate Complexes of divalent metal ions with hydrazine.

K.Saravanan, and S.Govindarajan, National conference on recent research in coordination chemistry held at Regional Engineering College, Tiruchirappalli on March 4 & 5, 1999.

2. Dipicolinate complexes of trivalent lanthanides with hydrazinium cation.

K.Saravanan, and S.Govindarajan, 19th Conference of Indian Council of Chemists held at Kuvempu University, Shimoga from November 27-29, 2000.

3. Preparation and thermal reactivity of hydrazinium pyridinedicarboxylates.

K.Saravanan, and S.Govindarajan, National Seminar on Metallo-Organic Chelates and Recent advances in Advanced Chemical research (NSMCRAC-2001) held at Presidency College (Autonomous), Chennai on February 9 & 10, 2001.

4. Dipicolinate complexes of main group metals with hydrazinium cation.

K.Saravanan and S.Govindaran. 20th Conference of Indian Council of Chemists held at Mysore University, Mysore from December 22-24, 2001.

5. Development of peptide incorporated aspirin derivatives from detrimental side effects.

S.S.Ilango, H.C.Renukeshwar and **K.Saravanan**, Regional symposium on Current Research Trends in Chemistry held at Kongunadu Arts and Science college (Autonomous), Coimbatore – 641029 on 10th September 2004.

6. Development of aspirin derivatives incorporated with peptides as antinociceptive agents divorced from detrimental side effects.

- S.S.Ilango, H.C.Renukeshwar and **K.Saravanan**, Second Regional CRSI Symposium in Chemistry held at Bharathidasan University, Trichy-24 on January 7 & 8, 2005.
7. Dipicolinate complexes of main group metal ions with piperazinium cation. P.Dhanakodi, N.Jagatheeswari and **K.Saravanan**, Second Regional CRSI Symposium in Chemistry held at Bharathidasan University, Trichy-24 on January 7 & 8, 2005.
 8. Dipicolinate complexes of transition metal ions with piperazinium cation. N.Jagatheeswari, P.Dhanakodi and **K.Saravanan**, Second Regional CRSI Symposium in Chemistry held at Bharathidasan University, Trichy-24 on January 7 & 8, 2005.
 9. Dihydrazinium mixed metal malonate dehydrates – New precursors for nanocrystalline metal cobaltites.
V. Yasodha, B.N.Sivasankar, **K.Saravanan** and S.Govindarajan, National seminar on Recent advances in Nanoscience and Technology held at Periyar University, Salem – 11 on September 29 & 30, 2005.
 10. Quantum Chemical and Corrosion Inhibition Studies of an Organic Compound: 2,5 Dichloroaniline.
G. Raja, **K. Saravanan** and S. Sivakumar, National Conference on Corrosion Assessment and its Control, Organised by Thiagarajar College of Engineering, Madurai on 21st and 22nd December 2009.
 11. Structures and Vibrational studies on 4-Chloro-2-Fluoroaniline of Density Functional Theory Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, UGC National Level Seminar on Glimpses of Materials Science, Organised by Sri Sarada College for Women, Salem on 1st February 2010.
 12. Structure and Vibrational Spectroscopic studies of 1-Naphthol: Density Functional Theory Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, National Conference on Recent Advances in Materials and Methods of Chemistry, Organised by SRM University, Chennai on 2nd February 2010.
 13. Density Functional Theory Calculations of O-Chloro Benzoyl Chloride.
G. Raja, **K. Saravanan** and S. Sivakumar, National Conference on Computational Applications in Chemistry, Organised by Vinayaka Missions University, Salem on 4th and 5th February 2010.

14. Simulation of IR and Raman spectral based on scaled DFT force fields: A case study of *O*-Chloro Benzoyl Chloride with emphasis on band assignment and first order hyperpolarisability studies.
G. Raja, **K. Saravanan** and S. Sivakumar, National Conference on Mathematical, Theoretical and Computational Chemistry, Organised by Department of Mathematics, Madura College, Madurai on 29th and 30th March 2010.
15. First-order Hyperpolarisability Calculations and Structure Confirmation of OCBC Based on DFT Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, 98th Indian Science Congress on Chemical Sciences Section Organised by Indian Science Congress Association and SRM University, Chennai during 3rd -7th January 2011.
16. Deciphering Structural Fingerprints for Hexafluorobenzene with DFT.
G. Raja, **K. Saravanan** and S. Sivakumar, A Chennai Chemistry Conference on Recent Trends in Chemistry Organised by Department of Chemistry Indian Institute of Technology, Chennai during 11th -13th February 2011.
17. Analysis on Structural Fingerprints of Hexafluorobenzene Based on DFT Calculations.
G. Raja, **K. Saravanan** and S. Sivakumar, National Conference on New Renaissance in Chemical Research Organised by Department of Chemistry SRM University, Chennai on 4th March 2011.
18. Quantum Chemical Investigations on Benzoyl Chloride Derivatives.
G. Raja, **K. Saravanan** and S. Sivakumar, A Second National Conference on Multifunctional Nanomaterials and Nanocomposites Organised by Department of Nanoscience and Technology, Bharathiar University, Coimbatore on 24th and 25th March 2011.
19. Structural, Vibrational spectroscopy and hyperpolarizability studies on 4-Chloro-2-Fluoroaniline: An ab initio and DFT approach.
G. Raja, **K. Saravanan** and S. Sivakumar, National Conference on Exploring the Frontiers of Vibrational Spectroscopy, Organised by Department of Physics Womens Christian College, Nagercoil on 1st and 2nd September 2011.
20. Nanometal Surface Complexes of Ketal and Diketal.
S. Ambika, S. Gopinath, **K. Saravanan**, K. Sivakumar and B. Karthikeyan, National Seminar on Recent Advances on Luminescent Materials held at Department of chemistry, Annamalai University, Annamalai Nagar,

Chidambaram on 23rd and 24th January 2015.

21. Bimetallic Nanoparticles interaction with selective Drugs DFT Study.

S. Ambika, S. Gopinath, **K. Saravanan**, K. Sivakumar and B. Karthikeyan, National conference on Recent Trends in Medicinal Chemistry held at Government Arts College, Coimbatore on 20th February 2015.

22. Understanding the Nanostructure formations in Proteins.

S. Gopinath, S. Ambika, K. Sivakumar **K. Saravanan**, S. Ramesh and B. Karthikeyan, National Seminar on Recent Trends in Organic Synthesis and Chemical Biology held at Department of Chemistry, Annamalai University, Annamalai Nagar, Chidambaram during 09th and 10th October 2015.

3. Participation in Seminar/ Conferences/ Workshop

1. National conference on recent research in coordination chemistry held at Regional Engineering College, Tiruchirappalli on March 4 & 5, 1999.
2. 19th Conference of Indian Council of Chemists held at Kuvempu University, Shimoga from November 27-29, 2000.
3. National Seminar on Metallo-Organic Chelates and Recent advances in Advanced Chemical research (NSMCRAC-2001) held at Presidency College (Autonomous), Chennai on February 9 & 10, 2001.
4. 20th Conference of Indian Council of Chemists held at Mysore University, Mysore from December 22-24, 2001.
5. Regional symposium on Current Research Trends in Chemistry held at Kongunadu Arts and Science college (Autonomous), Coimbatore – 641029 on 10th September 2004.
6. Indian Academy of Sciences, Bangalore conducted Workshop on Spectroscopy and its Application held at Kongunadu Arts and Science College (Autonomous), Coimbatore on 26th and 27th February, 2005.
7. National Seminar on Biodiversity - Status, Conservation and Management, sponsored by Indian Science Congress Association, Kolkata and organised by P. G. and Research Department of Botany, Kongunadu Arts and Science College (Autonomous), Coimbatore, held on September 12th and 13th, 2008.
8. DRDO sponsored National Level Workshop on “Recent Trends in Applications of Nanoscience in Corrosion Control” held on 20th November 2010 at Kongu Engineering College, Perundurai, Erode.

9. CSIR sponsored National Seminar on “Applications of Polymer Nanocomposite Materials in Various Fields” held on 16th July 2011 at Kongu Engineering College, Perundurai, Erode.
10. State Level Seminar on “Recent Trends in Chemistry” organized by PG & Research Department of Chemistry, Government Arts College (Autonomous) Salem on March 14, 2011.
11. “National Conference on Emerging Trends in Chemistry” organized by the PG and Research Department of Chemistry, Bishop Heber College (Autonomous), Tiruchirappalli on 11 January 2012.
12. Workshop on “Electrophoretic Techniques” organized by the Department of Biochemistry, Muthayammal College of Arts & Science, Rasipuram on 29th February, 2012.
13. National Seminar on “Recent Trends in Biotechnology and Chemistry” organized by the Department of Biotechnology and Chemistry, Jairam Arts and Science College, Salem on 25th September 2013.
14. National conference on "Recent Trends in Medicinal Chemistry" organized by the Department of Chemistry, Government Arts College (Autonomous), Coimbatore on 20th February 2015.
15. UGC Sponsored State Level Seminar in Chemistry organized by Department of Chemistry, Government Arts College (Autonomous), Salem on February 19, 2016.
16. Workshop on Corrosion and its Control Organised by National Corrosion Council of India in collaboration with CSIR - Central Electrochemical Research Institute, Karaikudi and PSGR Krishnammal College for Women, Coimbatore held at PSGR Krishnammal College for Women, Coimbatore on June 30 and July 1, 2016.
17. One day National Level Seminar on Green Chemistry in Organic Synthesis organized by Department of Chemistry, Namakkal Kavignar Ramalingam Government Arts College for Women, Namakkal on September 28, 2016.
18. National Seminar on The Progress of Carbon Nanomaterials Research organised by Department of Physics, Thiruvalluvar Government Arts College, Rasipuram on October 20, 2016.
19. National Conference on Recent Trends in Materials Science organised by Department of Physics, Thiruvalluvar Government Arts College, Rasipuram on January 25, 2017.

20. Third National Seminar on Advanced Oxidation Processes organised by Department of Chemistry, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli during 17th to 19th December 2017.
21. One day State Level Seminar on Recent Developments in Chemistry and Nano Science organised by PG and Research Department of Chemistry, Arignar Anna Government Arts College, Namakkal on 05.01.2018.
22. International Symposium on Nanotechnology - A leap in Materials Science organised by the Department of Chemistry, Sri Sarada College for Women (Autonomous), Salem on 19.01.2018.
23. International Conference on Recent Trends in Synthetic methods and Medicinal Chemistry organised by Department of Chemistry, Annamalai University, Annamalai Nagar during 2nd and 3rd February 2018.
24. International Conference on Novel Materials for Energy, Engineering and Biological Applications organised by Department of Science and Humanities, M. Kumarasamy College of Engineering, Karur on 09.04.2019.
25. International Conference on Functional Materials for Bio-Energy, Green Technology and Environmental Sustainability organised by PG Department of Physics and Chemistry, ISTA and Organization of Elavenil on 08.08.2019.
26. A Two Day National Conference on Emerging Materials and Nanotechnology organised by PG and Research Department of Physics, Thiruvalluvar Government Arts College, Rasipuram on 28th and 29th February 2020.
27. Two day FDP on Design, Develop and Deliver online courses through MOODLE platform conducted by TANSCH with technical support of DOTE, Tamilnadu on May 29 & 30, 2020 through online mode.
28. One week FDP on Advanced Materials Research organised by Bharat Institute of Engineering and Technology, Chennai and Indian Ceramic Society from 15th June to 19th June 2020.
29. International virtual conference on Advanced Materials for Energy and Environmental Applications organised by International Relationship Centre, Bharathidasan University, Tiruchirappalli during 26-27th June 2020.
30. Indo-Korea virtual conference on Development of Advanced Materials for Future Technologies jointly organized by Jeonbuk National University, Jeonju, South Korea and Vellore Institute of Technology, Vellore during 9th and 10th July 2020.

31. Two day online FDP on Virtual Teaching Learning Experience organized by Department of Chemistry, PSG college of Technology, Coimbatore, during 29th and 30th July 2020.
32. One day Professional Development Workshop for Science Stream Research Supervisors of Periyar University on Quality Framework in Science Stream Doctoral Research organized by SWAYAM cell, Periyar University, Salem on 03.11.2020.
33. 2020 Second International Conference on Recent Advances in Materials and Manufacturing held at Department of Mechanical Engineering, Velalar College of Engineering and Technology, Erode during 20 - 21 November 2020.