Academic Career Profile of

Dr. Sepperumal Murugesan

Professor and Head, Department of Inorganic Chemistry,
Chairperson, School of Chemistry, Madurai Kamaraj University,
Mobile:+91-9444451460
email: murugesan.chem@mkuniversity.ac.in / smsan@mail.com

Educational Qualifications

Name of Degree	University	Year of passing	Division/ class/ grade	Main subject
B.Sc.	Bharathidasan University	April 1991	I Class	Chemistry
B.Ed	Annamalai University	May 1993	II Class	English & Physical Science
M.Sc.	Bharathidasan University	April 1995	I Class	Chemistry
Ph.D	University of Madras	April 2003	Highly Commented	Chemistry-Energy Interdisciplinary

DoB: 05.02.1971

Date of Retirement: 04.02.2031

Professional Experience

No	Institution	Position	From (date)	To (date)
1	Madurai Kamaraj University	Professor and Head	01.07.2019	Till date
2	Madurai Kamaraj University	Professor	31.05.2016	30.06.2019
3	Madurai Kamaraj University	Associate Professor	16-07-2010	30.05.2016
4	Madurai Kamaraj University	Reader	16-07-2007	15-07-2010
5	Royal Institute of Tech., Sweden	Visiting Researcher	31.08.2005	13.07.2007
6	SRM University, Chennai	Lecturer	21.07.2004	27.08.2005
7	Dept of Energy, University of Madras	CSIR Res. Assoc.	01.05.2003	31.05.2004

Research Guidance/Supervision

Program	Completed	Ongoing
Ph.D	12 (Twelve)	5 (Five)
M.Phil.	11 (Eleven)	---

Major Research Projects

S No	Title of research project	Funding agency and Period	Total grants received (Rs.)
1	Study of detergent based nanocomposite solid electrolytes for dye-sensitized solar cells	DST-SERB, (2012 – 2015)	26.60 Lakh
2	Investigation of New Hole Transporting Materials for Efficient Perovskite Organic-Inorganic Hybrid Solar Cells	DST, Technology Mission (2016 – 2019)	23.36 Lakh
3	Development of Functional Nanomaterials for Green Energy and Environment	RUSA, MHRD- Gov't of India & RUSA-Gov't of Tamil Nadu (2021 – 2024)	152.58 Lakh

Research Specialization

Nanomaterials for photocatalytic applications
Dye-sensitized Solar Cells, Photoelectrochemistry
Nanomaterial-biomolecule interactions

Patents:

P. Maruthamuthu, B. Muthuraaman, S. Ganesan, S. Anandan, **S. Murugesan**, J. Madhavan, S.A. Suthanthiraraj, An improved solid-state polymer composition; A process for its preparation and an improved dye-sensitized solar cell, Patent No. 266300 (2728/CHE/2007) dt. 22.11.2007

Research Collaborations

Name of the Collaborator	Institute	Collaboration Details
Dr. S. Anandan	NIT, Tiruchirappalli	Research Collaboration
Prof. R.V. Mangalaraja	University of Concepcion, Chile	Research Collaboration
Prof. Hector Valdés	Catholic University of Santísima, Concepción, Chile	Research Collaboration
Prof. Panagiotis G. Smirniotis	University of Cincinnati, USA	Research Collaboration
Prof. M. Selvaraj	King Khalid University, Saudi Arabia	Research Collaboration
Dr. J. Madhavan	Thiruvalluvar University, Vellore	Research Collaboration

Countries Visited: Australia, Singapore, Sweden and Chile

Honors/ Awards/ Recognitions

Visiting Researcher award – Royal Inst. of Tech., Stockholm, Sweden, 2005 to 2007
Active reviewer for 28 Elsevier Sci. Journals, Two ACS and Two Taylor & Francis Journals
Outstanding Contribution to Reviewing Award from 7 Elsevier Science Journals.
Fellow of Academy of Sciences, Chennai

Conference/Seminar/Workshop organized

Name of Conference/Seminar	Date(s)	Place	Role Played
Intnl. Conf. on Recent Trends in Chemistry and Biosciences	16-17 May, 2019	Madurai Kamaraj University	Co-Convener
Nanomaterials Characterization by Electron Microscopy	21-22 Feb, 2018	Madurai Kamaraj University	Convener
Trnasmission Electron Microscopy	7-8 Jan, 2016	Madurai Kamaraj University	Organizing Secretary
Recent Advances in Inorganic and Nanochemistry	29-30 Mar, 2010	Madurai Kamaraj University	Organizing Secretary

Administrative Experience

Role Played	Responsibilities	Period
Dean – Faculty of Science, MKU	Planning/Scrutiny - academic works	Dec 2023 – till date
Management Committee Member – ANJA College Sivakasi & NMSVN College, Madurai	Colleg managent activities	May 2023 – till date
Member – AC and Senate, MKU	Planning/approval–academic/Admin	May 2019 – till date
Coordinator, Central Instrumentation Centre, MKU	Maintaining HRTEM, SEM, TG/DSC, etc., Instruments	May 2019– Till date
Director, IQAC, MKU	IQAC related -NAAC, AQAR, etc	July 2021 – July 2023
Member IQAC & Coordinator, MKU-NIRF	Consolidation and submission of MKU data to NIRF, New Delhi	Oct 2018 – Dec 2020
Programm Implementation Group Member, DST-PURSE-MKU	Implementation of DST-PURSE at MKU	Oct 2016 – Sep 2022
Member, Admission Monitoring Committee, MKU	Monitoring the PG and M.Phil Admission of MKU 2018-19	2018-19, 2022-2023
Awards Committee Member (Madurai Instt. of Social Sci, Madurai & EMG Yadava Women's College, Mdu)	Scrutiny and approval of Examination results	April 2019-Apr 2022

Membership in Academic Bodies

Member, Board of studies, Sri Kaliswari College (Autonomous), Sivakasi, May 2019 onwards
Member, Board of studies (UG), Mannar Thirumalai Naicker College, Madurai, May 2019 onwards
Member, Board of studies (MPhil), S.R. Naidu Memorial College, Sattur, May 2019 onwards
Member, Board of studies (PG & MPhil), School of Chemistry, MKU, July 2007 – till date
Member, Board of studies (PG), Mother Teresa University, Kodaikanal, Aug 2013 to July 2015.
Chairman, PG Chem Qn Setting Board, Bharathidasan Uni. Tiruchirappalli. Apr 2016- Nov 19

Membership in professional bodies

Fellow of Academy of Sciences, Chennai
Silver Member of the International Solar Energy Society
Member of the Indian Society for Radiation and Photochemical Sciences
Member of International Solid State Ionics Society
Member of Indian Solid State Ionics Society

Research Publications Metrics

Articles in International Journals (Indexed): **105**

Articles in National Journals (Refereed): **05**; Papers Presented in Conferences/Seminars: 35

Cumulative Impact Factor: 480.75

Total Citations: 2376

h-Index: 24

i10-Index: 68

Google Scholar page: scholar.google.com/citations?hl=en&user=3t2bgsAAAAAJ&view_op=list_works

List of Publications

Published in International Journals (Indexed)

1. M Kandasamy, A.H Seikh, S Suresh, A Kumar, A Husain, P Vijayakumar, TT Dele-Afolabi, N Pugazhenthiran, S Murugesan, M.N.M Ansari, Fabrication of ternary zinc-nickel-copper oxide microsphere nanocomposite photoanode material for boosting dye-sensitized solar cell efficiency, J. Alloys and Compounds, 2024, **1000**, 175039. Imp. Fac. 5.8

2. M Kandasamy, A Husain, S Suresh, J Giri, D.J Jasim, P Rameshkumar, H.A Al-Lohedan, S Thambidurai, N Kumar, M.N.M Ansari, S Murugesan, Enhanced dye-sensitized solar cell performance and electrochemical capacitive behavior of bi-functional ZnO/NiO/Co3O4 ternary nanocomposite prepared by chemical co-precipitation method, J. Science: Advanced Mater. and Devices, 2024, **9,** 100726. I.F. 6.7

3. M. Kandasamy, S. Suresh, M. Deepan Kumar, S. Murugesan, M. Selvaraj, K. Prem Ananth, Niraj Kumar, Ahmad Husain, N. Pugazhenthiran, P. Sathishkumar, M.N.M. Ansari, Combined experimental and DFT investigation on photovoltaic performance of low-cost metal-free organic dye-sensitized solar cells, Inorg. Chem. Commun., 2024, **164,** 112406. Imp. Fac. 4.4

4. R Rajendiran, P Balla, R Balaga, M Selvaraj, V Perupogu, S Murugesan, U Lassi, P.K Seelam, MnO_2 shape dependent catalytic activity in vapour phase benzyl alcohol (BnOH) oxidation in presence of air, Chemical Engineering Science, 2024, **285,** 119641. Imp. Fac. 4.1

5. M Kandasamy, S Suresh, A El-marghany, N Pugazhenthiran, S Karthick Kumar, S Murugesan, M.N.M Ansari, Plasmonic silver nanoparticles anchored ethylenediamine-titania nanobelt composite photoanode for efficient electron transport in dye-sensitized solar cell, Mater. Res. Bull., 2024, **171,** 112602. I.F. 5.3

6. H Muniyasamy, M.K Aravind, M Arunkumar, B Ashokkumar, S Murugesan, A Siva, Pharmacophore-based synthesis of pyrazole analogues as artificial antibiotics targeting Salmonella Typhi, J Mol. Structure, 2024, **1296,** 136801. Imp. Fac. 3.8

7. N Murugesan, S Suresh, M Kandasamy, S Murugesan, N Pugazhenthiran, V.P Venkatesh, B.K Balachandar, S Karthick Kumar, M.N.M Ansari, Facile dip-coating assisted preparation of reduced graphene oxide-copper oxide nanocomposite thin films on aluminum substrate for solar selective absorber, Physica B, 2023, **669,** 415288. Imp. Fac. 2.8

8. N Malini, S Murugesan, A Siva, Design and Development of Fluorescent Chemosensors for the Recognition of Biological Amines and Their Cell Imaging Studies, Biosensors Nanotechnology, Scrivener Publishing LLC, 2023, 245-266. (Book Chapter)

9. K Kumar, S Murugesan, T Muneeswaran, C.M Ramakritinan, Investigation of some new main group metal complexes of hydrazine and 2-mercaptopyridine-3-carboxylic acid mixed–ligands, J. Heterocyclic Chemistry, 2023, **60,** 1447-1457. Imp. Fac. 2.0

10. K Karupiah, N Malini, C Muniyappan, C Yesudhasan, S Murugesan, J.R Rajabathar, M Karnan, A Siva, M Selvaraj, A novel hydrazone platform for the recognition of Cd^{2+} and F^{-} ions: Imaging analysis in Zebrafish embryos, J Mol. Structure, 2023, **1282,** 135152. Imp. Fac. 3.8

11. N Murugesan, S Suresh, S Murugesan, BK Balachandar, M Kandasamy, N Pugazhenthiran, J Selvi, P Indira, S Karthick Kumar, Improving selectivity of thin film solar absorber by cobalt oxide grafted reduced graphene oxide, Optical Materials, 2023, **138,** 113629 Imp. Fac. 3.8

12. P Sasikala, T Bavani, M Selvaraj, M Preeyanghaa, B Neppolian, S Murugesan, J Madhavan, A Z-scheme $BiYO_3$/g-C_3N_4 heterojunction photocatalyst for the degradation of organic pollutants under visible light irradiation, Environmental Science and Pollution Research, 2023, **30,** 41095–41106. I.F. 5.19

13. R Sasikala, M Kandasamy, S Suresh, V Ragavendran, V Sasirekha, N Pugazhenthiran, S. Murugesan, S Alex Pandian M.N.M Ansari, J Mayandi, Strontium titanate perovskite embedded reduced graphene oxide photoanode for dye-sensitized solar cell, Optical Materials, 2023, **136,** 113464. Imp. Fac. 3.8

14. S Arumugam, T Bavani, M Selvaraj, B.M Al-Shehri, M Preeyanghaa, S Jung, J Theerthagiri, B Neppolian, S Murugesan, J Madhavan, M Yong Choi, Construction of direct $FeMoO_4$/g–C_3N_4–2D/2D Z-scheme heterojunction with enhanced photocatalytic treatment of textile wastewater to eliminate the toxic effect in marine environment, Chemosphere, 2023, **313**, 137552. Imp. Fac. 8.1.

15. N. Pugazhenthiran, P. Sathishkumar, Omeer Albormani, S. Murugesan, M. Kandasamy, M. Selvaraj, S. Suresh, S. Karthick Kumar, D. Contreras, H. Váldes, R.V. Mangalaraja, Silver nanoparticles modified ZnO nanocatalysts for effective degradation of ceftiofur sodium under UV–vis light illumination, Chemosphere, 2023, **313**, 137515. Imp. Fac. 8.1.

16. K Kumar, S Murugesan, T Muneeswaran, C.M Ramakritinan, Synthesis, characterization, and biological activities of five new trivalent lanthanide complexes of hydrazine and 3, 3'-thiodipropanoic acid, Current Chemistry Letters, 2023, **12,** 721-732. Imp. Fac. NA

17. S Karthick Kumar, S Murugesan, S Suresh, Anodization assisted preparation of diverse nanostructured copper oxide films for solar selective absorber, Optical Materials, 2023, **135,** 113304 Imp. Fac. 3.8

18. T. Bavani, J. Madhavan, M. Preeyanghaa, B. Neppolian, S. Murugesan, Construction of direct Z-scheme g-C_3N_4/$BiYWO_6$ heterojunction photocatalyst with enhanced visible light activity towards the degradation of methylene blue, Environmental Science and Pollution Research, 2023, **30,** 10179–10190. I.F. 5.19

19. E Vimali, N Sakthi Vignesh, M Kandasamy, S Murugesan, A Dhakshinamoorthy, M Arumugam, I.M Ganesh Moorthy, B Ashokkumar, P Varalakshmi, Influence of Food Waste and Graphene Oxide Nanosheets on Monoraphidium sp. VV1 Biomass and Biodiesel Production, Topics in Catalysis, 2022,. Imp. Fac. 2.8.

20. S.R Rubina, S Indhu Leka, K Sathya Priya, R Ranjith Kumar, S Murugesan, One-Pot Three-Component Domino Synthesis of Isoxazolo[5,4-b]pyrano[2,3-f]quinolines: An Efficient Fluorescent Turn-off Chemosensor for Picric Acid, ChemistrySelect, 2022, **7**, e202203902. Imp. Fac. 1.9.

21. S.R. Rubina, P.H. Stalin, C.S. Meenatchi, S. Murugesan, R. Ranjith Kumar, Synthesis of epiminocyclohepta[b]pyrazolo[4,3-e]pyridines from tropinone: Fluorescent "Turn on–off" chemosensors for the sequential detection of Al^{3+}, Cd^{2+} and Pb^{2+} in nanomolar concentration, J. Mol. Structure, 2022, **1269**, 133724. Imp. Fac. 4.0 .

22. R. Sasikala, M. Kandasamy, V. Ragavendran, S. Suresh, V. Sasirekha, S. Murugesan, S. Sagadevan, J. Mayandi, Perovskite zinc titanate-reduced graphene oxide nanocomposite photoanode for improved photovoltaic performance in dye-sensitized solar cell, Physica B, 2022, **646,** 414300. Imp. Fac. 2.8

23. S. Arumugam, T. Bavani, M. Preeyanghaa, S.O. Alaswad, B. Neppolian, J. Madhavan, S. Murugesan, A facile synthesis of visible light driven $Ni_3V_2O_8$ nano-cube/$BiVO_4$ nanorodcomposite photocatalyst with enhanced photocatalytic activity towards degradation of acid orange 7, Chemosphere, 2022, 308, 136100. Imp. Fac. 8.1.

24. N Murugesan, S Suresh, M Kandasamy, S Murugesan, N Pugazhenthiran, S Karthick Kumar, Enhancing selectivity of solar absorber using reduced graphene oxide modified nickel oxide nanocomposite thin films, Solar Energy, 2022, **247,** 185-195 Imp. Fac. 6.0

25. N Prabakaran, C Balamurugan, S Murugesan, Studies on DNA Interaction of Alanine and L-cysteine Functionalized ZnO Nanoparticles, Int. J. Innovative Sci. and Res. Technol, 2022, **7,** 80-852. I.F. NA

26. N. Pugazhenthiran, H. Valdes, R.V. Mangalaraja, P. Sathishkumar, S. Murugesan, Graphene modified "black {001} TiO_2" nanosheets for photocatalytic oxidation of ethylene: the implications of chemical surface characteristics in the reaction mechanism, Sep. Purif. Technol., 2022, 292, 121008. I.Fac. 8.2

27. D. Balaji, J. Madhavan, M. Preeyanghaa, M. Hussien, M. Selvaraj, S. Murugesan, B. Neppolian, Phosphorus co-doped reduced graphene oxide embedded flower-like CoS/CoS_2 heterostructure as an efficient electrocatalyst for hydrogen evolution reaction in acidic media, J. Alloys and Compounds, 2022, 907, 164506. Imp. Fac. 5.8

28. T. Bavani, A. Selvi, J. Madhavan, S. Vijayanand, V. Vinesh, B. Neppolian, S. Murugesan, M. Selvaraj, One-pot synthesis of bismuth yttrium tungstate nanosheet decorated 3D-BiOBr nanoflower heterostructure with enhanced visible light photocatalytic activity, Chemosphere, 2022, 297, 133993. Imp. Fac. 8.1

29. M Kandasamy, M Selvaraj, C Kumarappan, S Murugesan, J. Mayandi, Plasmonic Ag nanoparticles anchored ethylenediamine modified TiO2 nanowires@graphene oxide composites for dye-sensitized solar cell, J. Alloys and Compounds, 2022, 902, 163743. Imp. Fac. 5.8

30. T. Bavani, V. Vinesh, B. Neppolian, S. Murugesan, M. Selvaraj, J. Madhavan, One-step synthesis of rod-on-plate like 1D/2D-NiMoO4/BiOI nanocomposite for an efficient visible light driven photocatalyst for pollutant degradation, Environmental Sci. and Pollution Res. 2022, **29**, 65222-65232. Imp. Fac. 5.19

31. H. Muniyasamy, K. Muthusamy, M. Chinnamadhiyan, Murugesan Sepperumal, S. Ayyanar, M. Selvaraj, Molecular Design and Cost-Effective Synthesis of Tetraphenylethene-Based Hole-Transporting Materials for Hybrid Solar Cell Application, Energy & Fuels, 2022, **36**, 3909-3919. Imp. Fac. 4.65.

32. K. Karupiah, M. Nelson, M. Mujahid alam, M. Selvaraj, Murugesan Sepperumal, Siva Ayyanar, A new 5-bromoindolehydrazone anchored diiodosalicylaldehyde derivative as efficient fluoro and chromophore for selective and sensitive detection of tryptamine and F^- ions: Applications in live cell imaging, Spectrochim. Acta A Mol. Biomol. Spectrosc., 2022, **269,** 120777. Imp. Fac. 4.3

33. M Kandasamy, S Murugesan, M Selvaraj, M Mujahid Alam, Aminosilicate modified zinc oxide Nanorod-GO nanocomposite for DSSC photoanodes, Ceramic International, 2022, 48, 6037-6045. Imp. Fac. 5.1

34. M Kandasamy, M Selvaraj, M Mujahid Alam, P Maruthamuthu, S Murugesan, Nano-silver Incorporated Amine Functionalized Graphene Oxide Titania Nanotube Composite: a Promising DSSC Photoanode, J. Taiwan Instt. Chem. Engg. 2022, **131**, 104205. Imp. Fac. 5.5

35. M Kandasamy, S Murugesan, Mohammed M Alam, M Selvaraj, Effect of Anatase and Rutile Phase Microspheres Composition on Dye-Sensitized Solar Cell Photoanode Performance, Indian J. Pure & applied Phys. 2022, **60**, 126-130. Imp. Fac. 0.7

36. N. Pugazhenthiran, S. Murugesan, H. Valdés, M. Selvaraj, P. Sathishkumar, P.G. Smirniotis, S. Anandan, R.V. Mangalaraja, Photocatalytic oxidation of ceftiofur sodium under UV-visible irradiation using plasmonic porous Ag-TiO_2 nanospheres, J. Industrial and Engg. Chem. 2022, **105**, 384-392. I.F. 5.9

37. M. Nelson, H. Muniyasamy, P. Ongi, S. Balakrishnan, Murugesan Sepperumal, S. Ayyanar, R. Jegathalaprathaban, Incredible colorimetric sensing behavior of pyrazole-based imine chemosensor towards copper(II) ion detection: synthesis, characterization and theoretical investigations, Results in Chemistry, 2022, **4**, 100501. Imp. Fac. 2.3

38. K. Karupiah, H. Muniyasamy, M. Nelson, M. Selvaraj, Murugesan Sepperumal, Siva Ayyanar, A novel indolehydrazone appended salicyaldehyde platform for detection of multianalytes (Al^{3+}, Zn^{2+} and F^- ions): Live cell imaging, Inorg. Chem. Commun., 2022, **135,** 109080. Imp. Fac. 4.4

39. M. Selvaraj, M.A. Assiri, S.L. Rokhum, C. Manjunatha, J.N. Appaturi, S. Murugesan, A. Bhaumik, Ch Subrahmanyam, Solvent-free benzylic oxidation of aromatics over Cu(II)-containing propylsalicylaldimine anchored on the surface of mesoporous silica catalysts, Dalton Transactions, 2021, **50**, 15118-15128, I. F. 3.5

40. R. Sasikala, M. Kandasamy, S. Suresh, V. Ragavendran, V. Sasirekha, J.M. Pearce, S. Murugesan, J. Mayandi, Enhanced dye-sensitized solar cell performance using strontium titanate perovskite integrated photoanodes modified with plasmonic silver nanoparticles, J. Alloys and Compounds, 2021, 889, 161693. Imp. Fac. 5.8

41. K. Krishnaveni, S. Murugesan, A. Siva, Fluorimetric and colorimetric detection of multianalytes Zn^{2+}/Cd^{2+}/F^{-} ions via 5-bromosalicyl hydrazone appended pyrazole receptor; live cell imaging analysis in HeLa cells and zebra fish embryos, Inorg. Chem. Commun., 2021, **132,** 108843. Imp. Fac. 4.4

42. M. Nelson, H. Muniyasamy, A.M. Kubendran, A. Balasubramaniem, Murugesan Sepperumal, S. Ayyanar, Carbazole based fluorescent chemosensor for the meticulous detection of tryptamine in aqueous medium and its efficacy in cell-imaging and molecular logic gate, J. Molecular Liquids, 2021, **337**, 116445. Imp. Fac. 5.3

43. H. Muniyasamy, C. Chinnadurai, M. Nelson, A.M. Kubendran, K. Sukumaran, A. Balasubramaniem, Murugesan Sepperumal, S. Ayyanar, M. Govindasamy, A. Ghfar, F.M. Alsubaie, Highly selective flurogenic chemosensor for cyanide ion in aqueous medium and its applications of logic gate and Hela cells, J. Molecular Liquids, 2021, **334**, 116076. Imp. Fac. 5.3

44. C. Pandiyarajan, P. Rameshkumar, S. Murugesan, M. Selvaraj, Silver nanoparticles-supported graphitic-like carbon nitride for the electrochemical sensing of nitrobenzene and its derivatives, J. Materials Science: Materials in Electronics, 2021, **32,** 19912-19924. Imp. Fac. 2.4

45. H. Muniyasamy, C. Chinnadurai, M. Nelson, A. Veeramanoharan, **S. Murugesan**, A. Siva, Synthesis of C_3-Symmetric Triazine-Based Derivatives: Study of their AIEE, Mechanochromic Behaviors, and Detection of Picric Acid and Uric Acid in Aqueous Medium, Industrial & Engineering Chemistry Research, 2021, **60,** 7987-7997. Imp. Fac. 3.8

46. N. Pugazhenthiran, S. Murugesan, T. Muneeswaran, S. Suresh, M. Kandasamy, H. Valdés, M. Selvaraj, A. Dennyson Savariraj, RV. Mangalaraja, Biocidal activity of citrus limetta peel extract mediated green synthesized silver quantum dots against MCF-7 cancer cells and pathogenic bacteria, J. Environ. Chem. Eng., 2021, **9,** 105089. Imp. Fac. 7.4 .

47. C. Chithiraikumar, P. Kottala Vijaya, M. Harikrishnan, N. Malini, **S. Murugesan**, A. Siva, Efficient base-free asymmetric one-pot synthesis of spiro[in doline-3,3′-pyrrolizin]-2-one derivatives catalyzed by chiral organocatalyst, Research on Chemical Intermediates, 2021, **47,** 895-909. Imp. Fac. 3.13

48. K. Krishnaveni, M. Iniya, **S. Murugesan,** S. Ayyanar, A dual responsive probe based on bromo substituted salicylhydrazone moiety for the colorimetric detection of Cd^{2+} ions and fluorometric detection of F^{-} ions: Applications in live cell imaging, Int. J. Bioorg. and Med. Chem., 2021, 1, 1-9. Imp. Fac. NA

49. Krishnaveni Karuppiah, Harikrishnan Muniyasamy, **Murugesan Sepperumal,** A. Siva, Design and synthesis of new salicylhydrazone tagged indole derivative for fluorometric sensing of Zn2+ ion and colorimetric sensing of F− ion: Applications in live cell imaging, Microchemical Journal, 2020, **159,** 105543. Imp. Fac. 4.9

50. N. Murugesan, S. Suresh, M. Kandasamy, **S. Murugesan,** S.K. Kumar, Facile preparation of reduced graphene oxide wrapped copper oxide thin film solar selective absorbers, Ceramic International, 2020, 46, 27897-27902. Imp. Fac. 5.1

51. N. Pugazhenthiran, RV. Mangalaraja, S. Vijaya, S. Suresh, M. Kandasamy, P. Sathishkumar, H, Valdés, MA. Gracia-Pinilla, **S Murugesan,** S Anandan, Fluorine-free synthesis of reduced graphene oxide modified anatase TiO2 nanoflowers photoanode with highly exposed {0 0 1} facets for high performance dye-sensitized solar cell, Solar Energy, 2020, **211,** 1017-1026 Imp. Fac. 6.0

52. M. Kandasamy, **S. Murugesan,** Aminosilicate modified mesoporous anatase TiO2@ graphene oxide nanocomposite for dye-sensitized solar cells, Solar Energy, 2020, **211,** 789-798 Imp. Fac. 6.0

53. K. Krishnaveni, M. Iniya, A. Siva, N. Vidhyalakshmi, S. Sasikumar, U.K. Pandian Ramesh, **S Murugesan**, Naphthyl hydrazone anchored with nitrosalicyl moiety as fluorogenic and chromogenic receptor for heavy metals (Ag^{+}, Hg^{2+}) and biologically important F^{-} ion and its live cell imaging applications in HeLa cells and Zebrafish embryos, J. Mol. Struct., 2020, **1217,** 128446. Imp. Fac. 4.0

54. H. Muniyasamy, **S. Murugesan**, S. Ayyanar, Novel star shaped D-π-D-π-D and (D-π)2-D-(π-D)2, anthracene-based hole transporting material for perovskite solar cells, Nanoscale Adv., 2020, **2,** 3514-3524. Imp. Fac. 4.6

55. Jeya Shree Ganesan, **Murugesan Sepperumal**, B. Ashokkumar, S. Ayyanar, A novel pyrazole bearing imidazole frame as ratiometric fluorescent chemosensor for Al^{3+}/Fe^{3+} ions and its application in HeLa cell imaging, Spectrochim. Acta A Mol. Biomol. Spectrosc., 2020, **230,** 117993. Imp. Fac. 4.3

56. G. Jeya Shree, **S. Murugesan**, A. Siva, A highly sensitive and selective Schiff-base probe as a colorimetric sensor for Co^{2+} and a fluorimetric sensor for F^{-} and its utility in bio-imaging, molecular logic gate and real sample analysis, Spectrochim. Acta A Mol. Biomol. Spectrosc., 2020, **226,** 117613. I.F. 4.3

57. V. Sadhasivam, M. Harikrishnan, G. Elamathi, R. Balasaravanan, **S. Murugesan**, A. Siva, Copper nanoparticles supported on highly nitrogen-rich covalent organic polymers as heterogeneous catalysts for the ipso-hydroxylation of phenyl boronic acid to phenol, New J. Chem., 2020, **44,** 6222-6231. I. F. 2.7

58. M. Harikrishnan, V. Sadhasivam, M. Mariyappan, **S. Murugesan**, N. Malini, A. Siva, Simple triazine (D-A) based organic fluorophore selective dual sensor for Copper(II) and dichromate ions and its solvatochromism, solid state sensing, logic gate applications, Dyes and Pigments, 2019, **168,** 123-133. Imp. Fac. 4.1

59. M. Harikrishnan, V. Sadhasivam, A. Siva, S. Anandan, V. Subbiah, **S. Murugesan**, Energy Level Tuning of Novel Star Shaped D-π-DA Based Metal Free Organic Dyes for Solar Cell Application, J. Phys. Chem. C, *2019,* ***123,*** 21959–21968. https://doi.org/10.1021/acs.jpcc.9b05356 Imp. Fac. 3.5

60. Jeya Shree Ganesan, Sivaraman Gandhi, K.Radhakrishnan, Ashokkumar Balasubramaniem, **Murugesan Sepperumal**, Siva Ayyanar, Execution of julolidine based derivative as bifunctional chemosensor for Zn2+and Cu2+ions: Applications in bio-imaging and molecularlogic gate, Spectrochim. Acta A Mol. Biomol. Spectrosc., 2019, **219,** 33-43. Imp. Fac. 4.3

61. S. Balakrishnan, M. Harikrishnan, R. Raja, V. Sadhasivam, N. Malini, **S. Murugesan**, A. Siva, Design of a simple and efficient synthesis for bioactive novel pyrazolyl-isoxazoline hybrids, New J. Chem., 2019, **43,** 10458-10467. Imp. Fac. 2.7

62. M. Mariyappan, N. Malini, J. Sivamani, G. Sivaraman, M. Harikrishnan, **S. Murugesan**, A. Siva, Turn-on Fluorescence Chemosensor for Zn^{2+} Ion Using Salicylate Based Azo Derivatives and their Application in Cell-Bioimaging, J. Fluorescence, 2019, **29,** 737–749. Imp. Fac. 2.6

63. K. Krishnaveni, **S. Murugesan**, S. Ayyanar, Dual-mode recognition of biogenic amine tryptamine and fluoride ion by naphthyl hydrazone platform: Application in fluorescence imaging of HeLa cells and Zebrafish embryos, New J. Chem., 2019, **43,** 9021-9031. Imp. Fac. 2.7

64. Sadhasivam Velu, Harikrishnan Muniyasamy, Siva Ayyanar, Suresh Maniarasu, Ganapathy Veerappan, Murugesan Sepperumal, Design, synthesis of organic sensitizers containing carbazole and triphenylamine π-bridged moiety for dye-sensitized solar cells, J. Iranian Chem. Soc. 2019, **19,** 1923–1937. Imp. Fac. 2.2

65. N. Pugazhenthiran, R.V. Mangalaraja, P. Sathishkumar, **S. Murugesan**, T. Muneeswaran, T. Pandiyarajan, S. Naveenraj, D. Contreras, S. Anandan, Green synthesis of porous Au–N x-TiO 2 nanospheres for solar light induced photocatalytic degradation of diazo and triazo dyes and their eco-toxic effects, New J. Chem., 2018, **42,** 18717-18728. Imp. Fac. 2.7

66. M. Karuppuraja, **S. Murugesan,** Template free solvothermal synthesis of single crystal magnetic Fe_3O_4 hollow spheres, their interaction with bovine serum albumin and antibacterial activities, J. Saudi Chem. Soc. 2018, **22,** 569-580. Imp. Fac. 5.9

67. V. Sadhasivam, M. Mariyappan M. Harikrishnan, C. Chithiraikumar, **S. Murugesan**, A. Siva, $Pd(OAc)_2$ immobilized on imine-functionalized microporous covalent triazine polymer as efficient heterogeneous catalyst for Mizoroki–Heck cross-coupling reaction, Res. Chem. Intermed. 2018, **44,** 2853–2866. I.F. 2.8

68. K. Kumar, **S. Murugesan,** Synthesis, characterization and anti-bacterial activity of divalent transition metal complexes of hydrazine and trimesic acid, J. Saudi Chem. Soc. 2018, **22,** 16-26. IF: 5.9

69. A. Siva, P. Kottala Vijaya, V. Sadhasivam, S. Balakrishnan, C. Chithiraikumar, **S. Murugesan,** Enantioselective Synthesis of Dihydroquinazolinone derivatives Catalyzed by Chiral Organocatalyst, New J. Chemistry, 2017, **41,** 7980-7986. Imp. Fac. 2.7

70. P. Kottala Vijaya, **S. Murugesan**, A. Siva, Highly Enantioselective Asymmetric Henry Reaction Catalyzed by Novel Chiral Phase Transfer Catalyst Derived from Cinchona Alkaloids, Organic & Biomolecular Chemistry, 2016, 14, 10101-10109. Imp. Fac. 2.9

71. K.V. Ponmuthu, D. Kumaraguru, J.B. Arockiam, S. Velu, **Murugesan Sepperumal**, Siva Ayyanar, New quaternary phosphonium salt as multi-site phase-transfer catalyst for various alkylation reactions, Res. Chem. Intermed., 2016, 42, 8345-8358. Imp. Fac. 2.8

72. S. Suresh, M. Kandasamy, S.K. Kumar, **S. Murugesan,** Photovoltaic performance of curcumin as sensitizer in a solid-state solar cell, Optik, 2015, 126, 3366-3370. I.F. 2.8

73. P. Kottala Vijaya, **S. Murugesan**, A. Siva, Unexpected solvent/substitution-dependent inversion of the enantioselectivity in Michael addition reaction using chiral phase transfer catalysts, Tetrahedron Lett., 2015, **56,** 5209-5212. I. F. 1.5

74. A. Pandikumar, S. Suresh, **S. Murugesan**, R. Ramaraj, Dual Functional TiO_2-Au Nanocomposite Material for Solid-State Dye-Sensitized Solar Cells, J. Nanosci. Nanotechnol., 2015, **15,** 6965-6972. I.F. 1.3

75. **S. Murugesan**, Structural and electrical properties of $CuI–Ag_2O–MoO_3–WO_3$ glassy–crystalline composite solid electrolyte system, J. Non-Cryst. Solids, 2014, **396,** 8-12. I.F: 3.5

76. N. Pugazhenthiran, **S. Murugesan**, P. Sathishkumar, S. Anandan, Photocatalytic degradation of ceftiofur sodium in the presence of gold nanoparticles loaded TiO_2 under UV–visible light, *Chem. Eng. J*. 2014, **241,** 401-409. I.F. 13.4

77. S. Karthick Kumar, **S. Murugesan**, S. Suresh, Preparation and characterization of CuO nanostructures on copper substrate as selective solar absorbers, Mater. Chem. Phys., 2014, **143**, 1209–1214. I.F. 4.3

78. N. Pugazhenthiran, **S. Murugesan**, S. Anandan, High surface area Ag-TiO_2 nanotubes for solar/visible-light photocatalytic degradation of ceftiofur sodium, *J. Hazard. Mater*. 2013, **263,** 541-549. I.F. 12.2

79. S. Karthick Kumar, **S. Murugesan**, S. Suresh, S.P. Raj, Nanostructured CuO Thin Films Prepared through Sputtering for Solar Selective Absorbers, *J. Solar Energy*, 2013, 147270. Imp. Fac. Nil

80. M. Boominathan, N. Pugazhenthiran, M. Nagaraj, S. Muthusubramanian, **S. Murugesan,** N. Bhuvanesh, Nanoporous Titania-Supported Gold Nanoparticle-Catalyzed Green Synthesis of 1,2,3-Triazoles in Aqueous Medium, *ACS Sustainable Chem. Eng.,* 2013, **1,** 1405-1411. IF: 7.9

81. S.K. Kuriechen, **S. Murugesan**, Carbon-Doped Titanium Dioxide Nanoparticles Mediated Photocatalytic Degradation of Azo Dyes Under Visible Light, *Water, Air, & Soil Pollution*, 2013, 224, 1671-1675. IF. 3.8

82. S. Karthick Kumar, S. Suresh, **S. Murugesan**, S.P. Raj, CuO thin films made of nanofibers for solar selective absorber applications, *Solar Energy,* 2013, **94**, 299–304. IF: 6.0

83. K. Govindan, **S. Murugesan**, P. Maruthamuthu, Photocatalytic degradation of pentachlorophenol in aqueous solution by visible light sensitive N-F-codoped TiO_2 photocatalyst, *Mater. Res. Bull*., 2013, 48, 1913-1919. I.F. 5.3

84. S.K. Kuriechen, **S. Murugesan**, S.P. Raj, Mineralization of Azo Dye Using Combined Photo-Fenton and Photocatalytic Processes under Visible Light, J. Catalysts*,* 2013, *104019.* IF: Nil

85. S. Suresh, A. Pandikumar, **S. Murugesan**, R. Ramaraj, S.P. Raj, Metal-Free Low-Cost Organic Dye-Sensitized ZnO-Nanorod Photoanode for Solid-State Solar Cell, *Mater. Express,* 2011, **1**, 307–314. IF: 1.6

86. Selma K. Kuriechen, **S. Murugesan**, S.P. Raj, P. Maruthamuthu, Visible light assisted photocatalytic mineralization of Reactive Red 180 using colloidal TiO_2 and oxone, *Chem. Eng. J*., 2011, **174**, 530–538. IF: 13.4

87. S. Suresh, A. Pandikumar, **S. Murugesan**, R. Ramaraj, S.P. Raj, Photovoltaic performance of solid-state solar cells based on ZnO nanosheets sensitized with low-cost metal-free organic dye, *Solar Energy,* 2011, **85**, 1787–1793. IF: 6.0

88. N. Pugazhenthiran, P. Sathishkumar, **S. Murugesan**, S. Anandan, Effective degradation of acid orange 10 by catalytic ozonation in the presence of Au-Bi_2O_3 nanoparticles, *Chem. Eng. J.* 2011, **168** 1227–1233. IF: 13.4

89. Pandikumar A, **Murugesan S** and Ramaraj R, Functionalized Silicate Sol-Gel-Supported TiO_2-Au Core-Shell Nanomaterials and Their Photoelectrocatalytic Activity, *ACS Appl. Mater. Interfaces, 2010,* **2** 1912–1917. IF: 8.5

90. J. Madhavan, P. Maruthamuthu, **S. Murugesan,** M. Ashokkumar, Kinetics of degradation of acid red 88 in the presence of Co^{2+}-ion/peroxomonosulphate reagent, *Appl. Catal. A: Gen., 2009, **368**, 35.* IF: 4.7

91. B. Muthuraaman, **S. Murugesan**, V. Mathew, S. Ganesan, B. Joseph Paul, J. Madhavan, P. Maruthamuthu, S.A. Suthanthiraraj, An investigation on the performance of a silver ionic solid electrolyte system for a new detergent-based nanocrystalline dye-sensitized solar cell, *Solar Energy Materials & Solar Cells,* 2008, **92,** 1712. IF: 6.3

92. J. Madhavan, P. Maruthamuthu, **S. Murugesan**, S. Anandan, Kinetic studies on visible light-assisted degradation of acid red 88 in presence of metal-ion coupled oxone reagent, *Appl. Catal B: Env*., 2008, **83**, 8. IF: 20.3

93. **S. Murugesan,** A. Wijayasinghe, B. Bergman, Ion transport studies in CuI-doped silver borovanadate glassy system, *J. Non-cryst. Solids,* 2008, **354,** 1066. IF: 3.5

94. **S. Murugesan**, S.A. Suthanthiraraj, P. Maruthamuthu, All-solid-state cells based on solid electrolyte systems $Cu_{1-x}Ag_xI–Ag_2O–Y$, where x = 0.05 and 0.25; Y = P_2O_5, MoO_3, B_2O_3, SeO_2, V_2O_5 and CrO_3, *Mater. Res. Bull*. 2007, 42, 2017. IF: 5.3

95. **S. Murugesan,** B. Bergman, Direct evidence for purely silver ion conduction in CuI-doped silver oxysalt superionic systems: Combined electrolysis and EDS studies, *Electrochim. Acta,* 2007, **52**, 8064. *IF:5.5*

96. **S. Murugesan,** A. Wijayasinghe, B. Bergman, Preparation and characterization of CuI-doped silver borovanadate superionic system, *Solid State Ionics,* 2007, **178**, 779. IF: **3.0**

97. J. Madhavan, B. Muthuraaman, **S. Murugesan**, S. Anandan, P. Maruthamuthu, Peroxo-monosulphate, an efficient oxidant for the photocatalysed degradation of a textile dye, acid red 88, *Solar Energy Materials & Solar Cells,* 2006, **90,** 1875-1887. IF: 6.3

98. S. Anandan, S. Latha, **S. Murugesan**, J. Madhavan, B. Muthuraaman, P. Maruthamuthu, Synthesis, characterization and fabrication of solar cells making use of [Ru(dcbpy)(tptz)X]X (where X = Cl^-, SCN^-, CN^-) complexes, *Solar Energy,* 2005, **79**, 440. IF: 6.0

99. **S. Murugesan**, S.A. Suthanthiraraj, P. Maruthamuthu, Evaluation of Transport Properties of Superionic Materials in the System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(CrO_3), *Solid State Ionics,* 2002, 154-155C, 621–628. IF: **3.0**

100. S.A Suthanthiraraj, **S Murugesan**, P Maruthamuthu, Investigation of Fast-Ionic Transport in the Ternary System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(V_2O_5), $(0.05 \leq x \leq 0.25)$, *Mater. Res. Bull.* 2002, 37, 2145–2154. **Imp. Fac: 5.3**

101. **S. Murugesan**, S.A. Suthanthiraraj, P. Maruthamuthu, Complex Impedance and Structural Analyses of the Mixed System $40(Cu_{1-x}Ag_xI)$-$30(Ag_2O)$-$30(SeO_2)$, $(0.05 \leq x \leq 0.25)$, *Solid State Ionics* 2002, **148,** 417–423. **IF: 3.0**

102. S.A Suthanthiraraj, S Murugesan, P Maruthamuthu, An Evaluation of Superionic Properties of the Ternary System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(MoO_3), $(0.05 \leq x \leq 0.25)$, *Mater. Sci. Engg.* 2002, B94, 207–213. **IF: 3.9**

103. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Electrical Conductivity and Structural Studies of the Fast ionic System $35(Cu_{1-x}Ag_xI)$-$32.5(Ag_2O)$-$32.5(CrO_3)$, *J. Mater. Sci. Lett.* 2002, 21, 387–389. IF: 0.8

104. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Electrical Transport and Structural Properties of New Superionic Solids in the System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(B_2O_3), $(0.05 \leq x \leq 0.25)$, *Solid State Ionics* 2001, **143**, 413-423. **IF: 3.0**

105. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Preparation and Characterization of Superionic Materials in a New Mixed System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(P_2O_5), $(0.05 \leq x \leq 0.25)$, *Solid State Ionics* 2000, 130, 299-303. **IF: 3.0**

Articles in Proceedings of Conferences

106. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Complex Impedance and Fourier Transform Infrared Spectroscopic Investigations of Superionic Solids in the System $(Cu_{1-x}Ag_xI)$–(Ag_2O)–(MoO_3), $(0.05 \leq x \leq 0.25)$, in: A.R. Kulkarni, P. Gopalan (Eds.), Ion Conducting Materials-Theory and Applications, Narosa Publishing House, New Delhi, 2001, pp. 155–158.

107. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Investigation of Electrical Transport Properties of a New Mixed System $40(Cu_{1-x}Ag_xI)$–$30(Ag_2O)$–$30(SeO_2)$, in: S. Selladurai et al. (Eds.), Proceedings of the Fjrst Asian Conference on Solid State Ionic Devices: Science & Technology, Mar 2000, Allied Publishers, Chennai, pp. 49–52.

Published in National Journals (Indexed)

108. Selma K. Kuriechen, **S. Murugesan**, Photodegradation of reactive red 141 by combined Photocatalysis and phot-Fenton-like processes, Environmental Sci.: An Indian journal, 2013, 8, 8-13.

109. S.K. Kuriechen, **S. Murugesan**, Sulphur-doped titanium dioxide nanoparticles for visible-light induced photo-mineralization of reactive red 141, Environmental Sci.: An Indian journal, 2013, 8, 148-155.

110. J. Madhavan, **S. Murugesan**, P. Maruthamuthu, S. Anandan, Advance oxidation process-photocatalyzed degradation of a textile dye using titanium dioxide, *Environmental Sci.: An Indian Journal* 2008, 3, 80–83.

111. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Electrical Characterization of Superionic Materials in the System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(P_2O_5), $(0.05 \leq x \leq 0.25)$ for Solid State Batteries, *Indian J. Engg. Mater. Sci.* 8 (2001) 57-58. (Imp. Fac: 0.5**)**

112. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, An Investigation of the Nature of Electrical Conductivity in a New System $(Cu_{1-x}Ag_xI)$-(Ag_2O)-(MoO_3), $(0.05 \leq x \leq 0.25)$ for Solid State Batteries, *J. Electrochem. Soc. India* 1999, 48-3, 213-215.

Conference Presentations:

1. K. Kumar, **S. Murugesan**, "Synthesis, characterization and biological activities of new trivalent lanthanide complexes of hydrazine and 3,3'-thiodipropanoic acid", *International Conference on Advanced Functional Materials for Energy, Environment and Biomedical Applications*, December 11–12, 2017, Madurai Kamaraj University, Madurai.

2. M. Kandasamy and **S. Murugesan*** Enhanced photovoltaic performance of optimized Ag nanoparticles decorated 1D TiO_2 nanostructures on DSSC, Two day National Seminar cum workshop on Solar thermal and Photovoltaic Techniques, Organized by Department of solar energy, Madurai Kamaraj University, Madurai-625021 during 5^{th} and 6^{th} October, 2017.

3. M. Kandasamy and **S. Murugesan*** Investigation of Silver nanoparticles-decorated TiO_2 NTs based electrode for Dye-Sensitized Solar Cells, International conference on advanced functional materials for energy environment and biomedical application AFMEEB-2017, 11-12, December, Madurai Kamaraj University, Madurai-625021, Tamilnadu, India.

4. M. Karuppu Raja, **S. Murugesan,** *Green synthesis of monodispersed magnetic Fe_3O_4 nanoparticles and their interaction with serum albumins (BSA, HSA),* Intl. Conf. on Nanomaterials for Energy, Environment, Catalysis and Sensors, School of Chemistry, MKU, Madurai, India. Dec. 11–12, 2015.

5. M. Kandasamy, **S. Murugesan,** *Photovoltaic performance of low-cost metal free organic dye sensitized ZnO NRs@Ag nanocomposite photoanodes bases solid-state DSSC,* Intl. Conference on Green Technologies for Energy Management (ICGTEM 15), Mohamed Sathak Engg. College, Kilakarai, March 27 & 28, 2015

6. M. Kandasamy, S. Suresh, **S. Murugesan,** *Photovoltaic performance of solid-state dye-sensitized solar cell employing TiO_2 nanoparticles calcinated at different temperatures, National Seminar on Frontier Areas in Chemical Sciences, School of Chemical Sciences, Alagappa University, Karaikudi, March 6 & 7, 2015.*

7. M. Karuppu Raja, **S. Murugesan,** *Curcumin Functionalized Silver Nanoparticles Synthesis and its Binding with BSA, Nano India-2015, SASTRA University, Thanjavur, India, Jan 29 & 30, 2015.*

8. M. Kandasamy, **S. Murugesan,** *Photovoltaic performance of silver nanoparticles decorated TiO_2 in dye-sensitized solar cells, National Conf. on Pure and Applied Chemistry (NACOPAC-2014), University of Mysore, Mysuru, Dec. 29-31, 2014.*

9. M. Karuppu Raja, **S. Murugesan,** *Green Synthesis of Silver Nanoparticles using Leaves Extract of Plumbagozeylanica and its Binding with BSA,* 13th Eurasia Conference on Chemical Sciences, IISc, Bangalore, India, Dec. 14–18, 2014.

10. M. Kumar, **S. Murugesan,** *Preparation, characterization and anti-bacterial activity of lanthanide(III) complexes of hydrazine and thiophene-3-carboxylic acid,* 13th Eurasia Conference on Chemical Sciences, IISc, Bangalore, India, Dec. 14–18, 2014.

11. K. Kumar, **S. Murugesan**, "Synthesis, Characterization and anti-bacterial activity of divalent transition metal complex of hydrazine with trimesic acid", *16th CRSI National Symposium in Chemistry* (NSC–16), February 7–9, 2014, Indian Institute of Technology Bombay, Powai, Mumbai, Maharashtra, india.

12. M. Karuppu Raja, **S. Murugesan,** *Study of gold nanoparticles binding with bovine serum albumin,* Intl. Conf. on Advanced Materials Processing and Devices, Dept of Materials Science, SOC, MKU, Madurai , July 15–16, 2013.

13. M. Kumar, C. Ashmela, **S. Murugesan,** *Synthesis, characterization and anti-bacterial activity of divalent transition metal complexes of Schiff base ligand,* Intl. Conf. on Advanced Materials Processing and Devices, Dept of Materials Science, SOC, MKU, Madurai , July 15–16, 2013.

14. S. Karthickkumar, S. Suresh, **S. Murugesan**, S.P. Raj, Morphological effect of nanostructured CuO photo-cathodes on the photovoltaic performance of dye-sensitized solar cells, Intl. workshop and conf. on Renewable Energy and Climate Change-Exploring Opportunities for Sustainable Development, MKU, April 5-7, 2012.

15. N. Pugazhenthiran, S. Murugesan, One-pot green synthesis of porous N-TiO_2 nanospheres for solar light assisted degradation of textile dyes, Paper presented in *National Seminar on Current Trends in Chemistry,* Cochin University of Science and Technology, Kochi. India, January 20th & 21st, 2012.

16. S. Karthick Kumar, **S. Murugesan**, S.P. Raj, Preparation and characterization of CuO nanostructures on copper substrate for selective solar absorbers, Poster presented in *International Conference on Nanoscience and Nanotechnology,* Coimbatore Institute of Technology, Coimbatore, India, July 6–8, 2011.

17. S. Suresh, S.P. Raj, **S. Murugesan,** Copper iodide nanosheets dispersed solid-state polymer electrolyte for metal free organic dye sensitized solar cells, Poster presented in *International Conference on Nanoscience and Nanotechnology*, Coimbatore Institute of Technology, Coimbatore, India, July 6–8, 2011.

18. S. Suresh, A. Pandikumar, **S. Murugesan**, S.P. Raj, R. Ramaraj, *Superiority of ZnO nanorods in low-cost organic dye-sensitised solid-state solar cells,* National seminar on Nanostructured materials and applications (NSMA2011), Madurai Kamaraj University, Madurai, March 4–5, 2011.

19. S.K. Kuriechen, **S. Murugesan**, S.P. Raj, *Visible light sensitive Sulfur-doped titania for the efficient photocatalytic degradation of textile dye RR141,* NSMA2011, Madurai Kamaraj University, Madurai, March 4–5, 2011.

20. N. Pugazhenthiran, M. Shunmuganathan, M. Sampath, **S. Murugesan,** *Hydrothermal synthesis of carbon-doped TiO_2 and their photocatalytic performance towards textile dye degradation,* NSMA2011, Madurai Kamaraj University, Madurai, March 4–5, 2011.

21. N. Pugazhenthiran, **S. Murugesan,** *Visible light induced photo-catalytic degradation of ceftiofur sodium using gold nanoparticles loaded titanium dioxide,* NSMA2011, Madurai Kamaraj University, Madurai, March 4–5, 2011.

22. Selma K Kuriechan, **S. Murugesan,** S.P. Raj, P. Maruthamuthu, Carbon-doped titanium dioxide: an efficient visible-light active photocatalyst for the removal of textile dye RR180, Poster presented in *International Conference on Advance Oxidation Processes,* Mahatma Gandhi University, Kottayam, India, September 18–21, 2010.

23. N. Prabakaran, S. Murugesan, PR. Athappan, Enhancement of DNA binding activity of curcumin functionalized magnetic nanoparticles by vitamin-C, Poster presented in *National Seminar on Recent Advances in Inorganic and Nano Chemistry*, Madurai Kamaraj University, March 29–30, 2010.

24. S. Karthick Kumar, S. Murugesan, Samuel Paul Raj, Preparation and characterization of Cu_2O thin film coatings for solar light absorbers, Poster presented in *National Seminar on Recent Advances in Inorganic and Nano Chemistry*, Madurai Kamaraj University, March 29–30, 2010.

25. Selma K Kuriechan, S. Murugesan, , S.P. Raj, P. Maruthamuthu, Nitrogen-doped titanium dioxide for visible light photocatalysis, Poster presented in *National Seminar on Recent Advances in Inorganic and Nano Chemistry*, Madurai Kamaraj University, March 29–30, 2010.

26. S. Suresh, S. Murugesan, S.P. Raj, ZnO nanosheets photoanode for solid-state dye-sensitized solar cells, Poster presented in *National Seminar on Recent Advances in Inorganic and Nano Chemistry*, Madurai Kamaraj University, March 29–30, 2010.

27. Participated and presented a paper in the *International conference on Coordination and Organometallic Chemistry*, Bharathiar University, Coimbatore, India, March 19–20, (2009).

28. Attended the *National Workshop on Catalysis in Environmental Applications*, National Institute of Technology, Tiruchirappalli, India, Dec. 2-3, (2007).

29. Participated in the *National Workshop on Solid State Ionics and its Applications*, Bharathiar University, Coimbatore, India, January 18–23, (2002).

30. Participated and presented a paper in *International Conference on Materials for Advanced Technologies (ICMAT–2001),* National University of Singapore, **Singapore,** July 1–6, (2001).

31. Participated and presented a paper in *International Conference on Solid State Ionics (SSI2001),* Cairns, **Australia,** July 8–13, (2001).

32. Attended and presented a paper in *National Conference on Solar Energy Conversion Processes,* University of Madras, Chennai, India, March 1–2, (2001).

33. Attended and presented a paper in *First Asian Conference on Solid State Ionic Devices*, Madras Institute of Technology, Anna University, Chennai, India, March 22–24, (2000).

34. Attended and presented a paper in *Fourth National Conference on Solid State Ionics (FNCSSI-2000),* Indian Institute of Technology Bombay, India, March 3–5, (2000).

35. Attended and presented a paper in *National Seminar on Materials Science: Trends & Future,* Sant Longowal Institute of Engineering & Technology, Longowal, Punjab, India, February 24–25, 2000.

36. Attended and presented a paper in *National Seminar on Recent Trends in Materials Science (NSRTMS-99),* Sri Venkateswara University, Tirupati, India, Nov. 25–27, 1999.

37. Attended the *International Research Training Workshop on Solid State Ionics,* Banaras Hindu University, Varanasi, India, November 22–28, 1998.

Signature,