

Dr. Sepperumal Murugesan

Professor and Head, Department of Inorganic Chemistry,
School of Chemistry, Madurai Kamaraj University,
Madurai – 625021, Tamil Nadu,
Mobile:+91-9444451460

email: murugesan.chem@mkuniversity.org / smsan71@gmail.com



1. Personal Details

Full name : SEPPERUMAL MURUGESAN
Father's Name : D. SEPPERUMAL
Date of Birth & Age : 5th February, 1971 & 50 Yrs
Gender & Marital Status : Male & Married
Nationality : Indian
Place of Birth : Periyathirukkonam (Village), Tamil Nadu, India.

2. Educational Qualifications

2.1 Academic

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
NET	CSIR-UGC – NET-LS	June 2000	NA	Chemical Sciences

2.2. Research

Name of Degree	University	Year of passing	% of marks obtained	Division/class/ grade	Main subject
Ph.D	University of Madras	April 2003	--	Highly Commented	Chemistry-Energy Interdisciplinary

3. Post-Doctoral/ Research Associate / Industrial Experience

Name of the University / Institute / Industry	Period of Work	Nature of Work
University of Madras	01.05.2003 to 31.05.2004	CSIR Res. Assoc. / Research
Royal Institute of Tech., Sweden	31.08.2005 to 13.07.2007	Visiting Researcher / Research

4. 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	University of Madras	CSIR Res. Assoc.	01.05.2003	31.05.2004

5. Teaching

No	Year	Semester	Course Code	Course Title	Hours per Week
1	2022-23	MSc / Sem I	CHE2212C	Inorganic Chemistry - I	2
2	2022-23	MSc / Sem I	CHE2215EA	Nanoscience and Environmental Science	2
3	2022-23	MPhil / Sem I	MCHE11C	Research Methodology	1
4	2022-23	MPhil / Sem I	MCHE13E	In-depth Study of Published literature	3
5	2022-23	MSc / Sem III	CHE2133C	Applications of Spectroscopy & Magnetism	2
6	2022-23	MSc / Sem II	CHE2221C	Physical Chemistry - II	1
7	2022-23	MSc / Sem II	CHE2222C	Inorganic Chemistry - II	2
8	2022-23	MSc / Sem II	CHE2224C	Inorganic Chemistry Practicals	6
9	2022-23	MSc / Sem IV	CHE2242C	Inorganic Chemistry - III	2

6. Design/Development of New Curricula and Courses

No	Description	Organization for which it was Developed	Level(PG/UG)
1	BOS Subject Expert	Kamaraj College of Engineering, Virudunagar	UG
2	BOS Subject Expert	V.V.V College for Women, Virudunagar	UG
3	BOS Subject Expert	Mother Teresa University, Kodaikanal	PG
4	BOS University Nominee	H.K.R.H. College, Uthamapalayam	MPhil
5	BOS University Nominee	Sri S.R.N.M. College, Sttur	MPhil
6	BOS University Nominee	The American College, Madurai	UG
7	BOS University Nominee	Fatim College, Madurai	UG
8	BOS University Nominee	Mannar Thirumalai Naicker College, Madurai	UG

7. Creation of ICT Mediated Teaching-Learning Pedagogy

7.1. E-Contents

No	Description	Organization for which it was Developed	Level(PG/UG)
1	Video Lecture	Academy of Sciences Chennai	PG
2	Video Lecture	GIAN, MHRD	PG

7.2. Development of other ICT Mediated Teaching-Learning Pedagogy

No	Description	Organization for which it was Developed	Level(PG/UG)
1	PPT	Madurai Kamaraj University	PG
2	PPT	Madurai Kamaraj University	MPhil

8. Research Specialization

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

9. Research Publications

Type	International	National
Papers Published in UGC-CARE Listed Journals	81	2
Papers in Refereed Journals (Not mentioned above)	1	4
Contributions to Book Chapters	1	--
Papers Published in Conference/Seminar Proceedings	1	1
Papers Presented in Conferences/Seminars	7	30
Conference/Seminar/Workshop Attended	6	20

10. Citation Metrics

Cumulative Impact Factor (Recent Annual JCR)	442.36
Total Citations (Scopus/Web of Science)	1306
h-Index (Scopus/Web of Science)	19
g-Index (Scopus/Web of Science)	32
i10 Index (Scopus/Web of Science)	30

11. Details of 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

12. Research Guidance/Supervision

Program	Completed	Ongoing
Ph.D (Full-Time)	11 (Eleven)	7 (Seven)
M.Phil (Full-Time)	11 (Eleven)	---
MSc Projects	20 (Twenty five)	2 (Two)

13. Funded Research Projects

13.1. Ongoing

S No	Title of research project	Funding agency	Period / Duration	Total grants received (Rs.)
1	Development of Functional Nanomaterials for Green Energy and Environment	RUSA, MHRD- Gov't of India & RUSA- Gov't of Tamil Nadu	2020 – 2022 (2 yrs)	152.58 Lakh

13.2. Completed

S No	Title of research project	Funding agency	Period / Duration	Total grants received (Rs.)
1	Study of detergent based nanocomposite solid electrolytes for dye-sensitized solar cells	SERB	2012 – 2015 (3 yrs)	26.60 Lakh
2	Investigation of New Hole Transporting Materials for Efficient Perovskite Organic-Inorganic Hybrid Solar Cells	DST, Technology Mission	2016 – 2019 (3 yrs)	23.36 Lakh

14. Reviewer in Journals

Name of the Journal	Publisher	No of Papers Reviewed
Journal of the Taiwan Institute of Chemical Engineers	Elsevier	25
Chemical Engineering Journal	Elsevier	14
Journal of Non-Crystalline Solids	Elsevier	13
Journal of Solid State Chemistry	Elsevier	13
Solar Energy	Elsevier	9
Materials Chemistry and Physics	Elsevier	8
Journal of Saudi Chemical Society	Elsevier	4
Optical Materials	Elsevier	4
Applied Catalysis B: Environmental	Elsevier	3
Applied Catalysis A: General	Elsevier	3
Environmental Research	Elsevier	3
Journal of Hazardous Materials	Elsevier	3
Materials Research Bulletin	Elsevier	3
Vacuum	Elsevier	2
Optik	Elsevier	2
Materials Science in Semiconductor Processing	Elsevier	2
Journal of Cleaner Production	Elsevier	2
Applied Surface Science	Elsevier	2
Engineering Failure Analysis	Elsevier	1
Journal of King Saud University: Science	Elsevier	1
Physica E: Low-Dimensional Systems and Nanostructures	Elsevier	1
Surface and Coatings Technology	Elsevier	1

Chemical papers	Springer	2
Advanced materials	Wiley	1
Desalination and water treatment	Taylor & Francis	10
Inorganic and nano-metal chemistry	Taylor & Francis	3
SN Applied Sciences	Springer Nature	3

15. 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

16. Countries Visited

Name of the Country	Period	Purpose
Singapore	01.7.2001 to 06.07.2001	International Conference Participation
Australia	07.7.2001 to 13.07.2001	International Conference Participation
Sweden	31.08.2005 to 13.07.2007	Visiting Researcher

17. Honors/ Awards/ Recognitions

Name of the Honours / Awards / Recognition	Awarding Agency	International / National / State / Institute Level
Visiting Researcher award	Royal Inst. of Tech., Stockholm, Sweden	International
Outstanding Reviewer Award	Elsevier Science	International
Fellow of Academy of Sciences	Academy of Sciences, Chennai	National
Silver Member	International Solar Energy Society	International

18. Conference/Seminar/Workshop organized

Name of Conference/Seminar	Date(s)	Place	Role Played
Intl. Conf. on Recent Trends in Chemistry and Biosciences	16-17 May, 2019	Madurai Kamaraj University	Co-Convenor
Nanomaterials Characterization by Electron Microscopy	21-22 Feb, 2018	Madurai Kamaraj University	Convenor
Transmission 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
--	-----------------	----------------------------	----------------------

19. Invited Lectures / Resource Person

No	Institute / Organizer	Name of the Conference / Seminar / Workshop	International / National / State / Institute Level	Date(s)
1	Academy of Sciences Chennai	Summer Training Programme	State level	July 2021, Aug 2022
2	UGC-HRDC, MKU	Refresher Course(s)	Institute level	15 Lectures
3	MKU	GIAN Course	Institute Level	May 2018
4	Madurai Kamaraj University	Nanomaterials Characterization by Electron Microscopy	National	21-22 Feb, 2018
5	Mohamed Sathak Engg. College, Kilakarai	Intl. Conference on Green Technologies for Energy Management (ICGTEM 15)	International	27-28 Mar, 2015
6	MG Univ, Kottayam, Kerala, India	Materials Science Fundamentals and Applications	National	5-7 Mar, 2016
7	H.K.R.H. College, Uthamapalayam, India	Recent Trends in Chemistry,	National	12-13 Mar, 2015
8	Sree Narayana College, Punalur, Kerala, India	Chemical Applications of Spectroscopic Techniques,	National	12-13 Feb, 2015
9	Mother Teresa Univ., Kodaikanal, India	Workshop on Tuning nanoscientific research towards industrial needs	National	11.10.2013
10	Gov't Arts College, Ariyalur.	Chemistry Dept. Association Meeting,	Institute Level	28.03.2012

20. Administrative Experience

Role Played	Responsibilities	Period (Month & Yr)
Director, IQAC, MKU	IQAC related activities, like NAAC, AQAR, etc.	July 2021 onwards
Co-ordinator, UGC-UPE, MKU	Looking after UGC-UPE-Programme,	July 2019 onwards
Co-ordinator, Central Instrumentation Centre, MKU	In-charge of Maintaining HRTEM, SEM, TG/DSC, etc., Instruments	May 2019 onwards
Co-ordinator, MKU-NIRF	Consolidation and submission of MKU data to NIRF, New Delhi	Oct, 2018 – Dec 2020
Program Implementation Group Member, DST-PURSE-MKU	Implementation of DST-PURSE at MKU	October 2016 onwards
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	April 2019-Apr2022
Awards Committee Member	EMG Yadava Women's College, Mdu	April 2019-Apr2022

21. 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

22. 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

23. Languages Known

Languages	Read	Write	Speak
Tamil	Yes	Yes	Yes
English	Yes	Yes	Yes

24. Competence in Computer Applications

MS Word, MS Excel, MS Power Point, Origin, e-mail

List of Publications

Published in International Journals (Indexed)

1. S. Arumugam, T. Bavani, M. Preeyanghaa, S.O. Alaswad, B. Neppolian, J. Madhavan, S. Murugesan, A facile synthesis of visible light driven Ni₃V₂O₈ nano-cube/BiVO₄ nanorod composite photocatalyst with enhanced photocatalytic activity towards degradation of acid orange 7, Chemosphere, 2022, 308, 136100. Imp. Fac. 8.94.
2. 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 Al³⁺, Cd²⁺ and Pb²⁺ in nanomolar concentration, J. Mol. Structure, 2022, **1269**, 133724. Imp. Fac. 3.84.
3. H. Muniyasamy, K. Muthusamy, M. Chinnamadhyan, 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.
4. 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. 2.98

5. 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. 4.83
6. K. Karupiah, H. Muniyasamy, M. Nelson, M. Selvaraj, Murugesan Sepperumal, Siva Ayyanar, A novel indolehydrazone appended salicylaldehyde platform for detection of multianalytes (Al³⁺, Zn²⁺ and F⁻ ions): Live cell imaging, *Inorg. Chem. Commun.*, 2022, **135**, 109080. Imp. Fac. 3.43
7. 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. NA
8. T. Bavani, J. Madhavan, M. Preeyanghaa, B. Neppolian, S. Murugesan, Construction of direct Z-scheme g-C₃N₄/Bi₂WO₆ heterojunction photocatalyst with enhanced visible light activity towards the degradation of methylene blue, *Environmental Science and Pollution Research*, 2022, doi.org/10.1007/s11356-022-22756-9. Imp. Fac. 5.19
9. N. Pugazhenthiran, H. Valdes, R.V. Mangalaraja, P. Sathishkumar, S. Murugesan, Graphene modified "black {001} TiO₂" nanosheets for photocatalytic oxidation of ethylene: the implications of chemical surface characteristics in the reaction mechanism, *Sep. Purif. Technol.*, 2022, **292**, 121008. I.Fac. 9.13
10. 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 Science and Pollution Research*, 2022, **29**, 65222-65232. Imp. Fac. 5.19
11. D. Balaji, J. Madhavan, M. Preeyanghaa, M. Hussien, M. Selvaraj, S. Murugesan, B. Neppolian, Phosphorus co-doped reduced graphene oxide embedded flower-like CoS/CoS₂ heterostructure as an efficient electrocatalyst for hydrogen evolution reaction in acidic media, *J. Alloys and Compounds*, 2022, **907**, 164506. Imp. Fac. 6.37
12. 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. 8.94
13. 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. 6.37
14. 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. 5.53
15. 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. 5.47
16. 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-TiO₂ nanospheres, *J. Industrial and Engg. Chem.* 2022, **105**, 384-392. I.F. 6.76
17. 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 propylsalicylaldehyde anchored on the surface of mesoporous silica catalysts, *Dalton Transactions*, 2021, **50**, 15118-15128, I. F. 4.57
18. 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. 6.37
19. 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. 3.43
 20. M. Nelson, H. Muniyasamy, A.M. Kubendran, A. Balasubramaniam, 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. 6.63
 21. H. Muniyasamy, C. Chinnadurai, M. Nelson, A.M. Kubendran, K. Sukumaran, A. Balasubramaniam, Murugesan Sepperumal, S. Ayyanar, M. Govindasamy, A. Ghfar, F.M. Alsubaie, Highly selective fluorogenic chemosensor for cyanide ion in aqueous medium and its applications of logic gate and HeLa cells, *J. Molecular Liquids*, 2021, **334**, 116076. Imp. Fac. 6.63
 22. 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. 2.48
 23. H. Muniyasamy, C. Chinnadurai, M. Nelson, A. Veeramanocharan, **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. 4.32
 24. 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. 7.96
 25. 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
 26. 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
 27. Krishnaveni Karuppiah, Harikrishnan Muniyasamy, **Murugesan Sepperumal**, A. Siva, Design and synthesis of new salicylhydrazone tagged indole derivative for fluorometric sensing of Zn^{2+} ion and colorimetric sensing of F^{-} ion: Applications in live cell imaging, *Microchemical Journal*, 2020, **159**, 105543. Imp. Fac. 5.3
 28. 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. 5.53
 29. 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 TiO_2 nanoflowers photoanode with highly exposed $\{0\ 0\ 1\}$ facets for high performance dye-sensitized solar cell, *Solar Energy*, 2020, **211**, 1017-1026 Imp. Fac. 7.18
 30. M. Kandasamy, **S. Murugesan**, Aminosilicate modified mesoporous anatase $TiO_2@$ graphene oxide nanocomposite for dye-sensitized solar cells, *Solar Energy*, 2020, **211**, 789-798 Imp. Fac. 7.18
 31. 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. 3.84

32. 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. 5.59
33. Jeya Shree Ganesan, **Murugesan Sepperumal**, B. Ashokkumar, S. Ayyanar, A novel pyrazole bearing imidazole frame as ratiometric fluorescent chemosensor for Al³⁺/Fe³⁺ ions and its application in HeLa cell imaging, *Spectrochim. Acta A Mol. Biomol. Spectrosc.*, 2020, **230**, 117993. Imp. Fac. 4.83
34. G. Jeya Shree, **S. Murugesan**, A. Siva, A highly sensitive and selective Schiff-base probe as a colorimetric sensor for Co²⁺ 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. 4.83
35. 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. 3.92
36. 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. 5.12
37. 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. 4.18
38. Jeya Shree Ganesan, Sivaraman Gandhi, K.Radhakrishnan, Ashokkumar Balasubramaniam, **Murugesan Sepperumal**, Siva Ayyanar, Execution of julolidine based derivative as bifunctional chemosensor for Zn²⁺ and Cu²⁺ ions: Applications in bio-imaging and molecular logic gate, *Spectrochim. Acta A Mol. Biomol. Spectrosc.*, 2019, **219**, 33-43. Imp. Fac. 4.83
39. 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. 3.92
40. M. Mariyappan, N. Malini, J. Sivamani, G. Sivaraman, M. Harikrishnan, **S. Murugesan**, A. Siva, Turn-on Fluorescence Chemosensor for Zn²⁺ Ion Using Salicylate Based Azo Derivatives and their Application in Cell-Bioimaging, *J. Fluorescence*, 2019, **29**, 737–749. Imp. Fac. 2.52
41. 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. 3.92
42. 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. 2.27
43. 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-TiO₂ 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. 3.92

44. M. Karuppuraja, **S. Murugesan**, Template free solvothermal synthesis of single crystal magnetic Fe₃O₄ hollow spheres, their interaction with bovine serum albumin and antibacterial activities, *J. Saudi Chem. Soc.* 2018, **22**, 569-580. Imp. Fac. 4.71
45. 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. 3.13
46. 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: 4.71
47. 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. 3.92
48. 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. 3.89
49. 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. 3.13
50. 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. 2.84
51. 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. 2.03
52. A. Pandikumar, S. Suresh, **S. Murugesan**, R. Ramaraj, Dual Functional TiO₂-Au Nanocomposite Material for Solid-State Dye-Sensitized Solar Cells, *J. Nanosci. Nanotechnol.*, 2015, **15**, 6965-6972. I.F. 1.34
53. **S. Murugesan**, Structural and electrical properties of CuI–Ag₂O–MoO₃–WO₃ glassy–crystalline composite solid electrolyte system, *J. Non-Cryst. Solids*, 2014, **396**, 8-12. I.F: 4.45
54. N. Pugazhenthiran, **S. Murugesan**, P. Sathishkumar, S. Anandan, Photocatalytic degradation of ceftiofur sodium in the presence of gold nanoparticles loaded TiO₂ under UV–visible light, *Chem. Eng. J.* 2014, **241**, 401-409. I.F. 16.74
55. 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. 4.77
56. N. Pugazhenthiran, **S. Murugesan**, S. Anandan, High surface area Ag-TiO₂ nanotubes for solar/visible-light photocatalytic degradation of ceftiofur sodium, *J. Hazard. Mater.* 2013, **263**, 541-549. I.F. 14.22
57. 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
58. 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: 9.22
59. 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. 2.94

60. 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: 7.18
61. K. Govindan, **S. Murugesan**, P. Maruthamuthu, Photocatalytic degradation of pentachlorophenol in aqueous solution by visible light sensitive N-F-codoped TiO₂ photocatalyst, *Mater. Res. Bull.*, 2013, **48**, 1913-1919. I.F. 5.6
62. 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
63. 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: 1.65
64. Selma K. Kuriechen, **S. Murugesan**, S.P. Raj, P. Maruthamuthu, Visible light assisted photocatalytic mineralization of Reactive Red 180 using colloidal TiO₂ and oxone, *Chem. Eng. J.*, 2011, **174**, 530–538. IF: 16.74
65. 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: 7.18
66. N. Pugazhenthiran, P. Sathishkumar, **S. Murugesan**, S. Anandan, Effective degradation of acid orange 10 by catalytic ozonation in the presence of Au-Bi₂O₃ nanoparticles, *Chem. Eng. J.* 2011, **168** 1227–1233. IF: 16.74
67. Pandikumar A, **Murugesan S** and Ramaraj R, Functionalized Silicate Sol-Gel-Supported TiO₂-Au Core-Shell Nanomaterials and Their Photoelectrocatalytic Activity, *ACS Appl. Mater. Interfaces*, 2010, **2** 1912–1917. IF: 10.38
68. J. Madhavan, P. Maruthamuthu, **S. Murugesan**, M. Ashokkumar, Kinetics of degradation of acid red 88 in the presence of Co²⁺-ion/peroxomonosulphate reagent, *Appl. Catal. A: Gen.*, 2009, **368**, 35. IF: 5.72
69. 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: 7.3
70. 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: 24.31
71. **S. Murugesan**, A. Wijayasinghe, B. Bergman, Ion transport studies in CuI-doped silver borovanadate glassy system, *J. Non-cryst. Solids*, 2008, **354**, 1066. IF: 4.45
72. **S. Murugesan**, S.A. Suthanthiraraj, P. Maruthamuthu, All-solid-state cells based on solid electrolyte systems Cu_{1-x}Ag_xI–Ag₂O–Y, where x = 0.05 and 0.25; Y = P₂O₅, MoO₃, B₂O₃, SeO₂, V₂O₅ and CrO₃, *Mater. Res. Bull.* 2007, **42**, 2017. IF: 5.6
73. **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: 7.33
74. **S. Murugesan**, A. Wijayasinghe, B. Bergman, Preparation and characterization of CuI-doped silver borovanadate superionic system, *Solid State Ionics*, 2007, **178**, 779. IF: 3.69

75. 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: 7.3
76. 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: 7.18
77. **S. Murugesan**, S.A. Suthanthiraraj, P. Maruthamuthu, Evaluation of Transport Properties of Superionic Materials in the System (Cu_{1-x}Ag_xI)-(Ag₂O)-(CrO₃), *Solid State Ionics*, 2002, 154-155C, 621–628. IF: **3.69**
78. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Investigation of Fast-Ionic Transport in the Ternary System (Cu_{1-x}Ag_xI)-(Ag₂O)-(V₂O₅), (0.05 ≤ x ≤ 0.25), *Mater. Res. Bull.* 2002, 37, 2145–2154. (Imp. Fac: **5.6**)
79. **S. Murugesan**, S.A. Suthanthiraraj, P. Maruthamuthu, Complex Impedance and Structural Analyses of the Mixed System 40(Cu_{1-x}Ag_xI)-30(Ag₂O)-30(SeO₂), (0.05 ≤ x ≤ 0.25), *Solid State Ionics* 2002, **148**, 417–423. (IF: **3.69**)
80. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, An Evaluation of Superionic Properties of the Ternary System (Cu_{1-x}Ag_xI)-(Ag₂O)-(MoO₃), (0.05 ≤ x ≤ 0.25), *Mater. Sci. Engg.* 2002, B94, 207–213. (Imp. Fac: **3.40**)
81. 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(Ag₂O)-32.5(CrO₃), *J. Mater. Sci. Lett.* 2002, 21, 387–389. IF: 0.8
82. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Electrical Transport and Structural Properties of New Superionic Solids in the System (Cu_{1-x}Ag_xI)-(Ag₂O)-(B₂O₃), (0.05 ≤ x ≤ 0.25), *Solid State Ionics* 2001, **143**, 413-423. IF: **3.69**
83. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Electrical Characterization of Superionic Materials in the System (Cu_{1-x}Ag_xI)-(Ag₂O)-(P₂O₅), (0.05 ≤ x ≤ 0.25) for Solid State Batteries, *Indian J. Engg. Mater. Sci.* 8 (2001) 57-58. (Imp. Fac: 0.5)
84. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Preparation and Characterization of Superionic Materials in a New Mixed System (Cu_{1-x}Ag_xI)-(Ag₂O)-(P₂O₅), (0.05 ≤ x ≤ 0.25), *Solid State Ionics* 2000, 130, 299-303. (IF: **3.69**)

Articles in Proceedings of Conferences

85. 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)-(Ag₂O)-(MoO₃), (0.05 ≤ x ≤ 0.25), in: A.R. Kulkarni, P. Gopalan (Eds.), *Ion Conducting Materials-Theory and Applications*, Narosa Publishing House, New Delhi, 2001, pp. 155–158.
86. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, Investigation of Electrical Transport Properties of a New Mixed System 40(Cu_{1-x}Ag_xI)-30(Ag₂O)-30(SeO₂), 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)

87. Selma K. Kuriechen, **S. Murugesan**, Photodegradation of reactive red 141 by combined Photocatalysis and phot-Fenton-like processes, *Environmental Science an Indian journal*, 2013, 8, 8-13. IF: NA
88. S.K. Kuriechen, **S. Murugesan**, Sulphur-doped titanium dioxide nanoparticles for visible-light induced photo-mineralization of reactive red 141, *Environmental Science an Indian journal*, 2013, 8, 148-155.
89. J. Madhavan, **S. Murugesan**, P. Maruthamuthu, S. Anandan, Advance oxidation process-photocatalyzed degradation of a textile dye using titanium dioxide, *Environmental Science –An Indian Journal* 2008, 3, 80–83. I.F.: NA
90. S.A. Suthanthiraraj, **S. Murugesan**, P. Maruthamuthu, An Investigation of the Nature of Electrical Conductivity in a New System (Cu_{1-x}Ag_xI)-(Ag₂O)-(MoO₃), (0.05 ≤ x ≤ 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 TiO₂ 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 5th and 6th October, 2017.
3. M. Kandasamy and **S. Murugesan*** Investigation of Silver nanoparticles-decorated TiO₂ 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 Fe₃O₄ 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 TiO₂ 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 TiO₂ 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-TiO₂ 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-sensitized 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 TiO₂ 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 Cu₂O 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.