

Dr. Yuvraj Shivram Malghe
M.Sc., Ph.D.

Designation : Associate Professor

Email : ymalghe@yahoo.com



(a) Research Area/Research Interest :

Nanomaterials, Nano composites, Photocatalysis, Magnetic materials, Catalysis, Perovskites, Sensors, Electroceramic material etc.

(b) Publications year wise

1. Visible light photocatalytic degradation of malachite green using modified titania, Minakshi N. Bhatu, Atul B. Lavand, **Yuvraj S. Malghe**, Journal of Materials Research and Technology, 2018, Article in Press, DOI: 10.1016/j.jmrt.2017.05.019 (Impact Factor : 2.40) .
2. Synthesis, characterization and visible light photocatalytic activity of carbon and iron modified ZnO, A. B. Lavand and **Y S Malghe**, Journal of King Saud University – Science, 30 (2018) 65-70, DOI: 10.1016/j.jksus.2016.08.009 (Cite Score: 2.77).
3. Synthesis of nanosized BaCeO₃ from oxalate precursor, U. C. Yadav, **Y. S. Malghe**, Advanced Materials Proceedings, 2 (2017) 729-733. DOI: 10.5185/amp.2017/854.
4. Visible light driven photocatalysis using nitrogen doped TiO₂ quantum dots prepared by microemulsion route, Yuvraj S. Malghe , Atul B. Lavand, Advanced Materials Proceedings, 2 (2017) 16-21. DOI: 10.5185/amp.2017/105
5. Synthesis and study of anti-inflammatory activity of bis1,3,4-oxadiazole derivatives, Yuvaraj S. Malghe, Varsha V. Thorat, Abhay S. Chowdhary and Anil S. Bobade, International Journal of Chemistry, 5 (2016) 152-157.
6. Synthesis of C/ZnO/CdS nanocomposite with enhanced visible light photocatalytic activity, **Y. S. Malghe**, A. B. Lavand, Advanced Materials Letters, 7(3) (2016), 239-245. (Impact Factor : 1.90)
7. Microwave assisted synthesis of nickel nanostructures by hydrazine reduction route: Effect of solvent and capping agent on morphology and magnetic properties, Sahebrao B. Kashid, Rajesh W. Raut, **Yuvraj S. Malghe**, Materials Chemistry and Physics 170 (2016) 24-31. (Impact Factor : 2.259)
8. Synthesis, Characterization and Investigation of visible light photocatalytic activity of C, N co-doped ZnO, A. B. Lavand and **Y S Malghe**, Advanced Materials Letters, 7(3) (2016), 181-186. (Impact Factor : 1.90)
9. Visible-light photocatalytic degradation of ethidium bromide using carbon-and iron-modified TiO₂ photocatalyst A B Lavand, **Y S Malghe**, Journal of Thermal Analysis and Calorimetry, 123(2) (2016) 1163-1172. (Impact Factor : 2.042)

10. Synthesis, Characterization, and Investigation of Visible Light Photocatalytic Activity of C doped TiO₂/CdS Core-Shell Nanocomposite, A B Lavand, **Y S Malghe**, S H Singh, Indian Journal of Materials Science 2015, 1-9, <http://dx.doi.org/10.1155/2015/690568>.
11. Visible light photocatalytic degradation of 4-chlorophenol using C/ZnO/CdS nanocomposite,, A.B. Lavand, **Y.S. Malghe**, Journal of Saudi Chemical Society, 19 (2015) 471-478. 10.1016/j.jscs.2015.07.001 (Impact Factor : 2.523).
12. Synthesis, characterization and visible light photocatalytic activity of nitrogen-doped zinc oxide nanospheres, A.B. Lavand, **Y.S. Malghe**, Journal of Asian Ceramic Societies, 3 (2015) 305-310, doi:10.1016/j.jascer.2015.06.002.
13. Synthesis, characterization and investigation of dielectric properties of nanosized SrZrO₃, **Y. S. Malghe**, U. C. Yadav, J. Thermal Analysis and Calorimetry, 122 (2015) 589-594. DOI 10.1007/s10973-015-4804-9. (Impact Factor : 2.042)
14. Synthesis, characterization and biological activities of new bis-1,3,4-oxadiazoles, **Yuvraj S. Malghe**, Varsha V. Thorat, Abhay S. Chowdhary, Anil S. Bobade, Journal of Chemical and Pharmaceutical Research 7 (6) (2015) 392-98. (Impact Factor : 0.75)
15. Nano sized C doped TiO₂ as a visible light photocatalyst for the degradation of 2, 4, 6-trichlorophenol, A.B. Lavand, **Y.S. Malghe**, Advanced Materials Letters, 2015, 6(8), 695-700. (Impact Factor : 1.90)
16. Tandem synthesis of thia-oxadiazolophanes, **Y. S. Malghe**, V.V. Thorat, A.S. Chowdhary, A. S. Bobade, V N Patil, Journal of Chemical and Pharmaceutical Research 7 (5) (2015) 729-734. (Impact Factor : 0.75)
17. Synthesis, characterization and visible light photocatalytic activity of nanosized carbon doped zinc oxide, A.B. Lavand, **Y.S. Malghe**, International Journal of Photochemistry, vol. 2015, Article ID 790153, 9 pages, 2015. doi:10.1155/2015/790153.
18. Synthesis of Nanosized BaZrO₃ from oxalate precursor, A. B. Lavand, **Y. S. Malghe**, J. Thermal Analysis and Calorimetry, 118 (2014)1613-1618. (Impact Factor : 2.042)
19. Rapid Biosynthesis of platinum and palladium metal nanoparticles using root extract of Asparagus racemosus Linn. R W Raut, ASM Haroon **Y S Malghe** B T Nikam, S B Kashid, Adv. Matt. Lett. 4 (2013) 650-654. (Impact Factor : 1.90)
20. Synthesis of Nanosized CaZrO₃ from oxalate precursor, A. B. Lavand, S Prajapati and **Y. S. Malghe**, Int Green Nanotech. 4 (2012) 368-72. (Impact Factor : 0.10)
21. NANOSIZED SrTiO₃ POWDER FROM OXALATE PRECURSOR :Microwave Aided Synthesis and Thermal Characterization, **Y. S. Malghe**, J. Thermal Analysis and Calorimetry, 102 (2010), 831-836;DOI Number 10.1007/s10973-010-0786-9. (Impact Factor : 2.042)
22. Nanosized PbZrO₃ Powder from Oxalate Precursor : Microwave Aided Synthesis and Thermal Characterization, **Y. S. Malghe**, Journal of the American Ceramic Society 92 (2009) 2155 – 2158. (Impact Factor : 2.61)
23. Dilatometry and high temperature X-ray diffractometry study of LaCrO₃ prepared using microwave heating, **Y. S. Malghe**, K. Krishnan, K. D. Singh Mudher and S. R. Dharwadkar, J. Thermal Analysis and Calorimetry, 95 (2009) 49–52. (Impact Factor : 2.042)
24. Synthesis, characterization and biological activities of mixed ligand Zr (iv) complexes, **Y. S. Malghe**, R. C. Prabhu and R. W. Raut, Acta Poloniae Pharmaceutica – Drug Research, 66 (2009) 45-50. (Impact Factor : 0.86)

25. $\text{Ca}_{0.15}\text{Zr}_{0.85}\text{O}_{1.85}$ powder from oxalate precursor : Microwave aided synthesis and thermal characterization, **Y. S. Malghe** and S. R. Dharwadkar, *Thermochimica Acta*, 476 (2008) 66–68. (Impact Factor : 2.184)
26. LaCrO_3 powder from Lanthanum Trisoxalatochromate(III) (LTCR) Precursor : Microwave aided synthesis and thermal characterization, **Y. S. Malghe** & S. R. Dharwadkar, *J. Thermal Analysis and Calorimetry*, 91 (2008) 915-918. (Impact Factor : 2.042)
27. Synthesis of LaCoO_3 from lanthanum trisoxalatocobaltate (III) (LTC) precursor employing microwave heating technique, **Y. S. Malghe**, A. V. Gurjar and S. R. Dharwadkar, *J. Thermal Analysis and Calorimetry*, 78(2004) 739-744. (Impact Factor : 2.042)
28. Synthesis of BaTiO_3 powder from barium titanyl oxalate (BTO) precursor employing microwave heating technique, **Y. S. Malghe**, A. V. Gurjar, and S. R. Dharwadkar, *Bull. Mater. Sci.*, 27 (2004) 217-220. (Impact Factor : 1.017)
29. Solubility of CaSO_3 in aqueous sucrose solutions from 288 to 368 K, **Yuvraj S. Malghe** and Anil Kumar, *Indian Journal of Chemistry*, 37A (1998) 56-58. (Impact Factor : 0.9)
30. Visible light photocatalytic activity by modified titania, A. B. Lavand and Y S Malghe, *Proceedings of DAE-BRNS Nineteenth Symposium on Thermal Analysis (THERMANS-2013)*, BARC, Mumbai, Dec. 19 to 21, 2013, pp. 536 - 542.
31. Chloramine-T mediated synthesis of 2,5-disubstituted-2,3,4-oxidiazole using microwave irradiation, V. V. Thorat and Y. S. Malghe, *Proceedings of UGC sponsored National Seminar on Green Chemistry: A Route to Sustainable Development*, M. D. College, Parel, Dec. 3, 2013, pp. 68-72.
32. Photocatalytic activity of nanosized CuO synthesized from Cu-glycerol precursor, *Proceedings of the 18th International Symposium on Thermal Analysis (THERMANS-2012)*, BARC, Mumbai, Jan. 31 to Feb 2, 2012, pp. 221 - 222.
33. Photocatalytic Degradation of Methylene Blue using ZnO Nanocrystals, S. Trivedi and **Y. S. Malghe**, *Proceedings of the 17th National Symposium on Thermal Analysis (THERMANS-2010)*, Kurukshetra University, Kurukshetra, March 9-11, 2010. pp. 249-250.
34. Photocatalytic degradation of ethidium bromide using pure, Fe and Mn doped TiO_2 , **Y. S. Malghe** and S. K. Mourya, *Proceedings of the 16th National Symposium on Thermal Analysis (THERMANS-2008)*, Indira Gandhi Centre for Atomic Research, Kalpakkam, February 4-6, 2008. pp. 241-243.
35. Electrical Conductivity of $\text{Ca}_{0.15}\text{Zr}_{0.85}\text{O}_{1.85}$ (CSZ) Prepared From Oxalate Precursor Employing Microwave Heating Technique, **Y. S. Malghe**, R. K. Mishra and S. R. Dharwadkar, *Proceedings of the 15th National Symposium on Thermal Analysis*, University of Rajasthan, Jaipur, February 6-8, 2006, pp. 421-423.
36. Development of binary organic eutectics for solar energy trapping employing differential thermal analysis, **Y. S. Malghe**, and S. R. Dharwadkar, *Proceedings of the 13th National Symposium on Thermal Analysis (Thermans 2002)*, BARC, Mumbai, Jan. 21st –23rd, 2002, 49-51.

(c) Invited/Conference Talks

1. ‘Spectroscopic Techniques’ **Y. S. Malghe** – Workshop on “Instrumental Methods of

Chemical Analysis” held at MPASC College, Panvel on 16th Feb 2016.

2. ‘Atomic Term Symbols’ and ‘Hückel Molecular Orbital Theory,’ **Y. S. Malghe** – NET/SET workshop organized by Department of Chemistry, The Institute of Science, Mumbai during 10th to 12th March, 2016.

3. Green Chemistry: Microwave Assisted Synthesis of Technologically and Catalytically Important Compounds , **Y. S. Malghe** , Inagural talk in UGC sponsored Seminar on “Green Chemistry”, Dahiwadi College, Dahiwadi, Satara, India (28th Dec. 2009).

4. Physicochemical Investigations of Some Energy Related Systems

Y. S. Malghe , GURDIP SINGH – ITAS BEST Ph. D. THESIS

AWARD Lecture in “Sixteenth DAE- RNS National Symposium on Thermal Analysis (THERMANS 2008)” IGCAR, Kalpakkam, India (4 Feb. 2008).

(d) Paper Presentation in National/International Conferences/Symposia

1. **Y. S. Malghe**, U. C. Yadav. ‘Synthesis characterization and study of electrical conductivity of nanosized LaMnO₃’ presented in International Conference on Advanced Rechargeable Batteries and Allied materials (ICARBM-2017) held at C-MET, Pune during 8th to 10th March 2017.
2. **Y. S. Malghe**, A. B. Lavand ‘Visible light photocatalytic activity of C and Fe doped nanosized TiO₂’ presented in **American Advanced Materials Congress (AAMC-2016) held at Miami (USA)** during 4th to 9th December 2016.
3. **Y. S. Malghe and** U.C. Yadav. ‘Synthesis of nanosized SrCeO₃ from oxalate precursor,’ presented in **American Advanced Materials Congress (AAMC-2016) held at Miami (USA)** during 4th to 9th December 2016.
4. Synthesis of C/ZnO/CdS nanocomposite with enhanced visible light photocatalytic activity, **Y. S. Malghe**, A. B. Lavand presented in **Advanced Materials World Congress (AMWC-2015) held at Stockholm, Sweden** during 23rd to 26th Aug 2015.
5. Synthesis, Characterization and gas sensing * ebehavior of nanosized Fe₂O₃, **Y. S. Malghe**, P. S. More presented in **Advanced Materials world Congress (AMWC- 015) held at Stockholm, Sweden** during 23rd to 26th Aug 2015.
6. Visible light driven photocatalytic degradation of acifluorfen using nitrogen doped TiO₂ quantum dots, **Y. S. Malghe**, A. B. Lavand presented in International Conference on Materials Science and Technology (ICMTECH-2016) held at Conference Centre, Delhi University, Delhi during 1st to 4th March, 2016.
7. Synthesis of nanosized BaCeO₃ from oxalate precursor, U. C. Yadav, **Y. S. Malghe** presented in International Conference on Materials Science and Technology (ICMTECH-2016) held at Conference Centre, Delhi University, Delhi during 1st to 4th March, 2016.
8. Microwave assisted synthesis of superparamagnetic iron oxide nanoparticles and its magnetic properties, S. B. Kashid, R . W. Raut, **Y. S. Malghe** presented in International Conference on Materials Science and Technology (ICMTECH-2016) held at Conference Centre, Delhi University, Delhi during 1st to 4th March, 2016.

9. Synthesis, Characterization and Investigation of visible light photocatalytic activity of C, N co-doped ZnO, **Y S Malghe** and A. B. Lavand , presented in Conference on Advance Techniques and Devices in Mathematics and Physical Sciences, (An International Meet) organized by SRM University, Delhi-NCR Campus, Gaziabad, 23rd to 25th Jan , 2015.
10. Synthesis of nanosized SrZrO₃ from oxalate precursor, U. C. Yadav and **Y S Malghe**, presented in Conference on Advance Techniques and Devices in Mathematics and Physical Sciences, (An International Meet) organised by SRM University, Delhi-NCR Campus, Gaziabad, 23rd to 25th Jan , 2015.
11. Visible light photocatalytic degradation of 2,4,6 trichlorophenol using Carbon and Iron modified ZnO nanorods, A. B. Lavand and **Y. S. Malghe** presented in International conference on Environment and Energy Organised by Jawaharlal Nehru Technological University (JNTUH) Hyderabad Dec. 15-17th 2014
12. Synthesis of C doped TiO₂/CdS core shell nanoparticles using microemulsion method for visible light photocatalytic degradation of dye, A. B. Lavand and **Y. S. Malghe** presented in International conference on Energy, Environment, Materials and Safety (ICEEMS14) organized by CUSAT, Kochi, India Dec 10-12, 2014
13. Visible light photocatalytic degradation of Ethidium Bromide using nanosized carbon and iron modified TiO₂, A. B. Lavand and **Y. S. Malghe** presented in National Conference on Advances in Synthetic and Materials Chemistry (NCASMC-2014), Organised by Department of Chemistry, University of Mumbai, March 10-11, 2014.
14. Indioin resin catalysed efficient synthesis of symmetrical N, N'- alkylidene bisamides, S. Yewale and **Y. S. Malghe** presented in National Conference on Advances in Synthetic and Materials Chemistry (NCASMC-2014), Organised by Department of Chemistry, University of Mumbai, March 10-11, 2014.
15. Indioin resin an efficient, cost effective and recyclable catalyst for the synthesis of polysubstituted quinolines, S. Yewale and **Y. S. Malghe** presented in National Conference on Advances in Synthetic and Materials Chemistry (NCASMC-2014), Organised by Department of Chemistry, University of Mumbai, March 10-11, 2014.
16. Synthesis Characterization and anti-inflammatory evaluation of bis-1,3,4-oxadiazole derivatives, V. V. Thorat and **Y. S. Malghe** presented in National Conference on Advances in Synthetic and Materials Chemistry (NCASMC-2014), Organised by Department of Chemistry, University of Mumbai, March 10-11, 2014.
17. Visible light photocatalytic activity by modified titania, A. B. Lavand and Y S Malghe, Presented in DAE-BRNS Nineteenth Symposium on Thermal Analysis (THERMANS-2013), BARC, Mumbai, Dec. 19 to 21, 2013.
18. Chloramine-T mediated synthesis of 2,5-disubstituted-2,3,4-oxadiazole using microwave irradiation, V. V. Thorat and Y. S. Malghe, Presented in UGC sponsored National Seminar on Green Chemistry: A Route to Sustainable Development, M. D. College, Parel, Dec. 3, 2013.
19. Synthesis of nanosized CaZrO₃ from oxalate precursor, A. B. Lavand , **Y. S. Malghe**, 1st International conference on Functional Materials for Defence (ICFMD-2012 Jointly organized by Defence Institute of Advanced Technology, Pune Naval Postgraduate School, USA and Office of Naval Research (Global) USA, 18-20th May 2012.

20. Synthesis of nanosized SrZrO₃ from oxalate precursor, A. B. Lavand , **Y. S. Malghe** , 1st International conference on Functional Materials for Defence (ICFMD-2012, Jointly organized by Defence Institute of Advanced Technology, Pune Naval Postgraduate School, USA and Office of Naval Research (Global) USA, 18-20th May 2012.
21. Photocatalytic activity of nanosized CuO synthesized from Cu-glycerol precursor, S. Trivedi and **Y. S. Malghe** presented in 18th International Symposium on Thermal Analysis (THERMANS-2012), BARC, Mumbai, Jan. 31 to Feb 2, 2012.
22. Rapid Biosynthesis of platinum and palladium metal nanoparticles using root extract of Asparagus Racemosus Linn. R. W. Raut, A. S. M. Haroon, **Y. S. Malghe**, B. T. Nikam and S. B. Kashid presented in International Conference on Nanomaterials and Nanotechnology (ICNANO-2011), University of Delhi, Delhi, 18-21 Dec. 2011.
23. Photocatalytic Degradation of Malachite Green using ZnO Nanocrystals, **S. Trivedi and Y. S. Malghe** International Conference on Supramolecular Chemistry and Nanomaterials [ICSN 2011], Department of Chemistry, University of Mumbai, Mumbai, Feb14-16, 2011.
24. NANOSIZED SrTiO₃ POWDER FROM OXALATE PRECURSOR : Microwave Aided Synthesis and Thermal Characterization, **Y. S. Malghe**, presented in 17th National Symposium on Thermal Analysis (THERMANS-2010), held at Kurukshetra University, Kurukshetra, March 9-11, 2010.
25. Photocatalytic Degradation of Methylene Blue using ZnO Nanocrystals, S. Trivedi and **Y. S. Malghe**, presented in 17th National Symposium on Thermal Analysis (THERMANS-2010) held at Kurukshetra University, Kurukshetra, March 9-11, 2010.
26. Microwave Assisted Synthesis of Nanosized BaZrO₃ Powder from Oxalate Precursor, Sunitha L. Valupadasari and **Yuvraj S. Malghe**, presented in UGC-SAP sponsored National Conference on Synthesis and Applications of Novel Materials (NCSANM-2010) held at Department of Chemistry, University of Mumbai, Mumbai during March 4-5, 2010.
27. Nanosized PbZrO₃ powder from oxalate precursor : Microwave aided synthesis and thermal characterization', **Y. S. Malghe**, presented in "International Conference on Active/Smart Materials (ICASM- 2009)", held at Thiagarajar College of Engineering, Madurai during Jan. 7-9, 2009.
28. Synthesis of Fe₂O₃ and CuO Nanoparticles, **Yuvraj S. Malghe**, presented in "International Conference on Nanomaterials and Applications (ICNAMA 2008)", held at Shivaji University, Kolhapur during Dec.9-11, 2008.
29. Microwave processing of catalytically important materials, **Y. S. Malghe**, S. A. Borkar, Y. S. Satpute and S. R. Dharwadkar, presented in "International Conference on Emerging Trends in Chemical Sciences [ICETCS 2007]", held at Department of Chemistry, University of Mumbai, Mumbai during Jan. 23 – 25, 2007.
30. Microwave Assisted Low Temperature Synthesis of Calcia Stabilised Zirconia (CSZ) Powder from Oxalate Precursor, **Y. S. Malghe** and S. R. Dharwadkar, presented in "International Symposium on Materials Chemistry (ISMC-06)", Organized by Chemistry Division, BARC, Mumbai, December 4-8, 2006.
31. Synthesis of Solid Oxide Fuel Cell Materials Employing Microwave Heating Technique, **Y. S. Malghe**, R. K. Mishra and S. R. Dharwadkar, presented in IUPAC sponsored "Second

- International Symposium on Green/Sustainable Chemistry” held at Department of Chemistry, University of Delhi, during January 10-13, 2006.
32. Synthesis of Titania Based Alkaline Earth Pervoskites From Oxalate Precursors Employing Microwave Heating Technique, Y. S. Satpute, B. M. Patil, **Y. S. Malghe** and S. R. Dharwadkar, presented in Indo-Singapore symposium on “Advanced Function Materials (AFMS-06)” at I. I. T. Mumbai during 24-26th February, 2006.
 33. Preparation and investigation of photocatalytic activity of ZnO nanocrystals , M. S. Mishra and **Y. S. Malghe**, presented in National Conference on Chemistry of Materials [NCCM 2009] held at Department of Chemistry, University of Mumbai during February 20 – 21, 2009.
 34. Photocatalytic degradation of ethidium bromide using pure, Fe and Mn doped TiO₂, **Y. S. Malghe** and S. K. Mourya, presented in 16th National Symposium on Thermal Analysis (THERMANS-2008), Indira Gandhi Centre for Atomic Research, Kalpakkam, February 4-6, 2008.
 35. Low Temperature Synthesis of Mixed Oxides Employing Microwave Heating Technique, **Y. S. Malghe** and S. R. Dharwadkar, presented in Research Scholars Meet Organised by Indian Chemical Society (Mumbai Branch) and Meethibai College at Meethibai College, Mumbai on 11th and 12th February 2006.
 36. Synthesis of LaCrO₃ from Lanthanum Trisoxalatochromate(III) (LTCR) Precursor Employing Microwave Heating Technique, **Y. S. Malghe** & S. R. Dharwadkar, presented in “15th National Symposium on Thermal Analysis (Thermans 2006)”, University of Rajasthan, Jaipur, February 6-8, 2006.
 37. Dilatometric and High Temperature X-ray Diffractometric Study of LaCrO₃ prepared from Oxalate Precursor Employing Microwave Heating Technique, **Y. S. Malghe**, K. Krishnan, K. D. Singh Mudher and S. R. Dharwadkar, presented in “15th National Symposium on Thermal Analysis (Thermans 2006), University of Rajasthan, Jaipur, February 6-8, 2006.
 38. Electrical Conductivity of Ca_{0.15}Zr_{0.85}O_{1.85} (CSZ) Prepared From Oxalate Precursor Employing Microwave Heating Technique, **Y. S. Malghe**, R. K. Mishra and S. R. Dharwadkar, presented in “15th National Symposium on Thermal Analysis (Thermans 2006), University of Rajasthan, Jaipur, February 6-8, 2006.
 39. Synthesis of LaCoO₃ from Lanthanum Trisoxalato Cobaltate (III)(LTC) Precursor Employing Microwave Heating Technique, **Y. S. Malghe**, A. V. Gurjar and S. R. Dharwadkar, presented in “14th National Symposium on Thermal Analysis (Thermans 2004), M. S. University Baroda, January 20-22, 2004.
 40. Development of binary organic eutectics for solar energy trapping employing differential thermal analysis, **Y. S. Malghe**, and S. R. Dharwadkar, presented in 13th National Symposium on Thermal Analysis (Thermans 2002), BARC, Mumbai.

(e) Projects (Completed & Ongoing)

1. Fabrication and development of in situ characterization of soil elements determination system, Agency:- RGSTC, Mumbai, Duration (2018-2021), **Amount Rs.86,10,400/-**
2. Synthesis of nanosized perovskites and investigation of their electrical and magnetic properties, Funding Agency:- UGC, New Delhi , Duration (2013-17), **Amount Rs.9,15,800/- Completed**
3. Microwave assisted synthesis of Iron oxide - Iron magnetic nanoparticles, Funding Agency:- University of Mumbai, Duration:- 2012-13 (Completed).
4. Synthesis, Characterization and Investigation of Photocatalytic activities of Nanosized Zn and Cu Oxides, Funding Agency:- University of Mumbai, Duration:- 2009-2010 (Completed)
5. Preparation and investigation of catalytic activity of nano sized oxide materials, Funding Agency:- University of Mumbai, Duration:- 2007-2008 (Completed)
6. Design, Fabrication and Commissioning of Controlled Atmosphere Thermogravimetric System for Physico-chemical Investigations and its use for the Preparation of Heterogeneous Oxide Catalyst and Solid Oxide Fuel Cell Materials, Funding Agency:- University of Mumbai, Duration:-2002-2003 (completed)

(f) Research Guidance (Ph.D. & Msc by Research)

Sr. No.	Name of the Student	Research Topic	Degree	Remark
1.	Saurbh Trivedi	Synthesis, Characterization and Investigation of Catalytic Activity of nanosized Zn and Cu oxides	M. Sc. (By Research)	Degree awarded
2.	Atul B. Lavand	Synthesis, characterization and investigation of photocatalytic activities of nanosized transition metal oxides and their composites	Ph. D.	Degree awarded
3.	Mrs. Varsha Thorat	Synthesis, Characterization and Biological activities of heterocyclic compounds containing bis-1, 3,4-Oxidiazole moiety	Ph. D.	Degree awarded
4.	Sampat Yewale	Indion resin as a novel catalyst for organic reactions	Ph. D.	Synopsis Submitted
5.	S. B. Kashid	Synthesis, Characterisation and applications of magnetic nanoparticles	Ph. D.	Synopsis Submitted
6.	B. T. Nikam	Synthesis and characterization of metal oxide nanoparticles and their use as catalyst for organic synthesis	Ph. D.	Working
7.	U. C. Yadav	Synthesis of nanosized perovskites and investigation of their electrical and magnetic properties	Ph. D.	Working

8.	Nitisha Deshmukh	Synthesis of metal oxide nanostructures and investigation of their gas sensing properties	Ph. D.	Working
9.	Swapnali Dhage	Synthesis of nano sized composite oxides and investigation of their gas sensing properties	Ph. D.	Working

(g) Activities

1. Worked as Organizing Secretary of RGSTC, Mumbai and NSERTC, Delhi sponsored **‘National Seminar on Recent Trends in Science and Technology for Sustainable Developments 2018 (RTSTSD 2018)’** organized by The Institute of Science, Mumbai during 22nd to 23rd March, 2018.
2. Worked as a Coordinator for **‘Science Festival’** organized by The Institute of Science, Mumbai during 28th Feb to 16th March, 2017.
3. Worked as a Coordinator for Science exhibition organized by The Institute of Science, Mumbai as a Part of **‘Science Festival’** held during 15th to 25th February, 2016.
4. Worked as Coordinator for **Seven Days Hand on Training Course on Analytical Instruments** organized by The Institute of Science, Mumbai during 29th Oct. to 4th Nov. 2012.
5. Worked as Coordinator for **NET-SET workshop** organized by The Institute of Science, Mumbai during 1st to 4th Dec. 2011.
6. Worked as Coordinator for **NET-SET workshop** organized by The Institute of Science, Mumbai during Dec. 2010.
7. Working as **Coordinator UGC-CPE Committee**, The Institute of Science, Mumbai

(h) Topics taught

Quantum Chemistry, Thermodynamics, Statistical Thermodynamics, Spectroscopy, Nuclear Chemistry, Solid State Chemistry