


<p>Pragati Thakur <i>Associate Professor in Physical Chemistry</i> <i>Department of Chemistry</i> <i>University of Pune, Pune 411007</i></p> <p>Email : prthakur@chem.unipune.ac.in Phone(O): + 91 20 25601395 Extn.: 559/557 Mobile : + 91 9352405737</p>		
<p>Academic Background</p> <p>Ph.D. : Chemistry <i>(Laxminarayan Institute of Technology, Nagpur University, 2003)</i></p> <p>M.Sc. : Physical Chemistry <i>(Department of Chemistry, Nagpur University, 1997)</i></p> <p>B.Sc. Physics, Mathematics, Chemistry <i>(Nagpur University, 1995)</i></p> <p>Diploma in German Language <i>(Nagpur University, 2002, stood first in the order of merit)</i></p>	<p>Professional Experience</p> <p>26.08.2008 till date : <i>Associate Professor in Physical Chemistry at Department of Chemistry, University of Pune, Pune – 411 007.</i></p> <p>29.03.2003 to 25.08.2008 : <i>Worked as a Lecturer in Physical Chemistry at Department of Chemistry, University of Pune, Pune – 411 007.</i></p> <p>24.03.2003 to 28.03.2003 : <i>Worked as a Lecturer in Physical Chemistry, at Department of Chemistry, Mumbai University.</i></p> <p>1998 to 2003 : <i>Worked as a Lecturer in Physical Chemistry at Post Graduate Department, Hislop college, Nagpur University, Nagpur</i></p> <p>1998 to 1999 : <i>Worked as a Lecturer in Physical Chemistry at Post Graduate Department of Chemistry, Nagpur University, Nagpur</i></p> <p>1999 to 2003 : <i>Worked as a Lecturer in Applied Physical Chemistry (B. Tech. Chemical Engineering and Chemical Technology) at Laxminarayan Institute of Technology, Nagpur University, Nagpur.</i></p>	
<p>Research Interest</p> <ul style="list-style-type: none"> • Synthesis of Metal Oxide Semiconductor Nanoparticles and their Composites • Heterogeneous Photocatalysis • Advanced Oxidation Processes • Industrial Wastewater Treatment 		

Ongoing Research Schemes

Sr. No	Name of the PI	Title of Research Project/Scheme	Name of Funding Agency	Duration of Project/Scheme
1.	Pragati Thakur	Studies on Synergistic Effect of Microbial and Photocatalytic Treatment of Distillery Spent Wash for its Safe Disposal	UGC, New Delhi	3 Years 01.05.2009 to 30.04.2012
2.	Pragati Thakur	Synthesis and Applications of Composites of TiO ₂ with Carbon Nanotubes and Metal Chalcogenides sponsored by ISRO	ISRO- UOP	3 Years 01.04.2010 to 31.03.2013
	Pragati Thakur	Preparation and Photocatalytic Applications of Nanocomposites of Metal Oxides with Multiwalled Carbon Nanotubes (MWCNTs)	BCUD, Pune University	2 Years 01.04.2009 to 31.03.2011
4.	Pragati Thakur	Synthesis, Characterization and Application of Metal/Metal ions doped TiO ₂ /ZnO Nanoparticles with Potentially Enhanced Photocatalytic Activity	BARC-PU Collaborative Research Programme 2008- 2009	5 Years April 2010

Completed Research Schemes

Sr. No	Name of the PI	Title of Research Project/Scheme	Name of Funding Agency	Duration of Project /Scheme
1.	Pragati Thakur	Tertiary Treatment of Wastewater by Granular Activated Carbon Adsorption	UGC, New Delhi	2 Years 01.08.2006 to 31.09.2008
2.	Pragati Thakur	Photocatalytic Degradation of Refractory Organic Pollutants in Wastewater	BCUD, Pune University	2Years 01.1.2005 to 31.12.2006

Research Collaborators

- (i) Dr. S. B. Ogale, National Chemical Laboratory, Pune
- (ii) Dr. S. K. Haram, Department of Chemistry, University of Pune
- (iii) Dr. M. G. Chaskar, Principal, B.G. College, Pune
- (iv) Prof. V. S. Ghole, V. S. I. , Pune

Research Publications

1. **Shintre S. N. and Thakur P. R.***, “Photo-catalyzed Degradation of p-Nitrophenol Employing TiO₂ and UV Radiations”, Journal of Environmental Science and Engineering, 50, 4, pp 299-302, (2008).
2. **Shintre S. N. and Thakur P. R.***, “Photo-catalyzed Degradation of p-Nitrophenol employing ZnO and UV radiations”, proceedings of International “Trombay Symposium on Radiation and photochemistry (TSRP 2008)”, organized by BRNS, DAE in collaboration with Indian Society for Radiation and Photochemical Sciences, held at YASHADA, Pune, India, pp 213-214 (2008).
3. **Shintre S. N. and Thakur P. R.***, “Heterogeneous Photocatalytic Degradation of Organic Pollutant Present in Synthetic Wastewater”, proceedings of Indo-Italian International Conference on Green and Clean Environment (GCE 2008), organized by MITCOE, Pune in association with MPCB, CSIR, AICTE and the Embassy of Italy, held at MITCOE, Pune, India, pp 329-335 (2008) .
4. **Thakur P. R. and Yenkie M.K.N.**, Research paper entitled “Physico-chemical Treatment of Industrial Wastewater” in the proceedings of ‘National Symposium on Environment and Pollution’, (28th – 29th September 2002) organized by Indian Society of Analytical Scientist, (Nagpur Chapter, India), in collaboration with Board of Research in Nuclear Sciences, Department of Atomic Energy (2002).
5. **Kulkarni M. M. and Thakur P. R.***, “The effect of UV/TiO₂/H₂O₂ process and influence of operational parameters on photocatalytic degradation of azo dye in aqueous TiO₂ suspension”, accepted for publication in J Chemistry and Chemical Technology.

Research Papers Presented / Conferences / Workshops Attended

1. **Ovhal S.D., Thakur P.R.***, “Synthesis of Rutile TiO₂ Nanoparticles for the photocatalytic Degradation of Methyl Orange Dye” International Conference on Nanoscience & Nanotechnology (ICNN-2011) Nanded, Swami Ramanand Teerth Marathwada University, Nanded during January 11-13, 2011.

2. **Ovhal S.D., Thakur P.R.***, “Microemulsion Mediated Synthesis of Room Temperature Rutile TiO₂ Nanoparticles and its Photocatalytic Application” International Conference on Chemistry For Mankind : Innovative Ideas in Life Sciences (ICCM-2011) during 9-10th February 2011 at Nagpur.
3. **Kulkarni M. M., Thakur P.R.***, “Photocatalytic degradation of azodye using metal oxide nanoparticles” International Conference on Chemistry for Mankind: Innovative Ideas in Life Sciences (ICCM-2011) during 9-10 February 2011 at Nagpur.
4. **Nainani R.K., Samdani J.S., Thakur P.R.***, Synthesis of Silver Doped TiO₂ nanoparticles for the improved photocatalytic degradation of methyl orange” organized by “Centre for Environment Education and Technology (CEET)”, Kottayam, during 18–21 September 2010 held at Kottayam, pg 45 (2010)
5. **Samdani, J.S., Nainani R.K., Thakur P.R.***, “Preparation of Activated Carbon-TiO₂ Composite with Improved Photocatalytic Degradation Efficiency” , organized by “Centre for Environment Education and Technology (CEET)”, Kottayam, during 18–21 September 2010 held at Kottayam, pg 92 (2010)
6. **Kulkarni M.M., Thakur P.R.***, “Surface Chemical Modifications of TiO₂ Nanoparticles and Improved Photocatalytic Degradation of Azo Dye”, International Union of Materials Research Societies - International Conference on Electronic Materials 2010 (IUMRS-ICEM 2010, organized by International Union of Material Research Society, during 22-27 August 2010 at Seoul, Korea (2010).
7. **Ovhal S.D., Thakur P.R.***, “Comparative Study of ZnO and TiO₂ Catalyst for the Removal of Methylene Blue Dye via Photocatalytic degradation”, International Conference on Emerging Trends in Chemistry (ETIC 2010), organized by Department of Chemistry, University of Pune, during 5-7th January, 2010 pg 112 (2010).
8. **Kulkarni M. M., Thakur P.R.***, “Application of TiO₂ Nanoparticles for the photocatalytic degradation of organic pollutants in wastewater ”, International Conference on Emerging Trends in Chemistry (ETIC 2010), organized by Department of Chemistry, University of Pune, during 5-7th January 2010 pg 139 (2010).
9. **Ovhal S.D., Kale S.M., Thakur P.R.***, “Application of TiO₂ Nanoparticles for the Photocatalytic Degradation of Textile Dye”, 3rd Indo-Italian Seminar on Green Chemistry, organized by Department of Chemistry, University of Delhi at 9th December 2009 at Delhi University, Delhi pg 11(2009).
10. **Ovhal S.D., Thakur P.R.***, “Synthesis and Application of TiO₂ Nanoparticles for the Removal of Methylene Blue via Photocatalytic Degradation” International Workshop on Nanotechnology and Advanced Functional Materials (NTAFM-09) organized by National Chemical Laboratory, Pune, at Pune during 9-11th July, 2009, pg 115(2009).

11. **Kulkarni M. M., Thakur P. R.***, “Photocatalytic Degradation of p-Nitrophenol using UV/TiO₂/ H₂O₂ Process”, Seminar on Recent Trends in Chemistry, (pp-7) organized by Department of Chemistry, University of Pune, on 13 th March, 2009, at Pune University, Pune.
12. **Ovhal S. D., Kale S. M., Thakur P. R.***, “Application of TiO₂ for photocatalytic degradation of methylene blue”, has been presented in Seminar on Recent Trends in Chemistry (pp-38) organized by Department of Chemistry, University of Pune, on 13 th March , 2009, at Pune University, Pune.
13. **Thakur P.R.***, “Environmental Applications of Nano Materials”, “2nd International Symposium on Advanced Materials and Polymers for Aerospace and Defence Applications” organized by Yashada ,Pune held during 8-12th December 2008 at Yashada, Pune .
14. **Thakur P.R.***, “Semiconductor Photooxidation of Organic Pollutants Present in Wastewater”, “2nd International Symposium on Advanced Materials and Polymers for Aerospace and Defence Applications” held during 8-12th December 2008 at Yashada, Pune (2008).
15. **Kulkarni M. M., Samdani, J. S., Ovhal S. D., Thakur P.R.***, “Application of TiO₂ Nanoparticles for the Photocatalytic Degradation of Organic Pollutants”, has been presented in the “International Conference on Nanomaterials and Applications” organized by Shivaji University, Kolhapur, during 9-11th December 2008 at Shivaji University, Kolhapur pg 83 (2008).
16. **Ovhal S. D., Shintre S.N., Thakur P. R.***, “The effect of UV Aabsorption on the Photocatalytic Oxidation of Refractory Organic Pollutants”, Seminar on Advances in Chemistry, organized by Department of Chemistry, University of Pune, during 20-21th March 2008 at Pune University,(2008).
17. **Thakur P. R.***, “Photo-catalytic Degradation of p-Nitrophenol in TiO₂ and ZnO Water Suspension”, 95th Indian Science Congress Association, organized by Indian Science Congress Association, during 3-7th January 2008 at Vishakapatnam (2008).
18. **Thakur P. R.**, attended International Symposium on Recent Developments in Chemistry, organized by Department of Chemistry, University of Pune, during 14-15th February 2007 at Pune University, Pune.
19. **Shintre S. N., Thakur P. R.***, “Photocatalytic degradation of p-nitrophenol over UV irradiated TiO₂ and ZnO”, Innovation – 2007, First Conference for Pune University Teachers, organized by Department of Chemistry, University of Pune, during 19-21th , 2007 at Pune University, Pune PP-17 (2007).

20. **Shintre S. N., Hamdan H., Thakur P. R.***, “Photo-catalyzed Degradation of p-Nitrophenol Employing TiO₂ and UV Radiations”, ISCAS 2007, organized by R.T.M. Nagpur University, in association with Indian Association of Solid State Chemists and Allied Scientists, during 28-30th November, 2007 at Nagpur pg 95 (2007)
21. **Thakur P. R.***, “Adsorption Equilibrium and Kinetics of Nitrophenol”, 94th Indian Science Congress Association during January 3 to 7, 2007 at Annamalainagar, Tamil Nadu (2007).
22. **Thakur P. R.**, participated in workshop on “Access to E-Resources under UGC – Infonet E-Journals consortium, on 1st & 2nd November, 2004 at Goa University, Goa.
23. **Thakur P. R.**, Participated in Workshop on “Mathematical Concepts and Computer in Chemistry” on 4th January 2003 at Department of Chemistry, Institute of Science, Nagpur.
24. **Thakur P. R.*, Datta C., Yenkie M. K. N.** “Adsorption of phenol from its aqueous solution on synthetic resins”, has been presented at the second National seminar on “Environmental Awareness, Education and Management for Sustainable Rural Development organized by Department of Environmental Sciences, Sri Venkateswar University, Tirupati, India on 26 – 28th, August 2002 at Sri Venkateshwara University, Tirupati pg 30 (2002).
25. **Thakur P. R.** attended National Seminar on “Instrumentation and Control in Chemical Industry”, ‘ICCI 2K2’, on 9th August 2002 at Diamond Jubilee Celebrations, Laxminarayan Institute of Technology, Nagpur.
26. **Thakur P. R.***, attended National Seminar on “Instrumentation and Control in Chemical Industry”, ‘ICCI 2K2’, on 9th August 2002 at Diamond Jubilee Celebrations, Laxminarayan Institute of Technology, Nagpur.
27. **Thakur P. R.***, participated in Workshop on “International Workshop to Educate the Educators on Preventive Environmental Management (ETE on PEM)”, organized by jointly NetPEM and IIIIEE, Lund University Sweden on 15 -17th January, 2002 at Nagpur..
28. **Thakur P. R., Khati N. T., Yenkie M. K. N.** “Physico-chemical treatment of textile mill wastewater”, has been presented at the 89th Indian Science Congress Association Session organized by Section of Chemistry, held on 3-7th January, 2002 at Lucknow PP-3(2002)
29. **Thakur P. R.***, attended State Level Seminar on “Application of Chemistry for the Advancement of Life Sciences”, on 30th December, 2001 at Dr. Ambedkar College, Nagpur.
30. **Thakur P. R.*, Yenkie M. K. N** “Adsorption Characteristics of Some Organic pollutants from their aqueous solutions at different temperatures”, National seminar on “Recent Trends

in Industrial Waste Treatment” organized by Laxminarayan Institute of Technology, Nagpur University, Nagpur, during 13-14 January, 2001 at L.I.T., Nagpur pg 231 (2001).

- 31. Khaty N., Thakur P. R., Yenkie M. K. N.** “Scavenging Pollutants from Boiled Rice Mill Wastewater by Combination of Coagulation and GAC Adsorption”, National seminar on “Recent Trends in Industrial Waste Treatment”, organized by Laxminarayan Institute of Technology, Nagpur University, Nagpur, during 13-14 January, 2001 at L.I.T., Nagpur pg 237 (2001).
- 32. Thakur P. R.***, “Physico-chemical Treatment of Boiled Rice Mill Wastewater”, 88th Indian Science Congress Association Session held during 3-7 January, 2001 at Delhi pg. 292 (2001).
- 33. Thakur P. R.***, “Influence of Temperature on Adsorption of Some Organic Pollutants from their Aqueous Solutions”, 87th Indian Science Congress Association Session held during 3-7 January, 2000 at Pune pg 27 (2002).
- 34. Thakur P. R.***, attended National Seminar on “Advances in Industrial Waste Treatment”, “Treatwaste 99”, on 13th & 14th January, 1999 at Laxminarayan Institute of Technology, Nagpur.
- 35. Thakur P. R.***, attended National Seminar on “Facets of Coordination Chemistry”, on 24th April, 1999 at Nagpur.

Membership of Professional Society

- 1) Life member of Indian Society for Radiation and Photochemical Sciences (ISRAPS), C/o Radiation and Photochemistry Division, BARC, Mumbai. Life Member No. 320.
- 2) Life member of Indian Association of Chemistry Teachers