# BIO-DATA

## Dr. Manmohan Lal Satnami

*M. Sc., M. Phil., Ph.D., CSIR-NET(Chemistry) TWAS-CNPq Postdoctoral Fellow (Brazil)*

## *Assistant Professor*

School of Studies in Chemistry Pt. Ravishankar Shukla University, Raipur, (Chhattisgarh) 492010, India E-mail : *manmohanchem@gmail.com*
Mobile: 79995-09271

## Personal Details:

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| 1. | **Name** | : | **Dr. Manmohan Lal Satnami**<br>Assistant Professor<br>School of Studies in Chemistry,<br>Pandit Ravishankar Shukla University,<br>Raipur, (Chhattisgarh), 492010 |
| 2. | **Father's Name** | : | Shri Ghasiya Ram Satnami |
| 3. | **Mother's Name** | : | Smt. Parwati Satnami |
| 4. | **Date of Birth** | : | 01.06.1975 |
| 5. | **Residential Address** | : | L-6, Teachers Colony,<br>Pt. Ravishankar Shukla University Campus,<br>Raipur, (Chhattisgarh), 492010. |
| 6. | **Contact Address** | : | L-6, Teachers Colony,<br>Pt. Ravishankar Shukla University Campus,<br>Raipur, (Chhattisgarh), 492010<br>State- Chhattisgarh, Pincode: 490001 |

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| 7. | **Gender** | **:** | Male |
| 8. | **Marital Status** | **:** | Married |
| 9. | **Nationality** | **:** | Indian |
| 10. | **Language Known** | **:** | Hindi & English |
| 11. | **Blood Group** | **:** | **‘**O’ +Ve |
| 12. | **E-mail** | **:** | manmohanchem@gmail.com |
| 13. | **Mobile No.** | **:** | 79995-09271 |

## Educational Qualifications :

| **Examination/ Degree** | **Board/University** | **Subject** | **Year** |
|---|---|---|---|
| TWAS-CNPq Postdoctorate | Federal University of Santa Catarina, Florianopolis, Brazil | Phys. Org. Chemistry, Surface Science | 2007-08 |
| Ph.D. | Pt. Ravishankar Shukla University, Raipur | Phys. Org. Chemistry, Surface Science | 2007 |
| CSIR-NET | CSIR-New Delhi | Chemical Science | 2002, 2003 |
| M. Phil. | Vikram University, Ujjain | Chemistry (Inorg. Special.) | 2002 |
| M. Sc. | Pt. Ravishankar Shukla University, Raipur | Chemistry (Inorg. Special.) | 2000 |
| B.Sc. | Pt. Ravishankar Shukla University, Raipur | Chemistry, Botany, Zoology | 1998 |

## Position Obtained:

| No. | Position/Post | Department/Institute | Duration |
|---|---|---|---|
| 1. | Assistant Professor | School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur. | 18th October, 2008 to till date |
| 2. | TWAS-CNPq Postdoctoral Fellow | Federal University of Santa Catarina, Florianopolis, Brazil | 1, Year (2007-2008) |
| 3. | Assistant Professor | Govt. College, Antagarh | One Academic Session(2006-2007) |
| 4. | Lecturer (Contract Basis) | School of Studies in Chemistry, Pt. Ravishankar Shukla University,Raipur. | One Academic Session(2005-2006) |
| 5. | SRF (CSIR Project) | School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur. | 1 Years (2005) |
| 6. | JRF (CSIR Project) | School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur. | 2 Years (2003-2005) |

## Experience

[A] **Research Experience : 09 Years**

1. One Year, during M. Phil (Chemistry), worked on Inorganic Synthesis and submitted dissertation to Vikram University Ujjain, entitled ***"Synthesis and Characterization of Oximato Derivatives of Thorium (IV)."***

2. Four Years , During Ph.D; working on the Physical Organic Chemistry, Surface Science, and Detoxification of Organophosphorus Compounds. Thesis submitted entitled ***–Interfacial Reactivity of Hydroxamic Acids in Microorganized Media".***

3. One Year, During Postdoctorate, working on the Physical Organic Chemistry, Surface Science.

[B] Worked with 800 MHz and 400 MHz NMR spectrometer at National Center of NMR Analysis , Federal University of Rio de Janeiro, Brajil.

[C] **Teaching Experience :**

1. As Assistant Professor (Permanent), Teaching Post graduate students, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, 2008 to till date.
2. As Assistant Professor (Adhoc), Govt. College, Antagarh, Kanker (Chhattisgarh), 2006-07.
3. As Lecturer (Contract Basis), School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, 2005-06.
4. As Lecturer (Contract Basis), School of Studies in Chemistry, Vikram University, Ujjain, 2002- 03.

## Research Awards:

a. **U.G.C. Research Award:** Selected for U.G.C. Research Award 2016-18.

b. **Best Assistant Professor Award:** Awarded Assistant Professor of Year (Science) for Academic Session 2014-15.

c. **DST-Young Scientist Award (2011-14), Fast Track Project entitled –***O*-Nucleophilicity of Hydroxamic Acid: Esterolytic Cleavage of Some Simulants of Chemical Warfare Agents and Organophospsorus Pesticides‖.

d. **TWAS-CNPq- Postdoctoral Fellowship,** Awarded by Third World Academy of Sciences (TWAS), Italy and Council of Scientific and Technological Development (CNPq), Brazil awarded jointly.

e. **Senior Research Fellow** (SRF), Council of Scientific and Industrial Research (CSIR), New Delhi, Feb. 2005 to Sept. 2005.

f. **Junior Research Fellow** (JRF), Council of Scientific and Industrial Research (CSIR), New Delhi, Feb. 2005 to Sept. 2005.

## Research Project Availed:

| S. No. | Project Title | Funding Agency | Amount | Completed/ Ongoing |
|---|---|---|---|---|
| 1. | Nanomaterial-Based Optical And Electrochemical Biosensors For Detection Of Simulants Of Warfare Nerve Agents | SERB, New Delhi | 27,00000.00 | Ongoing |
| 2. | Hydrolytic Cleavage of Organophorsphorus Pesticides by Oximate and Hydroxamates in Self-Organized Assemblies | CGCOST | 5,00000.00 | Completed |
| 3. | *O*-Nucleophilicity of Hydroxamic Acid: Esterolytic Cleavage of Some Simulants of Chemical Warfare Agents and Organophosphorus Pesticides | DST, Delhi | 26,48000.00 | Completed |
| 4. | Synthesis and Development of Novel OximeReactivators of Cholinesterases Inhibited by Organophosphorus Toxicants. **(Co-Investigator)** | DRDO, Delhi | 39,00000.00 | Completed |
| 5. | Solubilization of Polycyclic Aromatic Hydrocarbons using Novel Surfactant Mixtures. **(Co-Investigator)** | CSIR, Delhi | 36,60000.00 | Completed |

## Research Project Submitted:

| S. No. | Project Title | Funding Agency | Amount | Completed/ Ongoing |
|---|---|---|---|---|

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| 1. | Quantum Dot Bioconjugates: Synthesis, Characterization and Biomolecular Interaction of Medicinally Important Biomolecules | DBT, New Delhi | 57,48000.00 | Submitted |
| 2. | Synthesis, Characterization and Biological Activities of Thiol CappedSilver and Gold Nanoparticles. | UGC, New Delhi | 21,00000.00 | Submitted |

## Research Scholar Guided:

| S.No. | Name | Title of Ph.D. Thesis | Status |
|---|---|---|---|
| 1. | Ms. Kumudini Chandraker | Synthesis, Characterization and Biological Activities of Thiol Capped Silver and GoldNanoparticles | Awarded |
| 2. | Mr. Sandeep Vaishnav | Quantum Dot Bioconjugates: Synthesis, Characterization and Biomolecular Interaction of Medicinally Important Biomolecules | Awarded |
| 3. | Mr. Hitesh Dewangan | O-Nucleophilicity of Hydroxamic Acids: Esterolytic Cleavage of Some Simulants of Chemical Warfare Agents and Organophosphorus Pesticides. | Awarded |
| 4. | Ms. Neha Kandpal | Hydrolytic Cleavage of Organophosphorus Based Pesticides in Self-Organized Media. | Awarded |
| 5. | Ms. Jyoti Korram | Nanomaterials based Biosensors for the Detection of Organophosphorus Pesticides | Awarded |
| 6. | Ms. Sunita Dhritlahre | Synthesis, Micellar Interactions and Catalytic Activities of Some Polymers Containing Oxime and Hydroxamic Acids. | Working |
| 7. | Ms. Lakshita Dewangan | Functional Quantum Dot Nanoprobe for Detection of Toxicants and Biomolecules. | Working |

# M. Phil. Students Guided:

| S.No. | Name | Title of Ph.D. Thesis | Year |
|---|---|---|---|
| 1. | Ms. Sunita Dhritlahre | Nucleophilic Attack of Salicylhydroxamate Ion at C=O and P=O Centers | Completed, 2009-10 |
| 2. | Mr. Indrapal Karbhal | Esterolytic Cleavage of Carboxylate and Phosphate Esters by Hydroxamate Ions in Micellar Media. | Completed, 2010-11 |
| 3. | Mr. Sandeep Vaishnav | Synthesis of Thiol Capped Chalcogenide Quantum Dots of Cd and Zn. | Completed, 2011-12 |
| 4. | Ms. Kaushilya Mannewar | Synthesis and Characterization of Thiol Capped Gold Nanoparticles | Completed, 2012-13 |
| 5. | Ms. Neha Kandpal | Synthesis, Characterization and Nucleophilic Reactivity of Naphthalene Hydroxamic Acid | Completed, 2013-14 |
| 6. | Ms. Jyoti Korram | Synthesis and Characterization of Au@Ag Core Shell Nanoparticles | Completed, 2013-14 |
| 7. | Mr Kuleshwar Prasad Patel | Smart Nanosensor for the Detection of Medicinally Important Thiol Compounds | Completed 2015-2016 |
| 8. | Ms. Meera | Synthesis, Chemosensing and Acteylcholinestrase inhibitor properties of Chalcogen Derivatives. | Completed, 2016-17 |
| 9. | Mr. Likeshwar Sinha | Synthesis, Characterization of Quaternized 3-Pyridine Hydroxamic acid and Micellar Catalysed Hydrolysis of Phosphate Esters. | Completed, 2016-17 |
| 10. | Ms. Lakshita Dewangan | L-Cysteine Capped CdTe Quantum Dot Based Fluorescence Nanosensor for Sensitive Detection of Co(II) ion. | Completed, 2017-18 |

## Research Publications:

1. 26 Papers Published in International and 09 Papers Published in National Journal of Repute. (Please see Annexure I) .
2. 07 Papers Presented in National and 2 Papers Presented in International Conferences. (Please see Anexure II).

## Foreign Visit:

1. TWAS-CNPq Postdoctoral Fellow, Department of Chemistry, Santa Catarina, Florianopolis, Brazil. (May 2—07 to March 2008).
2. 9$^{th}$ Latin American Conference on Physical Organic Chemistry, 30$^{th}$ September 2007 to 5th October 2007, Cordoba, Argentina.

## Membership of Academic Bodies:

*1. Member of University Academic Council.*

*2. Life Member, Indian Society for Surface Science and Technology.*

*3. Member of Indian Chemical Society.*

# List Of Publications

| S. No. | Title | Author | Journal | Impact factor |
|---|---|---|---|---|
| 1. | Interaction of Ionic Liquid with Silver Nanoparticles: Potential Application in Induced Structural Changes of Globular Proteins | Manoj Kumar Banjare, Kamalakanta Behera, Ramesh Kumar Banjare, Reshma Sahu, Srishti Sharma, Siddharth Pandey, **Manmohan L. Satnami**, Kallol K Ghosh | *ACS Sustainable Chem. Eng.*, **2019,** *7*, 11088-11100. | **6.97** |
| 2. | Interaction of Synthesized Nitrogen enriched Graphene Quantum Dots with Novel Anti-Alzheimer's Drugs: Spectroscopic Insights | Srishti Sharma, Namrata Singh, Eugenie Nepovimova, Jan Korabecny, Kamil Kuca, **Manmohan L Satnami**, Kallol K Ghosh | *J BIOMOL STRUCT DYN*, **2019,** 1-24. | **3.310** |
| 3. | Antidepressant drug-protein interactions studied by spectroscopic methods based on fluorescent carbon quantum dots | Sandeep K Vaishanav, Toshikee Yadav, Srishti Sinha, Swapnil Tiwari, **Manmohan L Satnami**, Kallol K Ghosh | *Heliyon*, **2019,** *5*, e01631. | **0.84** |
| 4. | Influence of pyridine oximate and quaternized pyridinium oximate ions on the hydrolysis of phosphate esters in cationic microemulsions | N Kandpal, HK Dewangan, R Nagwanshi, KK Ghosh, **ML Satnami** | *J. Dis. Sci. Technology*, **2019,** *40*, 604-611. | **1.479** |
| 5. | Silver nanoparticles for selective detection of phosphorus pesticide containing π-conjugated pyrimidine nitrogen and sulfur moieties through non-covalent interactions | Kamlesh Shrivas, Sushama Sahu, Bhuneshwari Sahu, Ramsingh Kurrey, Tarun Kumar Patle, Tushar Kant, Indrapal Karbhal, **Manmohan L Satnami**, Manas | *J. Mol. Liq.*, **2019,** *275*, 297-303. | **4.516** |

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|---|---|---|---|---|
| | | Kanti Deb, Kallol Kumar Ghosh | | |
| 6. | A carbon quantum dot–gold nanoparticle system as a probe for the inhibition and reactivation of acetylcholinesterase: detection of pesticides | Jyoti Korram, Lakshita Dewangan, Rekha Nagwanshi, Indrapal Karbhal, Kallol K Ghosh, **Manmohan L Satnami** | *New J. Chem.* **2019,** *43*, 6874-6882. | **3.069** |
| 7. | Micellar-accelerated hydrolysis of organophosphate and thiophosphates by pyridine oximate | Neha Kandpal, Hitesh K Dewangan, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *Int. J. Chem. Kinetics*, **2018,** *50*, 827-835. | **1.417** |
| 8. | Gold nanoprobe for inhibition and reactivation of acetylcholinesterase: An application to detection of organophosphorus pesticides | **Manmohan L Satnami**, Jyoti Korram, Rekha Nagwanshi, Sandeep K Vaishanav, Indrapal Karbhal, Hitesh K Dewangan, Kallol K Ghosh | *Sens. Actuators B Chem*. **2018,** *267*, 155-164. | **6.393** |
| 9. | Silver nanoparticle modulates gene expressions, glyoxalase system and oxidative stress markers in fluoride stressed Cajanus cajan L. | Bhumika Yadu, Vibhuti Chandrakar, Jyoti Korram, **Manmohan L Satnami**, Meetul Kumar, S Keshavkant | *J. Hazard. Mater.* , **2018,** *353*, 44-52. | **7.650** |
| 10. | Self-aggregation of bio-surfactants within ionic liquid 1-ethyl-3-methylimidazolium bromide: A comparative study and potential application in antidepressants drug aggregation | Manoj Kumar Banjare, Kamalakanta Behera, Ramsingh Kurrey, Ramesh Kumar Banjare, **Manmohan L Satnami**, Siddharth Pandey, Kallol K Ghosh | *Spectrochim. Acta Part A* , **2018,** *199*, 376-386. | **2.931** |
| 11. | Imidazolium-Based Ionic Liquid as Modulator of Physicochemical Properties of Cationic, Anionic, | Amit Kumar, Manoj K Banjare, Srishti Sinha, Toshikee Yadav, Reshma Sahu, | *J Surfactants Deterg.*, **2018,** *21*, 355-366. | **1.672** |

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|---|---|---|---|---|
| | Nonionic, and Gemini Surfactants | **Manmohan L Satnami**, Kallol K Ghosh | | |
| 12. | Spectroscopic studies on in vitro molecular interaction of highly fluorescent carbon dots with different serum albumins | Sandeep Kumar Vaishnav, Indrapal Karbhal, **Manmohan L Satnami**, Kallol K Ghosh | *J. Mol. Liq.*, **2018,** *255*, 279-287. | **4.561** |
| 13. | Hydrolytic Dephosphorylation of *p*-Nitrophenyl Diphenyl Phosphate by Alkyl Hydroxamate Ions | Neha Kandpal, Hitesh K Dewangan, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *J Surfactants Deterg.*, **2018,** *21*, 209-220. | **1.672** |
| 14. | Host–guest complexation of ionic liquid with α-and β-cyclodextrins: a comparative study by 1 H-NMR, 13 C-NMR and COSY | Manoj Kumar Banjare, Kamalakanta Behera, **Manmohan L Satnami**, Siddharth Pandey, Kallol K Ghosh | *New J. Chem.* **2018,** *42*, 14542-14550. | **3.069** |
| 15. | Self-assembly of a short-chain ionic liquid within deep eutectic solvents | Manoj Kumar Banjare, Kamalakanta Behera, **Manmohan L Satnami**, Siddharth Pandey, Kallol K Ghosh | *RSC Adv.*, **2018,** *8*, 7969-7979. | **3.049** |
| 16. | Supra-molecular inclusion complexation of ionic liquid 1-butyl-3-methylimidazolium octylsulphate with α-and β-cyclodextrins | Manoj Kumar Banjare, Kamalakanta Behera, **Manmohan L Satnami**, Siddharth Pandey, Kallol K Ghosh | *Chem. Phys. Lett.*, **2017,** *689*, 30-40. | **1.901** |
| 17. | An investigation of kinetic and physicochemical properties of vesicular surfactants with oximate and hydroxamate ions: Hydrolytic reactions of organophosphorus pesticides | Neha Kandpal, Hitesh K Dewangan, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *J. Mol. Liq.*, **2017,** *243*, 178-186. | **4.561** |
| 18. | Antibacterial properties of amino acid functionalized silver nanoparticles | Kumudini Chandraker, Rekha Nagwanshi, SK | *Spectrochim. Acta Part A*, **2017,** *181*, 47-54. | **1.672** |

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| | decorated on graphene oxide sheets | Jadhav, Kallol K Ghosh, **Manmohan L Satnami** | | |
| 19. | A comparative study on the effect of imidazolium-based ionic liquid on self-aggregation of cationic, anionic and nonionic surfactants studied by surface tension, conductivity, fluorescence and FTIR spectroscopy | Manoj Kumar Banjare, Ramsingh Kurrey, Toshikee Yadav, Srishti Sinha, **Manmohan L Satnami**, Kallol K Ghosh | *J. Mol. Liq.,* **2017,** *241*, 622-632. | **4.561** |
| 20. | Surface plasmon resonance based spectrophotometric determination of medicinally important thiol compounds using unmodified silver nanoparticles | Sandeep K Vaishnav, Kuleshwar Patel, Kumudini Chandraker, Jyoti Korram, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *Spectrochim. Acta Part A,* **2017,** *179*, 155-162 | **1.672** |
| 21. | Green luminescent CdTe quantum dot based fluorescence nano-sensor for sensitive detection of arsenic (III) | Sandeep K Vaishanav, Jyoti Korram, Priyanka Pradhan, Kumudini Chandraker, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *J. Fluoresc.,* **2017,** *27*, 781-789. | **1.913** |
| 22. | Reactivity of hydroxamate ions in cationic vesicular media for the cleavage of carboxylate esters | Neha Kandpal, Hitesh K Dewangan, Rekha Nagwanshi, Sandeep K Vaishanav, Kallol K Ghosh, **Manmohan L Satnami** | *J Surfactants Deterg.,* **2017,** *20*, 331-340. | **1.672** |
| 23. | Kinetic Investigation of Micellar Promoted Pyridine based Oximate and Hydroxamate Catalysis on Phosphotriester Pesticides | Hitesh K Dewangan, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *Catal. Lett.,* **2017,** *147*, 602-611 | **2.372** |
| 24. | $Mn^{2+}$ Doped-CdTe/ZnS Modified Fluorescence Nanosensor for Detection of | **Manmohan L. Satnami** Sandeep K. Vaishanav, Jyoti | *Sens. Actuators B Chem,* **2017,** *DOI:* | **5.667** |

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|---|---|---|---|---|
| | Glucose | Korram, Rekha Nagwanshi, Kallol K. Ghosh | *10.1016/j.snb.2017.01.118* | |
| 25. | Kinetic Investigation of Micellar Promoted Pyridine based Oximate and Hydroxamate Catalysis on Phosphotriester Pesticides | Hitesh K Dewangan, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *Catal. Lett.*, **2016,** *DOI: 10.1007/s10562-016-1912-5* | **2.372** |
| 26. | Synthesis and *in-vitro* reactivation screening of imidazolium aldoximes as reactivators of sarin and VX-inhibited human acetylcholinesterase (*h*AChE) | Rahul Sharma, Bhanushree Gupta, Arvind Kumar Sahu, Jyotiranjan Acharya, **Manmohan L Satnami**, Kallol K Ghosh | *Chem.-Biol. Interact.*, **2016,** *259*, 85-92. | **3.407** |
| 27. | Hydrolytic Cleavage of Paraoxon by Octanohydroxamate Ion in Cationic Microemulsions | **Manmohan L Satnami**, Hitesh K Dewangan, Rekha Nagwanshi | *Int. J. Chem. Kinetics*, **2016,** *48*, 601-608. | **1.417** |
| 28. | Influence of octanohydroxamic acid on the association behavior of cationic surfactants: Hydrolytic cleavage of phosphate ester | **Manmohan L Satnami**, Hitesh K Dewangan, Neha Kandpal, Rekha Nagwanshi, Kallol K Ghosh | *J. Mol. Liq.*, **2016,** *221*, 805-814. | **4.561** |
| 29. | Protein nanoparticle interaction: A spectrophotometric approach for adsorption kinetics and binding studies | Sandeep K Vaishanav, Kumudini Chandraker, Jyoti Korram, Rekha Nagwanshi, Kallol K Ghosh, **Manmohan L Satnami** | *J. Mol. Struct.*, **2016,** *1117*, 300-310. | **2.120** |
| 30. | Hydrolytic cleavage of paraoxon and parathion by oximate and functionalized oximate ions: a comparative study | Hitesh K Dewangan, Neha Kandpal, Rekha Nagwanshi, **Manmohan L Satnami** | *Indian J Chem A*, **2016,** *55*, 560-565. | **0.483** |
| 31. | Spectrofluorometric determination of mercury and lead by colloidal CdS nanomaterial | **Manmohan L Satnami**, Sandeep K Vaishanav, Rekha Nagwanshi, Kallol K Ghosh | *J. Dis. Sci. Technology.*, **2016,** *37*, 196-204. | **1.479** |

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| 32. | Adsorption Kinetics and Binding Studies of Protein Quantum Dots Interaction: A Spectroscopic Approach | **Manmohan L. Satnami** Sandeep K. Vaishanav, Jyoti Korram, Rekha Nagwanshi, Kallol K. Ghosh | *J. Fluoresc.*, **2016,** doi:10.1007/s10895-016-1773-8 | **1.913** |
| 33. | Nucleophilicity of aromatic and aliphatic hydroxamate ions towards C=O and P=O center in cationic micellar media | Rekha Nagwanshi Neha Kandpal, Hitesh K. Dewangan, **Manmohan L. Satnami** | *J. Indian Chem. Soc.*, **2016,** *93*, 1-8. | **0.25** |
| 34. | Radical scavenging efficacy of thiol capped silver nanoparticles | Kumudini Chandraker, Sandeep Kumar Vaishanav, Rekha Nagwanshi, **Manmohan L Satnami** | *J. Chem. Sci.*, **2015,** *127*, 2183-2191. | **1.298** |
| 35. | Interaction of Thiolated Aminoacids and Peptide on to the Gold Nanoparticle Surface: Radical Scavenging Activity. | **Satnami, M. L.,** Chandraker K.,Vaishanav, S. K., Nagwanshi, R., Ghosh,K.K | *J. Indian Chem. Soc.*, **2015**, *54A*, 1206-1214. | **0.25** |
| 36. | CdS Quantum Dots: Aqueous Synthesis, Spectroscopic and microscopic investigation | **ML Satnami**, SK Vaishanav, R Nagwanshi, KK Ghosh | *J. Indian Chem. Soc.*, **2015**, *92*, 1-9. | **0.25** |
| 37. | Spectrofluorometric determination of mercury and lead by colloidal CdS nanomaterial | **ML Satnami**, SK Vaishanav, R Nagwanshi, KK Ghosh | *J. Dis. Sci. Technology.*, **2015**, *37*, 196-204. | **0.71** |
| 38. | Nucleophilicity of Aromatic and Aliphatic Hydroxamate Ions towards C=O and P=O Center in Cationic Micellar Media. | N Kandpal, HK Dewangan, **ML Satnami** | *J. Indian Chem. Soc.*, **2015** *93*, 1-8. | **0.71** |

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| 39. | O-Nucleophilicity of Hydroxamate Ions for Cleavage of Carboxylate and Phosphate Esters in Cationic Micelles | **ML Satnami**, H Dewangan, I Karbhal | *Int. J. Chem. Kinetics.* **2014**, *46*, 419-432. | **1.57** |
| 40. | Evaluation of the Potency of Antibacterial activity of some beta-lactum antibiotics conjugated with CdSe/ZnS quantum dots. | **ML Satnami**, S Vaishanav | *Toxicol. Letters,* **2014,** S115. | **3.36** |
| 41. | Kinetics studies of hydroxamate and Functionalized oximate ions for hydrolysis of organophosphor us compounds | H Dewangan, **ML Satnami** | *Toxicol. Letters*, **2014**, S 229, S115. | **3.36** |
| 42. | From α-Nucleophiles to Functionalized Aggregates: Exploring the Reactivity of Hydroxamate Ion towards Esterolytic Reactions in Micelles | N. Singh, Y. Karpichev, R. Sharma, B Gupta, A. K. Sahu, **M. L. Satnami**, K. K. Ghosh | *Org. Biomol. Chem.*, **2015**,*13*, 2827-2848 **(Review Article)** | **3.562** |
| 43. | Solubilization of Polycyclic Aromatic Hydrocarbons in Structuraly Different Gemini and Monomeric Surfactants: A Comparative Study | T. Yadav, D. Tikariha, J. Lakra, **M.L. Satnami**, A.K. Tiwari, S. K. Saha, K. K Ghosh | *J. Mol. Liq.*, **2015**, *204*, 216-221 | **2.154** |
| 44. | Mixed Micellization of Gemini & Cationic Surfactants: Physico-chemical Properties &Solublization of Polycyclic Aromatic Hydrocarbons. | J. Lakra, D. Tikariha, T. Yadav, S. Ghosh, **M. L. Satnami**, Kallol K. Ghosh, | *Colloids Surf. A: Physicochem Eng. Aspects* **2014**, *451*, 56-65. | **2.354** |
| 45. | Catalytic hydrolysis of phosphodiesters by nucleophilic ions in gemini micellar media | Birendra Kumar, Deepti Tikariha, **M. L. Satnami**, N. Barbero, P.Quagliotto and K. | *J. Phy. Org. Chem. 2014, 27, 613-621* | **1.38** |

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| | | K. Ghosh | | |
| 46. | Assessment of Antidotal Efficacy of Cholinesterase Reactivators Against Paraoxon: In Vitro Reactivation Kinetics and Physicochemical Properties | B. Gupta, N. Singh, R. Sharma, B. Foretic´, K. Musilek, K. Kuca, J. Acharya, **M.L. Satnami**, K. K. Ghosh | *Bioorg. Med. Chem. Lett.*, **2014**, *24*, 4743-4748 | **2.331** |
| 47. | Physicochemical Properties and Supernucleophilicity of Oxime Functionlized Surfactants: Hydrolytic Catalysts Towards Dephosphorylation of Di- and Tri-phosphate Esters. | N. Singh, Y. Karpichev, B. Gupta, **M. L. Satnami**, J. Marek, K. Kuca, K. K. Ghosh | *J. Phy. Chem. B*, **2013**, *117*, 3806-3817 | **3.30** |
| 48. | Reactivity Studies of Carbon. Phosphorus and Sulphur Based Acyl Studies with Tertiary Oximes in Gemini Surfactants | B. Gupta, R. Sharma, N. Singh, Y. Karpichev, **M. L.Satnami**, K. K. Ghosh | *J. Phys. Org. Chem.*, **2013**, *26*, 632-642 | **1.38** |
| 49. | Study of Solubility Efficiency of Polycyclic Aromatic Hydrocarbons in Pure Surfactant System. | J. Lakra, D. Tikariha, T. Yadav, **M. L. Satnami**, K. K. Ghosh. | *J. Surf. Deterg.* **2013**, *16*, 957-966. | **1.68** |
| 50. | Reactivity Studies of Carbon. Phosphorus and Sulphur Based Acyl Studies with Tertiary Oximes in Gemini Surfactants. | B. Gupta, R. Sharma, N. Singh, Y. Karpichev, **M. L. Satnami,** K. K. Ghosh | *J. Phys. Org. Chem.*, **2013,** *26*, 632-642 | **1.38** |
| 51. | Physiochemical Characterization of Cationic Gemini Surfactants and Their Effect on Reaction Kinetics in Ethylene Glycol-Water Medium. | D. Tikariha, N. Singh, **M.L. Satnami**, K.K. Ghosh, P. Quagliotto N. Barbero | *Colloids Surf. A: Physicochem. Eng. Aspects*, **2012**, *411*, 1-11. | **2.354** |

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| 52. | Comparative studies on reaction of bis(*p*-nitrophenyl) phosphate and α- nucleophiles in cationic micellar media. | B. Kumar, **M.L. Satnami**, K.K. Ghosh, K. Kuca | *J. Phys. Org. Chem.*, **2012**, *25*, 864-871. | **1.38** |
| 53. | Nucleophilic Attack of Salicyl-hydroxamate Ions at C=O and P=O Centers in Cationic Miceller Media | **ML Satnami**, S Dhritlahre, R Nagwanshi, I Karbhal, KK Ghosh, F Nome | *J. Phys. Chem. B* **2010**, *114*, 16759-16765 | **3.30** |
| 54. | Incorporation and Reactions of Iodide Ion with Methyl Naphthalene-2-sulfonate in Zwitterionic Sulfobetaine Micelles: A New Model for Anion Distribution. | M. A. Farrukh, R. C. Beber, J. P. Priebe, **Manmohan L. Satnami**, G. A. Micke, A. C. O. Costa, H. D. Fiedler, C. A. Bunton, F. Nome | *Langmuir*, **2008**, *24*, 12995-13000. | **4.268** |
| 55. | The chameleon-Like Nature of Zwitterionic Micelles: The Intrinsic Relation of Anion and Cation Binding in Sulfobetaines Micelles | J. P. Priebe, **Manmohan L. Satnami**, D. W. Tondo, B. S. Souza, J. M. Priebe, G. A. Micke, A. C. O. Costa, H. D. Fiedler, C. A. Bunton, F. Nome | *J. Phys. Chem. B*, **2008**, *112*, 14373-14378 | **4.033** |
| 56. | Effect of Cationic Gemini Surfactants on the Hydrolysis of Carboxylate and Phosphate Esters Using Hydroxamate Ions. | K. K. Ghosh, S. Kolay, S. Bal, **Manmohan L. Satnami**, P. Quagliotto, P. R. Dafonte | *Colloid Polymer Sci.*, **2008**, *286*, 293-303. | **2.443** |
| 57. | Kinetic Studies of Micelle- Assisted Reaction of with Benzohydroxamate Ions in Water-Ehtylene Glycol Mixtures. | S. Bal, **Manmohan L. Satnami**, S. Kolay, R. M. Palepu, P. R. Dafonte, K. K. Ghosh | *J. Surface Sci. Technol*., **2007**, *23*, 1- 16. | **2.764** |

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| 58. | Kinetics of Reaction of Oximate Nucleophiles with *p*-Nitrophenyl Acetate in Alkyltriphenyl Phosphonium Bromide Micelles. | K. K. Ghosh, S. Kolay, **Manmohan L. Satnami**, Sarah, Moore, R. M. Palepu, P. R. Dafonte | *J. Dispersion Sci. Technol*., **2007**, *28*, 213-218. | **0.720** |
| 59. | Studies of Nucleophilic Reactions of *p*-Nitrophenyl Acetate with Some Dihydroxamate ions in Cationic Micellar Media. | K. K. Ghosh, S. Bal, **Manmohan L. Satnami**, R. M. Palepu, P. R. Dafonte | *J. Dispersion Sci. Technol*., **2006**, *27*, 349-355. | **0.720** |
| 60. | Enhanced Nucleophilic Reactivity of Hydroxamate ions some Novel Micellar Systems for Cleavage of Parathion. | K. K. Ghosh, D. Sinha, **Manmohan L. Satnami**, D. K. Dubey, A. K. Shrivastava, , R. M. Palepu, P. R. Dafonte | *J. Colloid Interface Sci.*, **2006**, *301*, 564-568. | **3.066** |
| 61. | The □-Effects in Micelles: Nucleophilic Substitution Reaction of *p*-Nitrophenyl Acetate with *N*-Phenylbenzohydroxamate Ions. | K. K. Ghosh, J. Vaidya, **Manmohan L. Satnami** | *Int. J. Chem. Kinet*., **2006**, *38*, 26-31. | **1.619** |
| 62. | Nucleophilic Substitution Reaction of Carboxylate and Phosphate Esters with Hydroxamate Ions in Microemulsions. | K. K. Ghosh, **Manmohan L. Satnami** | *Colloids and Surfaces A: Physicochem. Eng. Aspects*, **2006**, *274*, 125-129. | **2.130** |
| 63. | Kinetic Study of Hydrolytic decomposition of Organophosphates and Thiophosphates by *N*-Hydroxyamides in Cationic Micellar | K. K. Ghosh, D. Sinha, **Manmohan L. Satnami**, A. K. Shrivastava, D. K. Dubey, G. | *Indian J. Chem.*, **2006**, *45B*, 726-730. | **0.562** |

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| | Media | L. Mundhara. | | |
| 64. | Solvent Effects on the Nucleophilic Substitution Reaction of *p*- Nitrophenyl Acetate with Hydroxamate Ions. | K. K. Ghosh**, Manmohan L. Satnami,** D. Sinha | *J. Mol. Liquids* **2005**, *116*, 55-60. | **1.649** |
| 65. | Nucleophilic Dephosphorylation of *p*- Nitrophenyl Diphenyl Phosphate in Cationic Micellar Media. | K. K. Ghosh, D. Sinha, **Manmohan L. Satnami**, D. K. Dubey, P. R. Dafonte, G. L. Mundhara. | *Langmuir*, **2005**, *21*, 8664-8669 | **4.268** |
| 66. | Dephosphorylation of Paraoxon by Hydroxamate Ions in Micellar Media | K. K. Ghosh, **Manmohan L. Satnami**, D. Sinha | *Tetrahedron Letters*, **2004**, *45*, 9103-9105. | **2.618** |
| 67. | Effects of Hydroxamate Ions in Micellar Mediated Reaction of *p*- Nitrophenyl Acetate. | K. K. Ghosh, Y. Simanenko, **Manmohan L. Satnami**, S. K. Sar | *Indian J. Chem.*, **2004**, *43B*, 1990-1994. | **0.562** |
| 68. | Micellar Effects Upon the Reaction of *p*-Nitrophenyl Acetate with *N*Hydroxyamides. | K. K. Ghosh, D. Sinha, **Manmohan L. Satnami** | *J. Surface Sci. Technol*., **2003**, *19*, 159-166. | **2.764** |

# Annexure-II

## List Of Papers Presented In Conferences

| S.No. | Title | Author | Conference |
|---|---|---|---|
| 1. | Logic opration-based on FRET Switching of Carbon Quantum Dot and gold nanoparticles for inhibition and reactivation of Acetylcholine esterase: Detection of Organophosphorus and Carbamate Pesticides. | Manmohan L. Satnami | International Conference on Luminiscence and its Applications. January 7-10,2019 **India Presented** |
| 2. | | Manmohan L. Satnami | International Conference on Fostering Interdisciplinary Research in Medicines. January 19-21,2019 **India Presented** |
| 3. | Plasmonic and Quantum Dot based Optical tongues for evaluation of inhibition and reactivation AChE: Detection of Pesticides. | Manmohan L. Satnami | International Seminar Recent Advances on Chemical Sciences and Allied Areas and the 55$^{th}$ Annual Convection of Chemists 2018 December 28-30,2018 **India Presented** |
| 4. | Mixed Micellization and Catalytic Activity of Octanohydroxamic Acid for Hydrolysis of Paraxon. | Manmohan L. Satnami and Hitesh Kumar Dewangan | XVI National Conference on Surfactant, Emulsions &Biocolloids (NATCOSEBXI), Nov. 04-06, 2015, Pt. RavishankarShukla University, Raipur, (C.G.) **India Presented** |
| 5. | Catalytic Hydrolysis of Organophosphates: ONucleophilicity of –N-O-Functional Oximates and Hydroxamates. | Manmohan L. Satnami and Hitesh Kumar Dewangan | XVI National Conference on Surfactant, Emulsions &Biocolloids (NATCOSEBXI), Nov. 28-30, 2013, |

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| | | | Central Leather Research Institute (CLRI), Chennai, **India Presented** |
| 6. | Nucleophilic Attack of Salicylhydroxamate Ion at C=O and P=O Centers in Cationic Micellar Media. | Manmohan L. Satnami, Indrapal Karbhal, Sunita Dhritlahre | National Seminar On Research in Chemical Science (4 & 5th March 2011) Govt. Madhav Science College, **Ujjain. India Presented** |
| 7. | Nucleophilic Attack of Salicylhydroxamate Ion at C=O and P=O Centers in Cationic Micellar Media: Hydroxamate-Assisted Catalytic Cleavages of Carboxylate and Phosphate Esters In Cationic Micelles. | Manmohan L. Satnami, IndrapalKarbhal, SandeepVaishnav. | 48th Annuval Convention of Chemist 2011 (3-7Dec.2011) University of Allahabad, **Allahabad** (U.P.) **India Presented** |
| 8. | Specific Anion Binding to Sulfobetaine Micelles: Effect on Surface Acidity. | Daniel W. Tondo, Jonas P. Priebe, Jacks P. Priebe, Bruno S. de Souza, Manmohan L. Satnami and Faruk Nome | 9th Latin American Conferences on Physical Organic Chemistry, 30 Sept. to 5 October 2007, Cordoba**,** **Argentina** |
| 9. | Interfacial Modification of Sulfobetaine Micelles: Effect of Sulfobetaine Micelles on Hydrolytic Reactions. | Manmohan L. Satnami, Bruno S. De Souza, Jacks P. Priebe, Daniel W.Tondo and Faruk Nome. | XV Encontro de Quimica da RegioSul, Quimica e a Interdisciplinaridade, 15-17 November, 2007, Ponta Grassa, Prana, **Brasil(Presented)** |
| 10. | Interfacial Reactivity of Hydroxamic Acids in Micelles. | Manmohan L. Satnami | 3rd Chhattisgarh Young Scientist Congress, 28th Feb 2005 to 1st March 2005, Raipur (Chhattisgarh), **India Presented** |
| 11. | Enhanced Nucleophilic Reactivity of | Kallol K. Ghosh, D.Sinha and | 92nd Indian Science Congress,Jan. 3-7, |

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| | Hydroxamic Acids in Micelles. | ManmohanL.Satnami | 2005, Ahmedabad, **India Presented** |
| 12. | Kinetics of Nucleophilic Reactivity of Hydroxamic acids. | Kallol K. Ghosh and Manmohan L. Satnami | XI National Conference on Surfactant, Emulsions &Biocolloids (NATCOSEBXI), Dec. 11-13, 2003, University of Mumbai, **India Presented** |