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Academic Background:

- ***Raman (Obama-Singh) Fellow at Michigan State University, USA, 2013-2014***
- ***BOYSCAST Fellow at Iowa University, Iowa, USA, 2008.***
- ***JSPS Fellow at Gifu University, Gifu, Japan, 2002-2004.***
- ***Ph.D. National Chemical Laboratory, University of Pune 1996-2002.***
- ***M.Sc. Organic Chemistry, University of Pune 1995-1996.***
- ***B.Sc. Chemistry, University of Pune 1991-1994***

Professional Experience:

- ***Lecturer 2004-2008***
- ***Reader 2008-2011***
- ***Associate Prof. 2011-2014***
- ***Professor 2014 onwards***

Awards and Fellowships:

- **Raman (Obama-Singh) Post-Doctoral Fellowship at USA by UGC, 2013.**
- **Young Scientist Award by Catalysis Society of India, 2013.**
- **Young Associate of Maharashtra Academy of Sciences 2011.**
- **Young Scientist Award by CRSI, Bangalore 2009.**
- **BOYSCAST Fellowship 2008.**
- **JSPS Fellowship 2002**
- **CSIR-SRF Fellowship 1998**

Research Schemes, collaborative ventures and consultancy:

- **Department of Science and Technology, New Delhi**
- **University Grants Commission, New Delhi**
- **Bhabha Atomic Research Centre – University of Pune collaboration**
- **Department of Atomic Energy-Board of Research in Nuclear Sciences**
- **University of Pune**
  (Total Funding ~ 1.35 crores)

Life Memberships:

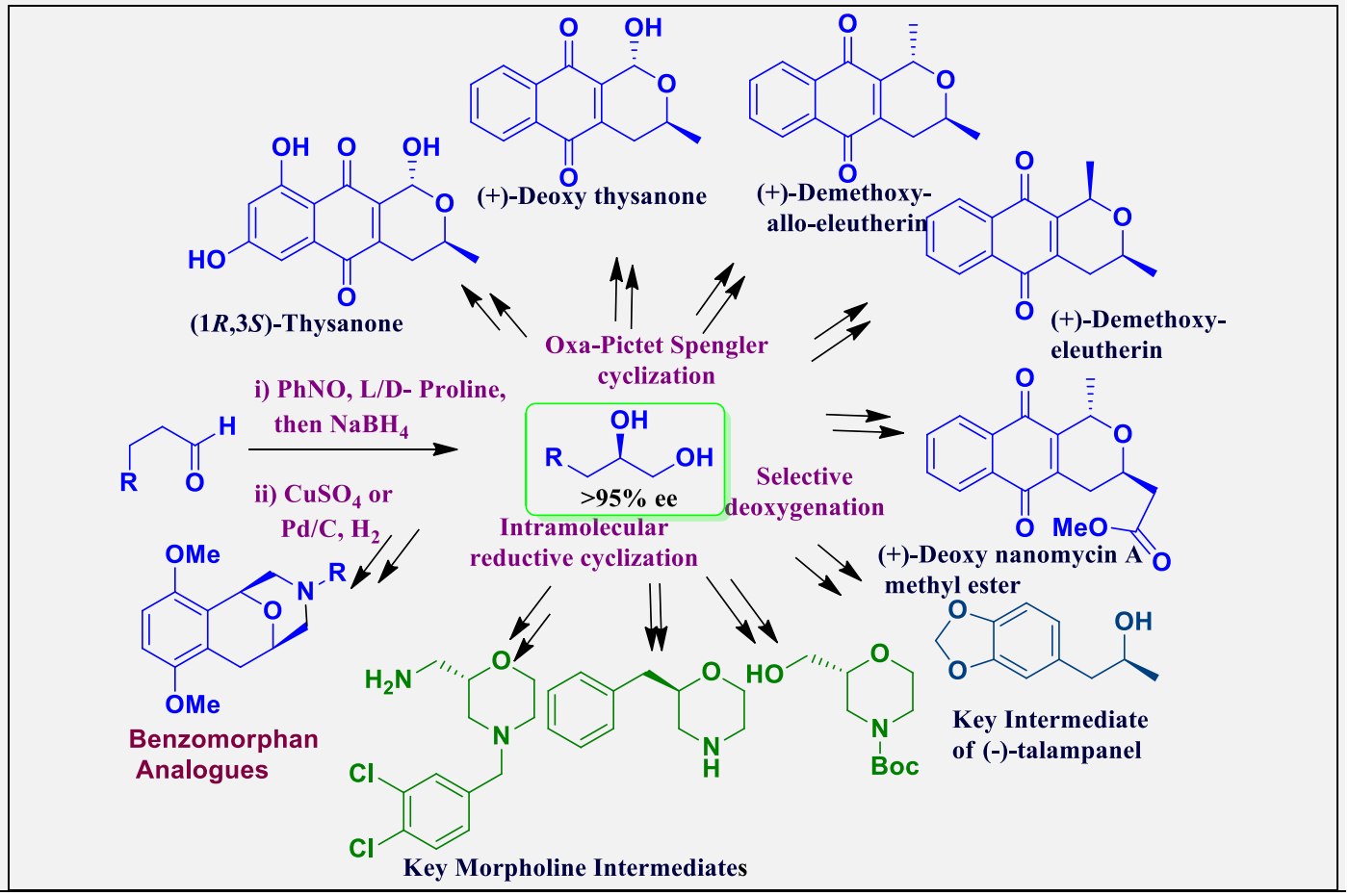
- **Catalysis Society of India**
- **CRSI, Bangalore**
- **Maharashtra Academy of Sciences**

Research Interests:

- **Synthetic Organic Chemistry,**
- **Heterogeneous Catalysis**
- **Photochemistry**
- **Biocatalysis**
- **Organocatalysis**

Organocatalysis: In organic chemistry, the term Organocatalysis (a concatenation of the terms "organic" and "catalyst") refers to a form of catalysis, whereby the rate of a chemical reaction is increased by an organic catalyst referred to as an "organocatalyst" consisting of carbon, hydrogen, sulfur and other nonmetal elements found in organic compounds.

Organocatalysis offers several advantages. There is no need for metal-based catalysis thus making a contribution to green chemistry. In this context, simple organic acids have been used as catalyst for the synthesis of bioactive molecules. When the organocatalyst is chiral an avenue is opened to asymmetric catalysis.



Research Publications

1) Metal-Free Approach for Oxa-spirocyclohexadienones through [3 + 2]/[4 + 2] ipso-Cyclization of para-Quinone Methides with Halo Alcohols
RA Gaikwad, AT Savekar, SB Waghmode
The Journal of Organic Chemistry **2023** (88) 9987

2) Pd-catalyzed selective C (sp3)-H acetoxylation of quinazolinones
SS Gaikwad, SC Zyate, SB Waghmode, AR Jadhao
Tetrahedron **2023,** 138, 133405

3) Metal free, one pot 1,6-Conjugate Addition of Diol on para-Quinone Methide followed by ipso cyclization: An Approach to Spiro 1,4-Dioxane cyclohexadienone …
RA Gaikwad, SB Kamble, SB Waghmode
Chemistry–An Asian Journal **2022** 17 (24), e202200931

4) Selective oxidation of benzylic alcohols by laccase from white-rot mushroom Tricholoma giganteum AGHP: Total synthesis of taccabulin A, taccabulin D and taccabulin E
AR Jadhao, H Patel, KM Kodam, A Gupte, SB Waghmode
Tetrahedron **2022,** 128, 133114

5) Nanomaterials for sensors: Synthesis and applications
Vinod Nandre, Yogesh Jadhav, Dwiti K Das, Rashmi Ahire, Sougata Ghosh, Sandesh Jadkar, Kisan Kodam, Suresh Waghmode, Chapter in ADVANCED NANOMATERIALS FOR POINT OF CARE DIAGNOSIS AND THERAPY' Published by Elsevier 2022 p. 477

6) Iron-Catalyzed Ring Opening of Cyclopropanols and Their 1,6-Conjugate Addition to *p*-Quinone Methides
BB Mane, SB Waghmode
The Journal of Organic Chemistry **2021**, 86 (24), 17774-17781; https://doi.org/10.1021/acs.joc.1c02059

7) Biosynthesis of vanillic acid by Ochrobactrum anthropi and its applications
Author links open overlay panel S. D.Girawale Surya N.Meena, V. S.Nandre, **S. B.Waghmode,** Kisan M.Kodam
Bioorg Med Chem 2022 Sep 7;72:117000. doi: 10.1016/j.bmc.2022.117000

8) Nanomaterials for sensors: Synthesis and applications, V. Nandre, Y. Jadhav, D. K Das, R. Ahire, S.Ghosh, S. Jadkar, K. Kodam, S. Waghmode Book Chapter in Advanced Nanomaterials for Point of Care Diagnosis and Therapy **2022**, 477-492; https://doi.org/10.1016/B978-0-323-85725-3.00011-8

9) Asymmetric total synthesis of dihydroisocoumarins: 6-methoxymellein, kigelin and fusarentin 6, 7 dimethyl ether by employing proline catalysed asymmetric α-aminoxylation
SB Markad, BB Mane, SB Waghmode
Tetrahedron **2021** 76 (46), 131524 DOI: 10.1021/jo400760q

10) Synthesis of substituted 3, 4-dihydroquinazolinones via a metal free Leuckart–Wallach type reaction
S Bokale-Shivale, MA Amin, RT Sawant, MY Stevens, L Turanli, **S. B. Waghmode** and Luke R. Odell
RSC Advances **2021**, 11 (1), 349-353; https://doi.org/10.1039/D0RA10142G

11) Sonication-assisted one pot, metal-free synthesis of β-keto sulfones from styrenes, NBS and aromatic sodium

sulfinate salts, AR Jadhao, SS Gaikwad, LR Patil, **SB Waghmode**
Chemical Papers **2021**, 75 (9), 4959-4968 DOI:10.1007/s11696-021-01719-3

12) A simple, efficient and green approach for the synthesis of palladium nanoparticles using Oxytocin: Application for ligand free Suzuki reaction and total synthesis of AD Bendre, VP Patil, SS Terdale, KM Kodam, **SB Waghmode**
Journal of Organometallic Chemistry 909, **2020** 121093 https://doi.org/10.1016/j.jorganchem.2019.121093

13) Enantioselective Total Synthesis of Ligraminol D and Ligraminol E
BB Mane, DD Kumbhar, **SB Waghmode**
Synlett 30, **2019**, 2285-2289; DOI:10.1055/s-0039-1690249

14) Stereoselective Approach towards the Synthesis of 3*R*, 5 *S* Gingerdiol and 3 *S*, 5 *S* Gingerdiol
SB Markad, VA Bhosale, SR Bokale, **SB Waghmode**
ChemistrySelect 4, **2019**, 502-505; https://doi.org/10.1002/slct.201803154

15) Isolation of lignin from Ammonia Fiber Expansion (AFEX) pretreated biorefinery waste
James R Meyer, **Suresh B Waghmode**, Jian He, Yu Gao, Dushyanthi Hoole, Leonardo da Costa Sousa, Venkatesh Balan, Marcus B Foston
Biomass and Bioenergy, 119 **2018** 446 https://doi.org/10.1016/j.biombioe.2018.09.017

16) Enantioselective total synthesis of pyrrolo[2,1-c][1,4]-benzodiazepine monomers (S)-(−)-barmumycin and (S)-(+)-boseongazepine B
Viraj A. Bhosale and **Suresh B. Waghmode**
Org. Chemistry Frontiers Online published DOI: 10.1039/c8qo00446c **2018**

17) A concise enantioselective synthesis of pyrrolidine sedum alkaloids (R)-(R)-(+), (S)-(S)-(−)-pyrrolsedamine and (S)-(R)-(+)-pyrrolallosedamine by using proline catalysis
VA Bhosale, S.B. Markad, **Suresh B. Waghmode**
Tetrahedron 73, **2017,** 5344-5349

18) Stereodivergent approach to Alzheimer's therapeutic agent (R)-(−) and (S)-(+)-arundic acid employing chiral 4-pentenol derivatives as building blocks
VA Bhosale, **SB Waghmode**
Tetrahedron 73, **2017**, 2342-2348

19) An Efficient Total Synthesis of (–)-(R),(+)-(S)-Lavandulol Pheromones and Their Derivatives through Proline Catalyzed Asymmetric α-Aminooxylation and [3, 3] Claisen rearrangement.
VA Bhosale, **SB Waghmode**
Chemistry Select 2, **2017**, 1262-1266

20) Total synthesis of sceletium alkaloids (±)-joubertinamine, (±)-tortuosamine and formal synthesis of (±)-N-formyltortuosamine
V. A. Bhosale, D.U. Ukale and **Suresh B. Waghmode**

New Journal of Chemistry 40, **2017**, 9432-9440

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22) Wire gauze and cordierite supported noble metal catalysts for passive autocatalytic recombiner
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KK Sanap, S Varma, **Sureh B Waghmode**, P Sharma, N Manoj, RK Vatsa, SR Bharadwaj
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24) Microbial lipid-based lignocellulosic biorefinery: feasibility and challenges
M Jin, PJ Slininger, BS Dien, **Suresh B Waghmode**, BR Moser, A Orjuela, Leonardo da Costa Sousa, Venkatesh Balan
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26) Enantioselective Synthesis of Benzomorphon Analogues by Intramolecular Oxa-Pictet Spengler Cyclization
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*Tetrahedron Asymmetry, 25, **2014**, 489.*

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28) An efficient method for demethylation of aromatic methyl ether using Aliquat-336
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Suresh B. Waghmode, S.S. Arbuj, S.Varma, and B.N. Wani
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30) Palladium chloride catalyzed photochemical Heck reaction
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*Canadian Journal Chemistry***,** 91, **2013,** 348.

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Canadian Journal Chemistry, 89, **2011***,*1355.

33) Synthesis, structure and magnetism of dinuclear paddle wheel Cu(II) complexes with tetradentate chelating carboxylate ligands and macrocycle-like bis-chelate rings
P. M. Selvakumar, E. Suresh, **Suresh B. Waghmode** and P. S. Subramanian
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35) Studies on $Pd/NiFe_2O_4$ catalyzed ligand-free Suzuki reaction in aqueous phase: synthesis of biaryls, terphenyls and polyaryls
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R. T. Sawant and **Suresh B. Waghmode**
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S.S. Arbuj, R.R. Hawaldar, U.P. Mulik, B.N. Wani, D.P. Amalnerkar, **Suresh B**. **Waghmode**
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45) Intramolecular reductive amination strategy to the synthesis of (R)-N-Boc-2-hydroxymethylmorpholine, N-(3,4-dichlorobenzyl)(R)-2-hydroxymethylmorpholine, and (R)-2-benzylmorpholine
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Patents

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Jpn. Kokai Tokkyo Koho 2005, JP 2005112655 A2 20050428

87) A new alkaline earth metal substituted aluminophosphate crystal ATS
Y. Sugi, Y. Kubota, S.K. Saha, **Suresh B. Waghmode,**
Jpn. Kokai Tokkyo Koho 2005, JP 20063837560 B2 20061108

88) Preparation method of alkaline earth metal substituted aluminophosphate ATS,
Y. Sugi, Y. Kubota, S.K. Saha, **Suresh B. Waghmode,**
Jpn. Kokai Tokkyo Koho 2005, JP 20063837561 B2 20061108

$ This paper was reviewed by Dr. D. Bredley, as a note entitled "**To Dye For**", in "**The Alchemist**". Available on http://www.chemweb.com/alchem/articles/1004023961779.html
#http://top25.sciencedirect.com/subject/chemistry/6/journal/tetrahedron-letters/00404039/archive/21/
http://top25.sciencedirect.com/subject/chemistry/6/journal/tetrahedron-letters/00404039/archive/19/
(both TL photo)
http://top25.sciencedirect.com/subject/chemistry/6/journal/tetrahedron-letters/00404039/archive/18/
(Heck and aromatic bromination TL)

Conference/Symposium Presentations:

1. Novel Synthesis of Pd nanoparticles and their application
National Conference on Nano Science and Nano Technology March 23rd 2013, NMU, Jalgoan

2. Enantioselective synthesis of benzomorphon analogs by intramolecular Oxa-Pictet Spengler Cyclization
21st National Symposium on Catalysis for Sustainable Development, 11-13th Feb 2013, IICT, Hyderabad.

3. Influences of cordierite supported Pt nanoparticles on catalytic activity of H2 and O2 recombination reaction in air
21st National Symposium on Catalysis for Sustainable Development, 11-13th Feb 2013, IICT, Hyderabad.

4. Enantioselective Synthesis of the Piperidine Alkaloids and Chiral Furans by using Proline catalyzed α-Aminooxylation
Innovation 2013, University of Pune 14th May 2013.

5. Syllabus restructuring workshop in Chemistry,
University of Pune, 27th Feb. 2013.

6. Facile synthesis of tricyclic oxazino-fused-tetrahydro-quinolines via intra molecular reductive cyclization
National organic symposium trust 8th J-NOST conference for research scholars, 15-17th Dec. 2012.

7. Synthesis of Tricyclic Oxazino-Fused-THQ through Intramolecular Reductive Cyclization
Prospectives of Organic Synthesis, 24th March 2012.

8. Preparation and catalytic activity evaluation of Pt-Pd wire gauze catalysts for the application of hydrogen mitigation
4th Interdisciplinary Symposium on Materials Chemistry, DAE-BARC, Dec. 11-15, 2012, Mumbai

9. Palladium chloride catalyzed photo-chemical Heck reaction
1st International symposium on physics and technology of sensors, 8-10th March 2012, University of Pune and Centre for Materials for Electronics Technology, Pune, India.

10. Inteamolecular Oxa-Pictect Spengler cyclization stratergy to the synthesis of tricyclic benzomorphans analogues and isocromes
National Conference on “Perspectives of Chemical Sciences”, 23-25th Feb 2012.

11. Intramolecular Oxa-Pictet-Spengler Cyclization Strategy to the Synthesis of Tricyclic Benzomorphan Analogues and Isocromans
S.G. Jadhav, R. T. Sawant and **Suresh B. Waghmode**,
1st CRSI NCL13th and 14th May, 2011, NCL May 13-14, 2011.

12. Impact of noble metal morphologies on functioning of hydrogen mitigation catalyst,
Kiran K. Sanap, S. Varma, D. Dalavi, P. S. Patil, **Suresh B. Waghmode** and S. R. Bharadwaj,
International Conference on Renewable Energy (ICRE – 2011), University of Rajasthan, Jaipur, India, Jan. 2011.

13. Pt, Pt + Pd and Pd over Pt, wire gauze supported catalysts for mitigation of hydrogen under LOCA condition in nuclear reactor, *Kiran K. Sanap, S. Varma, S. R. Bharadwaj and S. B. Waghmode.*
Catalysis Scholars Meet CATSCHOL 2011, ICT, Matunga, Mumbai, March-5th 2011.

14. Influence of vanadium doping on physicochemical properties of TiO_2, S. S. Arbuj, S. Varma, B. N. Wani, U.P. Mulik, **S. B. Waghmode** and D.P. Amalnerkar
3rd International Symposium on Materials Chemistry, DAE-BRNS, Mumbai, 7-11 Dec. 2010.

15. Mixed nobel metal on wire gauze based catalyst for mitigation of hydrogen, Kiran K. Sanap, S. Varma, S. R. Bharadwaj and **S. B. Waghmode**
3rd International Symposium on Materials Chemistry, DAE-BRNS, Mumbai, 7-11 Dec. 2010.

16. Synthesis of terphenyls and polyaryls using Pd-$NiFe_2O_4$ catalyzed Suzuki reaction
Sanjay R. Borhade and **Suresh B. Waghmode**
20th National Symposium on Catalysis held during Dec.19-22, 2010
IIT Madras, Chennai.

17. Palladium chloride catalyzed photochemical Heck reaction
Sudhir S. Arbuj, S. Varma, B. N. Wani, U.P. Mulik, and **Suresh B. Waghmode**
20th National Symposium on Catalysis held during Dec.19-22, 2010
IIT Madras, Chennai.

18. Photodissociation dynamics of 2-(bromomethyl)hexafluoro-2-propanol at 193 nm,
Y. N. Indulkar, H. P. Upadhyaya, A. Kumar, **Suresh B. Waghmode**, P. D. Naik.
21st International Symposium on Gas Kinetics, Leuven, Belgium, 18-22 July, 2010.

19. Intramolecular Oxa-Pictet-Spengler Cyclization Strategy to the Synthesis of Tricyclic Benzomorphan Analogues and Isocromans
S.G. Jadhav, R. T. Sawant and **Suresh B. Waghmode**cleanup
International Year of Chemistry, IYC-2011 at University of Pune, Pune, 25th March, 2011.

20. Enantioselective Synthesis of Tetrahydroisoquinoline Alkaloids
Innovation, 2010, University of Pune, Pune March 2011.

21. Asymmetric α-aminooxylation of aldehydes by using proline and its derivatives catalyzed approach for the synthesis of biologically active *O*- and *N*- containing molecules

Suresh B. Waghmode
Invited talk at National Conf. on Advances in Nanomaterials in Catalysis, Dec. 17-18 2010, Loyola College Chennai.

22. Synthesis of polyaryls using Pd-$NiFe_2O_4$ Catalyzed Suzuki Reaction
Sanjay R. Borhade and **Suresh B. Waghmode***
Poster in International Conference on Emerging Trends in Chemistry (January, 5-7, 2010) Department of Chemistry, University of Pune, India.

23. Heck reaction over Magnetically Separable Nickel Ferrite
Sanjay R. Borhade, R. Sawant and **Suresh B. Waghmode***
Poster in International Conference on Emerging Trends in Chemistry (January, 5-7, 2010) Department of Chemistry, University of Pune, India.

24. Aliquat-336# (PTC) an efficient catalyst for synthesis of biphenyl ether
Ganesh D. Mahale, and **Suresh B. Waghmode**
Poster in International Conference on Emerging Trends in Chemistry (January, 5-7, 2010) Department of Chemistry, University of Pune, India.

25. Enantioselective Synthesis of Deoxy Analogues of Thysanone, Eleutherin and Nanomycin A via Proline-Catalyzed Asymmetric α-Aminooxylation of Aldehyde and Oxa-Pictet Spengler Cyclization
Rajiv T. Sawant and **Suresh B. Waghmode**
Oral in International Conference on Emerging Trends in Chemistry (January, 5-7, 2010) Department of Chemistry, University of Pune, Pune-411007,India.

26. A highly efficient and magnetically recoverable heterogeneous Pd-$NiFe_2O_4$ catalyst for the Heck reaction
Sanjay R. Borhade and **Suresh B. Waghmode**
Invited lecture in National Workshop on Catalysis-2009, (December 21-23, 2009) at Tepzur University, Assam, India.

27. A highly efficient and magnetically recoverable heterogeneous Pd-$NiFe_2O_4$ catalyst for the Heck reaction
Sanjay R. Borhade and **Suresh B. Waghmode**
Invited lecture in National Workshop on Catalysis-2009, (December 21-23, 2009) at Tepzur University, Assam, India.

28. Absolute measurement of rate constants of OH with organic molecules
Y. Indulkar, S. SenGupta, H.P. Upadhyaya, A. Kumar, S. Dhanya, P.D. Naik, **Suresh B. Waghmode** and P.N. Bajaj
Proceeding of Trombay Symposium on Radiation and Photochemistry, TSRP 2008, 7-10th Jan 2008.

29. Studies towards Enantio selective synthesis of Tetrahydroquinone
Suresh B. Waghmode
Innovation 2007, University of Pune, Pune, 19-20 Nov, 2007.

30. Photocatalytic degradation of methylene blue using $CaFe_xTi_{1-x}O_{3-\delta}$ catalyst
Sudhir S. Arbuj, **Suresh B. Waghmode** S. Varma and B.N. Wani
18th National Symposium on Catalysis, Catalysis and Indo-US Seminar on Future Fuels, April 16-18th 2007.

31. A simple, mild and efficient method for α-bromination of ketones using *N*-bromosuccinimide
Sudhir S. Arbuj and **Suresh B. Waghmode**
International Workshop on Recent Developments in Chemistry, University of Pune, 14-15th Feb. 2007.

32. Photochemical α-bromination of ketones using *N*-bromosuccinimide
Suresh B. Waghmode, S.S. Arbuj, P.K. Chhattise, S.J. Borhade, and A.V. Ramaswamy
National Symposium on Advances in Chemistry and Environmental Impact (ACE 2006 oral presentation) NEHU, Shillong-793022, India, 5-7th Oct. 2006.

33. Photocatalytic degradation of Methyleneblue using Titanates
Sudhir Arbuj, **Suresh B. Waghmode**, S. Varma and B.N. Wani
International Symposium on Material Chemistry (ISMC-06) 5-8th Dec. 2006.

34. Zincoaluminophosphates with AFI and ATS Topologies: Synthesis by Dry Gel Conversion Methods and Catalytic Properties in the Isopropylation of Biphenyl.
Y. Sugi, S.K. Saha, **Suresh B. Waghmod**e, K. Komura, and Y. Kubota
Poster presented in ICMAT 2005 Advances in Ecomaterials July 2005, USA.

35. Biotransformation of aromatic aldehydes
P.D. Lokhande, K.R. Gawai, K.M. Kodam, **Suresh B. Waghmode**, and K.N. Taksande
National Conference on Bioactive Compounds: New Frontiers and Therapeutic Usage Poster presented in NCBCNFTU, Nanded, 24-25 March 2005, India.

36. n-Hexane aromatization by Pt-M-zeolite catalysts: role of electronic structure of Pt as Brought out by *ab initio* calculations
Suresh B. Waghmode, R. Vetrivel and S. Sivasanker
Poster presented in 17th Nat. Symposium On Catalysis January 2005, Bhavnagar, India.

37. Large pore one-dimensional zeolites: catalysts for the alkylation of biphenyl
Y. Kubota, Y. Sugi, K. Komura, A. Ito, H. Maekawa, R.K. Ahedi, S. Tawada, S. Watanabe, **Suresh B. Waghmode**, I. Toyama, C. Asaoka
Poster presented in 21 International Pittsburgh Coal Conference, coal energy and environment, Osaka, September 2005, Japan.

38. MAPO- 5 and MAPO-36 and application to isopropyl conversion of biphenyl
S.K. Saha, **Suresh B. Waghmode**, H. Maekawa, Y. Kubota and Y. Sugi.
Poster presented in Matsuyama conference 34th petroleum / petrochemical debate; November 19th of 2004, Osaka, Japan.

39. Shape selective ethylation of biphenyl to 4,4'-diethylbiphenyl over different zeolites: catalytic activity and molecular modeling studies
Suresh B. Waghmode, S. Watanabe, Y. Kubota and Y. Sugi
Oral Presented in International in 18th Canadian Catalysis Society Symposium, Montreal, Canada, May

2004.

40. Catalytic performance of metalloaluminophosphate (MAPO-5) molecular sieves in the isopropylation of biphenyl
S.K. Saha, **S.B. Waghmode**, H. Maekawa, Y. Kubota, and Y. Sugi,
Poster Presented in International in 18th Canadian Catalysis Society Symposium, Montreal, Canada, May 2004.
41. Vapor Phase Ethylation of Biphenyls with Ethanol over different Zeolites
Suresh B. Waghmode, S. Watanabe, S.K. Saha, Y. Kubota and Y. Sugi
Poster presented in 8th Int. Eco-material Symposium, Yokohama, Japan Oct. 2003.
42. Synthesis of Aluminophsopate AFI molecular sieves by DGS and HTS method
S.K. Saha, **Suresh B. Waghmode,** S. Watanabe, Y. Kubota and Y. Sugi
Poster presented in 8th Int. Eco-material Symposium, Yokohama, Japan Oct. 2003.
43. Vapor phase ethylation of biphenyls with ethanol over zeolites
Suresh B. Waghmode, S. Watanabe, S.K. Saha, Y. Kubota and Y. Sugi
Poster Presented in 2nd international Japan-South Korea symposium at South Korea, Gwanju, April 2003.
44. Acid site characterization in zeolites using REAPDOR and MQ-REDOR
A. Abraham, **Suresh B. Waghmode,** S.Ganapathy, J.P. Amoureux and C. Fernandez,
Poster Presented in 42nd ENC Conference, 2001, USA.
45. Modeling the diffusion of key-intermediates for anti-inflammatory drugs inside zeolites
Suresh B. Waghmode, P. Bharathi, R.C. Deka and R. Vetrivel;
Poster Presented in the International symposium at Pune NCL, India, Jan. 1999.
46. Molecular modelling of adsorption and diffusion processes in zeolites in relevance to 'shape-selective' phenomenon
Suresh B. Waghmode, P. Bharati, R. C. Dekha, S. Sivasanker and R. Vetrivel, ", Indo-Japan conference on Molecular Modelling, 26-28 Aug., 1999, Sendai , Japan.
47. Industrial application of montmorillonite pillared clay
Suresh B. Waghmode and S.P. Katdare,
Golden Jubilee Celebration of Pune University, India, Dec. 1998.

Schemes Received/Sanctioned/Completed:

No.	Title of the projects	Name of the funding agency	Duration	Amount Rs(lack)
1	Heck and Suzuki reactions over basic zeolites: molecular modeling studies	**DST**	**2005-2008**	**25.0**
2	Modified semiconductor oxides for the sunlight assisted photo-catalytic oxidation of volatile organic compounds	**DAE-BRNS**	**2005-2008**	**5.0**
3	Enantioselective synthesis of THQ alkaloids	**University of Pune**	**2006-2009**	**3.0**
4	Enantioselective synthesis of tetrahydroisoquinoline alkaloids	**University of Pune**	**2009-2011**	**2.0**
5	Organocatalytic asymmetric α-amination of aldehydes by using prolinamide derivatives: enatio-selective synthesis of *N*-containing bioactive	**DST**	**2010 -3013**	**20.0**

	molecules			
6	Mitigation of hydrogen gas in BTR reactor	**BRNS**	**2009-2012**	**25.0**
7.	Synthesis of Bioactive Molecules an Organocatalytic Asymmetric α-Amination or α-Aminooxylation Approach by using Proline-Derived Catalyst	**UGC**	**Sept. 2012**	**3.0**
8	Production and Purification of Laccase and Its Application for the synthesis and iotransformation of organic compounds	**DBT**	**2014-2016**	**30**
9	Annulation of para-Quinone Methides through 1,6-Nucleophilic Conjugate Addition: A Simple Approach for Complex Molecular Scaffolds of Biological Significance	**SERB**	**2023-2026**	**30**

Seminars/Symposia organized:

a. Member of the organizing committee of National Conference on "Changing Paradigms in Theoretical and Computational Chemistry: From Atoms to Molecular Clusters" organized by Department of Chemistry, University of Pune, Pune, Dec 18-19, 2009.
b. Member of the organizing committee of International Conference on Emerging Trends in Chemistry (ETIC) organized by Department of Chemistry, University of Pune, Pune, Jan 5-7, 2010
c. Refresher course co-ordinated for teachers sponsored by UGC during 8th Nov.2 2011 to 27th Nov. 2011.

Ph.D Students topics and link

No	Name	Topic	year	Thesis ink
1	Sawant Rajiv	Introduction to Proline-Catalyzed Asymmetric α-Aminooxylation of Aldehydes and Chiral Auxiliary-Mediated Aza-Michael Reactions	2010	https://shodhganga.inflibnet.ac.in:8443/jspui/handle/10603/255462
2	Indulkar Yogesh	Photodissociation dynamics and OH reaction kinetics of halogenated alcohols in gas phase	2011	
3	Sanjay Bhorade	Palladium supported on nickel ferrite catalyzed heck and suzuki reactions and their applications	2011	https://shodhganga.inflibnet.ac.in/handle/10603/255435
4	Sudhir Arbhuj	Physicochemical studies and photocatalytic activity of titanium dioxide doped titanium dioxide and atio3 A Ca Sr and Ba type oxides	2012	https://shodhganga.inflibnet.ac.in/handle/10603/198984
5	Kiran Sanap	Development of supported noble metal catalysts for mitigation of hydrogen	2014	https://shodhganga.inflibnet.ac.in:8443/jspui/handle/10603/255698
6	Viraj	Synthetic studies towards	2016	

	Bhosale	bioactive molecules xyloketal h, tortuosamine alkaloids, rolipram, bakuchiol, lavandulol pheromones, barmumycin, tmc-126 by using [3, 3] sigmatropic claisen rearrangement and proline catalysed asymmetric α-amination reactions		
7	Viraj Patil	Synthesis of Proline Derivatives and their Applications in the Enantioselective C-N, C-O Bond Formation Reactions and Evaluation of Biological Activity	2017	
8	Markad Sachin	Studies towards the Asymmetric Synthesis of Bioactive Molecules Fusarentin Ethers 3 Methyl 3 4 Dibydroxyisocoumarines Gingerdiols Pyrolidine Sedum alkaloids Deoxocuscohygrine and Tetraponerine Alkaloids using Proline Catalyzed a Aminoxylation and a Amination Reactions	2018	https://shodhganga.inflibnet.ac.in/handle/10603/365718
9	Mane Baliram	Enantioselective Synthesis of Ligraminol D Ligraminol E Phosphodisterase IV inhibitor and Metal Catalyzed ring opening of Cyclopropanol and their C C Bond Forming 6Reactions	2022	https://shodhganga.inflibnet.ac.in/handle/10603/401946

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