Name and Designation:
Mrs.Radhika S.Kusurkar,
Professor in Organic Chemistry.

Academic Background:
Ph.D. *(Department of Chemistry, University of Pune Pune India)*
M.Sc. (*University of Pune, 1973)*
B.Sc. *(University of Pune, 1971)*

Professional Experience:
Please, give information about your Post-doctoral. Research Associate, visiting Scientist/professor: and/or earlier employment information

Research Interests: Synthetic organic chemistry

- Synthesis of Biologically active Compounds
- Synthesis of Heterocyclic compounds
- Synthesis of Indole alkaloids
- Diels-Alder reactions in synthesis.
- Synthesis of carboline alkaloids
-

Research Schemes, collaborative ventures and consultancy)
Completed and ongoing Schemes from Funding agencies,

- **CSIR,**
- **DST,**
- **UGC,**
- **BARC**
- **DRDO**
- **BCUD etc.**

Research Publications (last 10 years)

1. 1,3-dipolar Cycloaddition reaction assisted by microwave radiation and γ-radiation

Kusurkar, R.S.; Kannadkar, U.D.

Synthetic Communications, **31**, 2001**,** 2235.

2. Reactions of Vilsmeier Haack reagent with aromatic and heterocyclic aldoximes

R. S. Kusurkar, S. K. Goswami and S.M. Vyas

Indian Journal of Chemistry, **42B**, 2003**,** 3148-3151,

3. Efficient one-pot synthesis of anti HIV and antitumor compounds: Harman and substituted harmans

R. S. Kusurkar, S.K. Goswami and S.M. Vyas

Tetrahedron Letters, **44**,4761-4763, 2003

4. Efficient one-pot synthesis of anti HIV and antitumor -carbolines

R. S. Kusurkar and S. K. Goswami

Tetrahedron, **60**, 2004 5315- 5318.

5. Synthesis, Characterization and Performance evaluation of Triaryl Cyanurates.
Sandhya Vyas, V. N. Krishnamurthy, R. S. Kusurkar.
Theory and Practice of energetic materials Vol. IV, p 48, China Science and Technology Press.

6. Microwave mediated fast synthesis of diaminoglyoxime and 3,4-diaminofurazan: key synthons for the synthesis of high energy density materials.
Kusurkar, Radhika S.; Goswami, Shailesh K.; Talawar, Mahadev B.; Gore, Girish M.; Asthana, Shri N.
Journal of Chemical Research, 2005, 245-247.

7. Synthesis and Characterisation of Diaryl Furoxans
Sandhya Vyas, M. B. Talawar, R. S. Kusurkar, S. N. Asthana and V. N. Krishnamurthy.
Defence Science Journal, **56**, 2006**,** 551-557,

8. Thermal and Microwave-Assisted Conjugate Additions of Indole on Electron Deficient Nitro-olefins.
Radhika S. Kusurkar, Nabil A. H. Alkobati, Anita S. Gokule, Purnima M.Chaudhari, and Prasad B. Waghchaure
Synthetic Communications, **36**, 2006**,** 1075–1081.

9. Conjugate addition of Pyrroles to α, β–unsaturated ketones using copper bromide as a catalyst.
Radhika.S.Kusurkar,* Sandip.K.Nayak and Neelam L. Chavan
Tetrahedron Lett. **47**, 2006**,** 7323-7326,

10. An efficient synthesis of bibenzylic oxygen heterocycles.
Virendra B. Kumbhar, Augustine R. Joseph, Arun D. Natu, Radhika S.Kusurkar and Madhusudan V. Paradkar
Journal of Chemical Research, 2007**,** 590-593.

11. Use of the Pictet-Spengler reaction for the synthesis of new 1,4-disubstituted-1,2,3,4-tetrahydro-β-carbolines and 1, 4-disubstituted-β-carbolines: Formation of γ-carbolines.
Radhika S. Kusurkar, Nabil A. H. Alkobati, Anita S. Gokule and Vedavati G. Puranik.
Tetrahedron, **64**, 2008**,** 1654-1662.

12. A Combination of $AlCl_3$, Ionic Liquid and MW: An Efficient Method for Dehydration and 1,3-Dipolar Cycloaddition; An Unusual Observation in The Presence of Acrylonitrile.

Radhika S. Kusurkar*, Nilesh H. Naik and Prajakta N. Naik

Synthetic Communications, **38**, 2008**,** 1952-1957.

13. Microwave-assisted conjugate addition of pyrrole on electron-deficient nitro-olefins

Nabil A. H. Alkobati and Radhika S. Kusurkar

Synthetic Communications, **40**: 2010, 320–327.

14. Indium(iii) chloride: an efficient catalyst for the synthesis of amidoalkyl naphthols

Neelam L. Chavan, Prajakta N. Naik, Sandip K. Nayak and Radhika S. Kusurkar

Synthetic Communications., **40**, 2010

15. Silica gel, an effective catalyst for the reaction of electron-deficient nitro-olefins with nitrogen heterocycles

Abdullah M. A. Shumaila and Radhika S. Kusurkar

Synthetic Communications, **40,** 2010.

16. A rapid method toward the synthesis of new substituted tetrahydro a-carbolines and a-carbolines

Neelam L. Chavan, Sandip K. Nayak, Radhika S. Kusurkar

Tetrahedron **66**, (2010) 1827–1831

17. An efficient route towards the synthesis of monosubstituted *N*-aryl amidines from 4,5-dihydro-1,2,4-oxadiazoles

Neelam L. Chavan, Nilesh H. Naik, Sandip K. Nayak and Radhika S. Kusurkar

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