# Dr. Sharadkumar C. Karad

**Designation**: Assistant Professor

**Specialization**: Organic Chemistry

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Ph.D. in Organic Chemistry, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India, 2013 – 2017

M.Sc. in Organic Chemistry, Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India, 2010 – 2012

B.Sc. in Chemistry, M. B. Patel Science College, Anand, Sardar Patel University, Gujarat, India, 2007-2010

### **Academic Experience:**

Assistant Professor in Department of Chemistry, Marwadi University, Rajkot, 10<sup>th</sup> August 2017 to 3<sup>rd</sup> January 2022.

Assistant Professor in P.G Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar 4<sup>th</sup> January 2022 to till date

# **Research Area:**

Synthetic Organic/Medicinal Chemistry,

Transition-metal-catalyzed C—H bond functionalization,

Multicomponent Reactions,

New synthetic methods and Diversity Oriented Synthesis,

Microwave-assisted transition-metal-catalyzed cross-couplings.

# **Expertise:**

Reaction Mechanism, Heterocyclic Chemistry, Stereochemistry

#### No. of Publication

Research Articles: 16

Book: 05



## List of publications in international peer reviewed Journals:

- "Design, synthesis and characterization of fluoro substituted novel pyrazolylpyrazolines scaffold and their pharmacological screening" Sharad C. Karad, Vishal B. Purohit, Dipak K. Raval, *European Journal of Medicinal Chemistry*, 2014, 84, 51-58, Impact Factor (7.088)
- 2. "Green synthesis and pharmacological screening of polyhydroquinoline derivatives bearing a fluorinated 5-aryloxypyrazole nucleus" **Sharad C. Karad,** Vishal B. Purohit, Dipak K. Raval, Piyush N. Kalaria, Jemin R. Avalani, Parth Thakor and Vasudev R. Thakkar, *RSC Advances*, 2015, 05, 16000-16009, Impact Factor (4.036)
- 3. "Novel morpholinoquinoline nucleus clubbed with pyrazoline scaffolds: Synthesis, antibacterial, antitubercular and antimalarial activities" **Sharad C. Karad,** Vishal B. Purohit, Dipak K. Raval, Piyush N. Kalaria, Jemin R. Avalani, Parth Thakor and Vasudev R. Thakkar, *European Journal of Medicinal Chemistry*, 2016, 112, 270-279, Impact Factor (7.088)
- "Design, synthesis, and characterization of a fluoro substituted novel pyrazole nucleus clubbed with 1,3,4-oxadiazole scaffolds and their biological applications" Sharad C. Karad, Vishal B. Purohit, Jemin R. Avalani, Nirav H. Sapariya and Dipak K. Raval, RSC Advances, 2016, 06, 41532-41541, Impact Factor (4.036)
- "Synthesis and biological screening of novel 2-morpholinoquinoline nucleus clubbed with 1,2,4-oxadiazole motifs" Sharad C. Karad, Vishal B. Purohit, Rahul P. Thummar, Beena K.Vaghasiya, Ronak D. Kamani, Parth Thakor, Vasudev R. Thakkar, Sampark S. Thakkar, Arabinda Ray and Dipak K. Raval, *European Journal of Medicinal Chemistry*, 2017, 126, 894–909, Impact Factor (7.088)
- "Cu(N-heterocyclic carbene)chloride: an efficient catalyst for multicomponent click reaction for the synthesis of 1,2,3-triazoles in water at room temperature" Vishal B. Purohit, Sharad C. Karad, Kirit H. Patel and Dipak K. Raval, RSC Advances, 2014, 04, 46002-46007, Impact Factor (4.036)
- 7. "Palladium N-heterocyclic carbene catalyzed regioselective C–H halogenation of 1-aryl-3-methyl-1H-pyrazol-5IJ4H)-ones using N-halosuccinimides (NXS)", Vishal B. Purohit, **Sharad C. Karad**, Kirit H. Patel and Dipak K. Raval, *Catalysis Science & Technology*, 2015, 05, 3113-3118, Impact Factor (6.177)
- 8. "Palladium N-heterocyclic carbene catalyzed regioselective thiolation of 1-aryl-3-methyl-1H-pyrazol-5(4H)-ones using aryl thiols.", Vishal B. Purohit, **Sharad C. Karad**, Kirit H. Patel and Dipak K. Raval, *Tetrahedron*, 2016, 72, 1114-1119, Impact Factor (2.388)

- "Palladium N-heterocyclic carbene catalyzed expected and unexpected C–C and C–N functionalization reactions of 1-aryl-3-methyl-1H-pyrazol-5(4H)-ones" Vishal B. Purohit, Sharad C. Karad, Kirit H. Patel and Dipak K. Raval, RSC Advances, 2016, 6, 111139-111143, Impact Factor (4.036)
- 10. "A review on diverse heterocyclic compounds as a privileged scaffold in antimalarial drug discovery" Piyush N. Kalaria, **Sharad C. Karad** and Dipak K. Raval, *European Journal of Medicinal Chemistry*, 2018, 158, 917-936, Impact Factor (7.088)
- 11. "Microwave-Assisted Palladium-catalyzed double C-H Activation: One-pot Synthesis of Benzo[a]imidazo[5,1,2-cd]indolizines from 2-Phenylimidazo[1,2-a]pyridines and 1,2-Diiodobenzen" Ronak V. Prajapati, Vaibhav D. Prajapati, Vishal B. Purohit, Jemin R. Avalani, Ronak D. Kamani, Nirav H. Sapariya, **Sharad C. Karad**, and Dipak K. Raval, *Chemistry Select*, 2022, 7(24), e202201436, Impact Factor (2.307)
- 12. "Quantification of panel of most potent antipsychotic medicines by high throughput UPLC method" Hetal Jebaliya, Anamik Shah, **Sharad C. Karad**, Shraddha Nakum, Batuk Dabhi, *Results in Chemistry*, 2022, 04, 100427, Impact Factor (2.30)
- 13. "N-Chlorosuccinimide Mediated Regioselective Sulfenylation and Halogenation of 4H-Pyrido[1,2-a]pyrimidin-4-ones at Room Temperature" Vaibhav D. Prajapati, Ronak V. Prajapati, Vishal B. Purohit, Jemin R. Avalani, Nirav H. Sapariya, Ronak D. Kamani, Sharad C. Karad, and Dipak K. Raval, *Chemistry Select*, 2022, 07(47), e202204126, Impact Factor (2.307)
- 14. "C–H Functionalization Reactions of 1-Aryl-5-pyrazolones" Vishal B. Purohit, Ronak V. Prajapati, Vaibhav D. Prajapati, **Sharad C. Karad**, Nirav H. Sapariya, Jemin R. Avalani, and Dipak K. Raval, *European Journal of Organic Chemistry*, 2022, 45, e202201111, Impact Factor (3.261)
- 15. "N-Chlorosuccinimide Mediated Direct C–H Thiocyanation of 1-Aryl-5-pyrazolones at Room Temperature" Ronak V. Prajapati, Vaibhav D. Prajapati, Vishal B. Purohit, Luis Andre Baptista, Jemin R. Avalani, Nirav H. Sapariya, Sharad C. Karad, Dipak K. Raval, *Chemistry Select*, 2023, 45, e202201111, Impact Factor (2.307)
- 16. "Transition-metal-free direct arylselenation of 1-aryl-3-methyl pyrazolones using diselenides" Vaibhav D. Prajapati, Ronak V. Prajapati, Vishal B. Purohit, Luis Andre Baptista, Jemin R. Avalani, Nirav H. Sapariya, **Sharad C. Karad**, and Dipak K. Raval, *Tetrahedron*, 2023, 151, 133783, Impact Factor (2.100)

#### **Book Published:**

- A lecture series on heterocyclic Chemistry (Diazines, Traizenes, Tetrazines, Pyrrole, furan thiophene and Indole). Sharadkumar C Karad, Vishalkumar B. Purohit, Niravkumar H. Sapariya, LAP LAMBERT Academic Publishing. ISBN: 978-613-9-89140-5 (2018).
- A lecture series on heterocyclic Chemistry (Quinoline, Isoquinoline, Benzodiazines, Benzo[b]furans and Benzo[b]thiophenes.), Vishalkumar B. Purohit, Sharadkumar C Karad, Niravkumar H. Sapariya, LAP LAMBERT Academic Publishing. ISBN: 978-613-9-88076-8 (2018).
- 3. Objective Chemistry, Niravkumar H. Sapariya, **Sharadkumar C Karad**, Vishalkumar B. Purohit, LAP LAMBERT Academic Publishing. ISBN: 978-613-9-86663-2 (2018).
- 4. Chemistry Practical Inorganic Qualitative Analysis (For Under Graduate Students) Mayank J. Mamtora, **Sharadkumar C. Karad**, Jayantilal S. Makasana, LAP LAMBERT Academic Publishing, ISBN: 978-613-9-46320-6 (2019).
- Chemistry Practical Organic Qualitative Analysis (For Under Graduate Student), Mayank J. Mamtora, Sharadkumar C. Karad, Chandankumar T. Pashavan, LAP LAMBERT Academic Publishing, ISBN: 978-620-0-28298-9 (2019).

## List of Minor/ Major projects carried out: Nil

#### **Honors:**

## Fellowships:

2014 to 2015 Selected as a Research Fellow (JRF) under the scheme of UGC BSR, New Delhi

2016 to 2018 Selected as a Research Fellow (SRF) under the scheme of UGC BSR, New Delhi

# Awards:

2012 Awarded with Dr M. R. Patel gold plated medal in M. Sc. organic chemistry.