

# Curriculum Vitae

**Dr. Dipak Subhash Gaikwad**  
**M.Sc. Ph.D. Organic Chemistry**



**Current Address:** 167/2, Samarth Park, Shantinagar, Pachgaon,  
Tal-Karveer, Dist. Kolhapur, Maharashtra, India 416013

**Contact:** +91-8087806022, +91-7972286435

**Email:** dgchemistry@gmail.com; dipak.solapur@gmail.com

**Current Occupation:** Assistant Professor at Department of Chemistry, Shikshanmaharshi  
Dr. Babuji Salunkhe College, Miraj.

## Personal Details:

Date of Birth : 7<sup>th</sup> March, 1985  
Gender : Male  
Nationality : Indian  
Caste-Subcaste : Hindu-Maratha  
Blood Group : 'A'+ve  
Marital status : Married

## Educational Qualifications:

Degree/ Course	University/Board	Subject/Specialization	Year of Passing	Marks/Class
<b>Ph.D.</b>	Shivaji University, Kolhapur	Organic Chemistry	Sep. 2013	--
<b>M.Sc.</b>	Shivaji University, Kolhapur	Organic Chemistry	Apr. 2007	72.00 % I <sup>st</sup> Class with Dist.
<b>B.Sc.</b>	Shivaji University, Kolhapur	Chemistry	Apr. 2005	75.80 % I <sup>st</sup> Class with Dist.
<b>H.S.C.</b>	Pune Board	Physics, Chemistry, Biology	Feb. 2002	65.00 % I <sup>st</sup> Class
<b>S.S.C.</b>	Pune Board	Languages, Science, Social science, Maths	March 2000	72.66 % I <sup>st</sup> Class

Doctor of Philosophy, Organic Chemistry

**June 2009- September 2013**

**Ph.D. Degree Awarded on 16<sup>th</sup> Sep 2013**

Department of Chemistry, Shivaji University Kolhapur, Maharashtra, India.

Title: **“Synthetic studies in coupling and multi-component reactions”**

Under the guidance of **Prof. (Dr.) D.M. Pore (M.Sc., Ph.D.)** Professor in Organic  
Chemistry, Department of Chemistry Shivaji University Kolhapur, Maharashtra, India.

**Academic Projects:**

<b>Research Project</b>	<b>Funding agency with amount</b>	<b>Duration and Status</b>
Designing of Novel Ionic Liquids for Synthesis of Metal Nanoparticles and Heterocyclic compounds	SERB New Delhi Rs. 28,60,000/-	<b>Sep 2015-Aug 2018</b> Completed with 6 (Six) international research publications.
Sustainable development in organic synthesis by utilizing Task Specific Ionic Liquids (TSILs)	Vivekanand College, Kolhapur (Autonomous) Rs. 40,000/-	<b>Nov 2022-Ongoing</b>

**Research Thrust area:**

1. Organic Synthesis, Catalysis
2. Organometallic Chemistry: Synthesis and application of Palladium metal complex
3. A Green Chemistry approach for Organic transformation
4. Catalysis in Ionic Liquid: Synthesis and applications
5. Synthesis and applications of Metal Nanoparticles

**List of Research Publications:**

- 1 Synthesis of Bi-doped titanium oxide by chemical bath deposition for dye synthesized solar cell application  
Kamble, A.A., Jadhav, A.L., Ghanwat, V.B., **Gaikwad D. S.** Bhuse, D.V., Bhuse, V.M. Inorganic Chemistry Communications, 2023, 152, 110681
- 2 Cooperative catalysis: Condensation-aromatization for synthesis of 2-(4-nitrophenyl)-1H-benzimidazole by silica immobilized Brønsted-Lewis acidic ionic liquid (Si-BLAIL)  
Kalel, R.A., **Gaikwad, D.S.** Journal of the Indian Chemical Society, 2022, 99(7), 100550
- 3 Antitumor and Antimicrobial Potential of Manganese(II), Nickel(II) and Copper(II) Complexes of 4-Methoxy Benzohydrazide Derived Schiff Base Ligand  
Awatade, M., Ubale, P., Kamble, A., **Gaikwad, D.S.**...Lamraoui, G., Kollur, S.P. Letters in Applied NanoBioScience, 2022, 11(1), pp. 3249–3260
- 4 Synthesis and Biological Activities of Novel Aryldiazo Substituted Heterocycles  
Korade, S.N., Patil, J.D., **Gaikwad, D.S.**, ...Mhaldar, P.M., Pore, D.M. Organic Preparations and Procedures International, 2020, 52(2), pp. 147–165

- 5 Cu-ACP-Am-Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>: an efficient and recyclable heterogeneous catalyst for the Chan–Lam coupling reaction of boronic acids and amines  
Sandip P. Vibhute, Pradeep M. Mhaldar, **Dipak S. Gaikwad**, Rajendra V. Shejwal & Dattaprasad M. Pore  
Monatshefte für Chemie - Chemical Monthly 2020, 151, 87–92  
<https://link.springer.com/article/10.1007/s00706-019-02529-w>
- 6 Dual basic ionic liquid as a catalyst for synthesis of (2-amino-3-cyano-4H-chromen-4-yl) phosphonic acid diethyl ester and its molecular docking study  
**Gaikwad, D.S.**, Undale, K.A., Patravale, A.A., Choudhari, P.B.  
Research on Chemical Intermediates, 2020, 46, 621–637  
<https://link.springer.com/article/10.1007/s11164-019-03981-3>
- 7 Acacia concinna pods: a natural and new bioreductant for palladium nanoparticles and its application to Suzuki–Miyaura coupling  
**Gaikwad, D.S.**, Undale, K.A., Kalel, R.A., Patil, D.B.  
Journal of the Iranian Chemical Society, 2019, 16, 2135–2141  
<https://link.springer.com/article/10.1007/s13738-019-01682-7>
- 8 Multi-functionalized ionic liquid with in situ-generated palladium nanoparticles for Suzuki, Heck coupling reaction: a comparison with deep eutectic solvents  
**Gaikwad, D.S.**, Undale, K.A., Patil, D.B., Pore, D.M.  
Journal of the Iranian Chemical Society, 2019, 16, 2, 253–261  
<https://link.springer.com/article/10.1007/s13738-018-1503-z>
- 9 A new dual basic ionic liquid promoted synthesis of spiro[naphthalene-2,5'-pyrimidine]-4-carbonitrile  
**D. S. Gaikwad**, V. B. Gawade, A. B. Kamble, N. H. Nimbalkar, Y. B. Pujari, K. A. Undale, D. B. Patil, D. M. Pore  
Research on Chemical Intermediates, 2018, 44, 12, 7437–7447  
<https://link.springer.com/article/10.1007/s11164-018-3565-z>
- 10 Synthesis of magnetically separable catalyst Cu-ACP-Am-Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> for Huisgen 1,3-dipolar cycloaddition  
S.P.Vibhute, P.M.Mhaldar, S.N.Korade, **D.S.Gaikwad**, R.V.Shejawal, D.M.Pore  
Tetrahedron Letters Volume 59, 41, 2018, 3643-3652  
<https://www.sciencedirect.com/science/article/pii/S0040403918310463>
- 11 A task-specific biodegradable ionic liquid: a novel catalyst for synthesis of bicyclic

ortho-aminocarbonitriles

**Gaikwad, D.S.**, Undale, K.A., Patil, D.B., Patravale, A.A., Kamble, A.A.

Journal of the Iranian Chemical Society May 2018, 15, 5, 1175–1180

<https://link.springer.com/article/10.1007/s13738-018-1315-1>

- 12 Triton X-100 stabilized Pd nanoparticles and their catalytic application in one-pot sequential Heck and Hiyama coupling in water  
**Gaikwad, D.S.**, Undale, K.A., Patil, D.B., Pore, D.M., Kamble, A.A.  
Research on Chemical Intermediates 2018, 44, 1, 265–275  
<https://link.springer.com/article/10.1007/s11164-017-3102-5>
- 13 In-situ-generated palladium nanoparticles in novel ionic liquid: an efficient catalytic system for Heck–Matsuda coupling  
**D. S. Gaikwad** K. A. Undale, D. B. Patil D. M. Pore S. N. Korade A. A. Kamble  
Research on Chemical Intermediates 2017, 43, 8, 4445–4458  
<https://link.springer.com/article/10.1007/s11164-017-2888-5>
- 14 Dual functionalized task specific ionic liquid promoted in situ generation of palladium nanoparticles in water: synergic catalytic system for Suzuki-Miyaura cross coupling  
Patil, J.D., Korade, S.N., Patil, S.A., **Gaikwad, D.S.**, Pore, D.M.  
*RSC Adv.*, 2015,5, 79061-79069  
<https://pubs.rsc.org/en/content/articlelanding/2015/ra/c5ra17186e#!divAbstract>
- 15 Catalyst-free access to pseudo multi-component synthesis of benzopyranopyrimidines  
Shaikh, T S, Patil, J D, **Gaikwad, D S**, Hegade, P G, Patil, P B, Undale, K A, Mane, M  
MPore, D M  
IJCB 53B 2014, (10) 1288-1294  
<http://nopr.niscair.res.in/handle/123456789/29475>
- 16 Green access to multi-component synthesis of spiropyranopyrazoles  
Pore, D.M., Hegade, P.G., **Gaikwad, D.S.**, Patil, P.B., Patil, J.D.  
Letters in Organic Chemistry, Volume 11 , Issue 2 , 2014  
<http://www.eurekaselect.com/115836/article>
- 17 Green access to novel spiropyranopyrazole derivatives  
D.M.Pore, P.B.Patil, **D.S.Gaikwad**, P.G.Hegade, J.D.Patil, K.A.Undale  
Tetrahedron Letters 54, 44, 2013, 5876-5878  
<https://www.sciencedirect.com/science/article/pii/S0040403913014706>
- 18 Ferrocene-tagged N-heterocyclic carbene-Pd complex for Suzuki-Miyaura coupling  
Pore, D.M., **Gaikwad, D.S.**, Patil, J.D.

- Monatshefte für Chemie - Chemical Monthly 2013, 144, 9, 1355–1361  
<https://link.springer.com/article/10.1007/s00706-013-0970-2>
- 19 Palladium-nanoparticle-catalyzed Matsuda-Heck reaction in water  
**Dipak S. Gaikwad**, Dattaprasad M. Pore  
Synlett 2012; 23(18): 2631-2634  
<https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0032-1317477.pdf>
- 20 Potassium phosphate catalyzed efficient synthesis of 3-carboxycoumarins  
Undale, K.A., **Gaikwad, D.S.**, Shaikh, T.S., Desai, U.V., Pore, D.M.  
Indian Journal of Chemistry - Section B Organic and Medicinal Chemistry  
2012, 51, 1039-1042  
[http://nopr.niscair.res.in/bitstream/123456789/14362/1/IJCB%2051B\(7\)%201039-1042.pdf](http://nopr.niscair.res.in/bitstream/123456789/14362/1/IJCB%2051B(7)%201039-1042.pdf)
- 21 A novel hydrophobic fluoros ionic liquid for ligand-free Mizoroki-Heck reaction  
**Gaikwad, D.S.**, Park, Y., Pore, D.M.  
Tetrahedron Letters, 53, 24, 2012, 3077-3081  
<https://www.sciencedirect.com/science/article/pii/S004040391200603X>
- 22 Envirocat EPZ-10: An efficient catalyst for the synthesis of 3-acetoacetyl coumarins  
Shaikh, T.S., Undale, K.A., **Gaikwad, D.S.**, Pore, D.M.  
Comptes Rendus Chimie 14, 11, 2011, 987-990  
<https://www.sciencedirect.com/science/article/pii/S1631074811001470>
- 23 An efficient multi-component synthesis of (2-amino-3-cyano-4H-chromen-4-yl) phosphonic acid diethyl ester  
**Gaikwad, D.S.**, Undale, K.A., Shaikh, T.S., Pore, D.M.  
Comptes Rendus Chimie 14, 10, 2011, 865-868  
<https://www.sciencedirect.com/science/article/pii/S1631074811000373>
- 24 One-pot multi-component synthesis of polyhydroquinolines at ambient temperature  
Undale, K.A., Shaikh, T.S., **Gaikwad, D.S.**, Pore, D.M.  
Comptes Rendus Chimie 14, 5, 2011, 511-515  
<https://www.sciencedirect.com/science/article/pii/S1631074810002602>
- 25 A green protocol for catalyst-free synthesis of 1-oxo-hexahydroxanthenes in aqueous medium  
Pore, D.M., Shaikh, T.S., Undale, K.A., **Gaikwad, D.S.**  
Comptes Rendus Chimie 13, 12, 2010, 1429-1432  
<https://www.sciencedirect.com/science/article/pii/S1631074810001876>

### Teaching Experience:

Worked as Teaching Assistance under the Scheme "Teaching Assistantship Programme" of Shivaji University, Kolhapur, Maharashtra, India at Department of Chemistry, Shivaji University, Kolhapur.

**Sep 2010-Apr 2011**

Working on Clock Hour Basis for B.Sc. & M.Sc. course (Organic Chemistry) at Department of Chemistry, Vivekanand College, Kolhapur, Maharashtra, India.

**June 2013-Present**

### Research/ Industrial Experience:

*Trainee Research Associate R&D*

**June 2007–August 2007**

Excel Industries Ltd., Roha, Raigad, Maharashtra, India.

*Research Associate R&D* **August 2007–Sep**

**2009**

Jubilant Chemsys Ltd., Noida, Uttar Pradesh, India.

- *Instruments handled:* IR Spectrometer, NMR instrument, Flash column chromatography, Microwave (Biotage, Discovery), Orbital shaker, Parallel synthesizer, Ozonizer apparatus and Parr-shaker hydrogenation apparatus.

### Other Achievements:

Ekalavya Merit Scholarship From Govt. of Maharashtra, India

**2005-2007**

Senior Research Fellow from CSIR New Delhi, India.

**April 2013-Oct 2013**

### References:

**Prof. (Dr.) D. MPore**

**(M.Sc., Ph.D.)**

Professor (Organic Chemistry)

Department of Chemistry

Shivaji University Kolhapur,

Maharashtra, India-416004

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**Prof. (Dr.) G. B. Kolekar**

**(M.Sc., Ph.D.)**

Professor (Physical Chemistry)

Department of Chemistry

Shivaji University, Kolhapur,

Maharashtra, India-416004

Email: gbkolekar@yhaoo.co.in

Contact:+91-9423281085

### Declaration:

I hereby declare that particulars in the resume are correct to the best of my knowledge. Thank you for pursuing my personnel information.



Yours faithfully

Dr. Dipak S. Gaikwad