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 (CHB) at Department of Chemistry, Vivekanand College, Kolhapur (Autonomous), 2130 E ward, Tarabai Park, Tal-Karveer, Dist. Kolhapur, Maharashtra-416003.

Personal Details:

Date of Birth	:	7th 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
Ph.D.	Shivaji University, Kolhapur	Organic Chemistry	Sep. 2013	--
M.Sc.	Shivaji University, Kolhapur	Organic Chemistry	Apr. 2007	72.00 % Ist Class with Dist.
B.Sc.	Shivaji University, Kolhapur	Chemistry	Apr. 2005	75.80 % Ist Class with Dist.
H.S.C.	Pune Board	Physics, Chemistry, Biology	Feb. 2002	65.00 % Ist Class
S.S.C.	Pune Board	Languages, Science, Social science, Maths	March 2000	72.66 % Ist Class

- Doctor of Philosophy, Organic Chemistry **June 2009- September 2013**
  Ph.D. Degree Awarded on 16th 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:

Research Project	**Funding agency with amount**	**Duration and Status**
Designing of Novel Ionic Liquids for Synthesis of Metal Nanoparticles and Heterocyclic compounds	SERB New Delhi Rs. 28,60,000/-	**Sep 2015-Aug 2018** 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/-	**Nov 2022-Ongoing**

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-Fe3O4@SiO2: 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-Fe3O4@SiO2 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 LettersVolume 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 SocietyMay 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

21 A novel hydrophobic fluorous 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-acetoacetylcoumarins
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 Chemsitry, 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, Uattar 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 Maharashatra, India

  2005-2007

- Senior Research Fellow from CSIR New Delhi, India.

  April 2013-Oct 2013

References:

Prof. (Dr.) D. M. Pore
(M.Sc., Ph.D.)
Professor (Organic Chemistry)
Department of Chemistry
Shivaji University Kolhapur,
Maharashtra, India-416004
Email: p_dattaprasad@rediffmail.com
Contact: +91-8087268810

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