

**Dr. Abhijeet Ganpatrao Mulik** *M.Sc. Ph.D, SET, MBA.***Designation:** Assistant Professor**Personal Details**

**Date of birth:** 26<sup>th</sup> September 1987

**Languages Known:** English, Hindi, Marathi

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**Educational Qualification**

Exam	University/Board	Subjects	Year of Passing	Percentage	Class obtained
Ph.D.	Shivaji University, Kolhapur	Organic Chemistry	2013	-----	-----
SET	Pune University	Chemical sciences	Aug. 2010	-----	-----
M.Sc.	Shivaji University, Kolhapur	Organic Chemistry	April 2010	<b>73.25%</b>	<b>Distinction</b>
B.Sc.	Shivaji University, Kolhapur	Chemistry	April 2008	<b>81.48%</b>	<b>Distinction</b>
H.S.C	Kolhapur	P.C.M.B	Feb. 2005	<b>79.67 %</b>	<b>Distinction</b>
S.S.C	Kolhapur	-----	March 2003	<b>80.26%</b>	<b>Distinction</b>
MBA	YCMOU, Nashik	Human Resource	May 2021	---	<b>Distinction</b>

➤ **Ph.D. Thesis Title:** 'Synthesis and applications of some new pyrazine and Pyridazine derivatives.'

**Teaching Experience**

➤ **Thirteen years** of Teaching Experience as follows

Institute	Management	From	To
Department of Technology	Shivaji University, Kolhapur	Aug. 2010	April 2012
Chhatrapati Shahu College, Kolhapur	Rayat Shikshan Sanstha, Satara	July. 2012	April 2013
Balwant College, Vita	Rayat Shikshan Sanstha, Satara	July 2013	21/02/2020
Sadguru Gadage Maharaj College, Karad	Rayat Shikshan Sanstha, Satara	22/02/2020	Till date

## Research Activities:

### ❖ Reviewer for Journals

1. Journal of Heterocyclic Chemistry (Wiley).
2. Current Organic Chemistry (Bentham Science).
3. Journal of Sol-Gel Science and technology (Springer).

### ❖ Patents:

**Name of Patent:** A SYSTEM AND COMPOSITION FOR SYNTHESIS OF 1,2,4-TRIAZOLIDINE-3-THIONES. **Dr. Abhijeet Mulik, German Patent Granted, Patent No. 202022100931.**

### ❖ List of Publications

Publications	Citations	h-index
31	342	11

31	A Novel Recyclable Bi-Mg-O Composite Nano-Catalyst Promoted Rapid and Efficient Synthesis of Spirooxindole and 4H-Pyran Derivatives <b>Abhijeet Mulik</b> , Vishvanath Ghanwat, Pravin Hegade, Mukund Mali, D-Y Kim, Dae Sung Lee, Asif Shahzad, Surendra Shinde, Mohan Rajmane <i>Polycyclic Aromatic Compounds</i> , /doi.org/10.1080/10406638.2022.2124280, 2022. (IF- 3.74)
30	Novel ionic liquid dihydrogen 4, 4'-trimethylenedipiperidine phosphate-catalyzed greener and efficient synthesis of dihydro pyrano [2, 3-c] pyrazole Sagar Tanpure, Abhijeet Mulik, Mohan Rajmane, Shamrao Lawande <i>Research on Chemical Intermediates</i> , (2022). <a href="https://doi.org/10.1007/s11164-022-04904-5">https://doi.org/10.1007/s11164-022-04904-5</a> (IF- 3.1)
29	Catalytic one-pot three-component synthesis of 3, 3'-disubstituted oxindoles and spirooxindole pyrans by mixed ligand transition metal complexes. S Hegade, G Gaikwad, Y Jadhav, A Pore, <b>A Mulik</b> <i>Monatshefte für Chemie</i> , 46, DOI- 10.1007/s00706-021-02867-8, 2021 (IF- 1.45)
28	CuO nanoparticles and nanobelts catalyzed potent synthesis of Benzopyran derivatives <b>A. G. Mulik</b> , P. G. Hegade, S. V. Mulik, M. B. Deshmukh, <i>Research on Chemical Intermediates</i> , DOI-10.1007/s11164-019-03925-x, June 2019 (IF - 2.064)
27	Proficient synthesis of quinoxaline and phthalazinetrione derivatives using [C <sub>8</sub> dabco] Br ionic liquid as catalyst in aqueous media <b>A Mulik</b> , D Chandam, P Patil, D Patil, S Jagdale, M Deshmukh <i>Journal of Molecular Liquids</i> 179, (2013), 104-109. (IF - 4.51)

26	Efficient, rapid avenue for synthesis of highly substituted piperidines using polystyrene sulfonic acid <b>A Mulik</b> , P Hegade, D Patil, G Mulik, S Salunkhe, M Deshmukh <i>Research on Chemical Intermediates</i> 43 (2), (2017) 729-736(IF - 2.064)
25	Protic ionic liquids: a lucid, rational tool for synthesis of phthalazinediones, quinoxalines and benzopyrans <b>AG Mulik</b> , DR Chandam, DR Patil, PP Patil, GN Mulik, ST Salunkhe, MB Deshmukh <i>Research on Chemical Intermediates</i> 41 (12), (2015), 10085-10096. (IF - 2.064)
24	Polymer-Supported Sulfonic Acid-Catalyzed Candid Synthesis and Photophysical Properties of 2H-indazolo [2, 1-b] phthalazinetriones <b>A Mulik</b> , D Chandam, P Patil, D Patil, S Jagdale, S Sankpal, M Deshmukh <i>Journal of Heterocyclic Chemistry</i> 52 (3), (2015), 931-937. (IF - 1.24)
23	Glycerol-promoted catalyst-free one-pot three component synthesis of 1H-pyrazolo [1, 2-b] phthalazinediones <b>A Mulik</b> , M Deshmukh, D Chandam, P Patil, S Jagdale, D Patil, S Sankpal <i>Der PharmaChemica</i> 5 (2), (2013)19-23. (IF - 0.38)
22	Oxalic acid dihydrate and proline based low transition temperature mixture: An efficient synthesis of spiro [diindenopyridine-indoline] triones derivatives. Dattatray R Chandam, <b>Abhijeet G Mulik</b> , Dayanand R Patil, Ajinkya Patravale, Digambar R Kumbhar, Madhukar B Deshmukh <i>Journal of Molecular Liquids</i> 219, (2016), 573-578. (IF - 4.51)
21	Oxalic acid dihydrate: Proline (LTTM) as a new generation solvent for synthesis of 3,3-diaryloxindole and chromone based bis(indolyl)alkanes: Green, chromatography free protocol D Chandam, <b>A Mulik</b> , P Patil, S Jagdale, D Patil, S Sankpal, M Deshmukh <i>Journal of Molecular Liquids</i> 207, (2015), 14-20. (IF - 4.51)
20	Ion-pair based liquid-liquid extraction of gold(III) from malonate media using 2-octylaminopyridine as an extractant: analysis of alloys, minerals and drug samples V. suryavanshi, A.kokare, S. zanje, <b>A. mulik</b> , R. pawar, M. patil, A. gaikwad, M. anuse, G. Mulik <i>Turkish Journal of Chemistry</i> , DOI: 10.3906/kim-1712-34, 2018. (IF - 1.37)
19	Highly proficient extraction separation of thorium(IV) from sulfuric acid solution using N-n-decylaniline: real sample analysis M M Patil, V J Suryavanshi, <b>A G Mulik</b> , G N Mulik <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 325, 111-119
18	Novel Brønsted Acidic Ionic Liquid ([CMIM][CF <sub>3</sub> COO]) Prompted Multicomponent Hantzsch Reaction for the Eco-Friendly Synthesis of Acridinediones: An Efficient and Recyclable Catalyst DayanandPatil, DattatrayChandam, <b>Abhijeet Mulik</b> , Prasad Patil, Surybalajagadale, Rajni Kant, Vivek Gupta, MadhukarDeshmukh <i>Catalysis letters</i> 144 (5), (2014), 949-958. (IF - 2.91)

17	One pot four component sequential synthesis of hexahydroquinoline derivatives in aqueous media via enaminone intermediates: A green protocol D Patil, D Chandam, <b>A Mulik</b> , S Jagdale, P Patil, M Deshmukh <i>Journal of Saudi Chemical Society</i> 21, (2017), S329-S338. (IF - 2.45)
16	Synthesis of some novel quinonediimine derivatives of benzo-15-crown-5 for application in Hg <sup>2+</sup> recognition SD Jagadale, AD Sawant, PP Patil, DR Patil, <b>AG Mulik</b> , DR Chandam, SA Sankpal, MB Deshmukh <i>Luminescence</i> 29 (6), (2014), 586-590. (IF - 1.69)
15	Novel dibenzo-18-crown-6 ether functionalized bis-benzimidazole derivatives: synthesis and antifungal evaluation. D Patil, D Chandam, <b>A Mulik</b> , P Patil, S Sankpal, M Deshmukh <i>Research on Chemical Intermediates</i> 42 (3), (2016), 2449-2459. (IF - 2.064)
14	Oxalic acid dihydrate: proline as a new recyclable designer solvent: a sustainable, green avenue for the synthesis of spirooxindole DR Chandam, <b>AG Mulik</b> , DR Patil, MB Deshmukh <i>Research on Chemical Intermediates</i> 42 (2), (2016), 1411-1423. (IF - 2.064)
13	Novel crown ether functionalized imidazolium-based acidic ionic liquid catalyzed synthesis of pyrazole derivatives under solvent-free conditions. D Patil, D Chandam, <b>A Mulik</b> , S Jagdale, P Patil, M Deshmukh <i>Research on Chemical Intermediates</i> 41 (9), (2015), 6843-6858. (IF - 2.064)
12	Camphor-10-sulfonic acid catalyzed atom efficient and green synthesis of triazolo [1, 2-a] indazole-triones and spirotriazolo [1, 2-a] indazole-tetraones. DR Chandam, <b>AG Mulik</b> , PP Patil, SD Jagdale, DR Patil, MB Deshmukh <i>Research on Chemical Intermediates</i> 41 (2), (2015), 761-771. (IF - 2.064)
11	Synthesis and Cation Recognition Study of Novel Benzo Crown Ether Functionalized Enamine Derivatives DR Patil, DR Chandam, <b>AG Mulik</b> , SD Jagdale, PP Patil, MB Deshmukh <i>Synthetic Communications</i> 45 (16), (2015), 1902-1911. (IF - 1.37)
10	Synthesis of Novel Dibenzo-18-crown-6-ether-Functionalized Benzimidazoles and its Applications in Colorimetric Recognition to Hg <sup>2+</sup> and as Antifungal Agents SD Jagadale, AD Sawant, PP Patil, DR Patil, <b>AG Mulik</b> , DR Chandam, SA Sankpal, MB Deshmukh <i>Journal of Heterocyclic Chemistry</i> 52 (2), (2015), 468-472. (IF - 1.24)
9	Multicomponent synthesis of highly functionalized piperidines using sulfamic acid as a heterogeneous and cost effective catalyst D Patil, D Chandam, <b>A Mulik</b> , P Patil, S Jagdale, M Deshmukh <i>Indian Journal of Chemistry</i> , 54B, (2015), 545. (IF - 0.52)

8	Synthesis of some novel 3, 5-diarylpyrazole derivatives of dibenzo-18-crown-6-ether SD Jagadale, <b>AG Mulik</b> , DR Chandam, PP Patil, DR Patil, SA Sankpal, AD Sawant, MB Deshmukh <i>Indian Journal of Chemistry, 52B (10), (2013), 1352. (IF - 0.52)</i>
7	An efficient synthesis of bis (indolyl) methanes under solvent free condition using Silica supported Chloroacetic Acid as reusable Catalyst DR Chandam, MB Deshmukh, <b>AG Mulik</b> , PP Patil, DR Patil, SD Jagdale, PV Anbhule, SA Sankpal <i>Der Pharmacia Lettre 4 (1), (2012), 54-60. (IF - 1.96)</i>
6	Crown ether complex cation like ionic liquids: synthesis and catalytic applications in organic reaction SD Jagadale, MB Deshmukh, <b>AG Mulik</b> , DR Chandam, PP Patil, DR Patil, SA Sankpal <i>Der PharmaChemica 4, (2012), 202-207. (IF - 0.38)</i>
5	An Efficient, Greener synthesis of 2-Aryl-1-Arylmethyl-1H-Benzimidazoles using Polystyrene Sulfonic acid as a Catalyst PP Patil, Madhukar B Deshmukh, <b>AG Mulik</b> , DR Chandam, DR Patil, SD Jagdale, PV Anbhule, DK Salunkhe, Sandeep A Sankpal <i>Der Pharm. Chem 3 (6), (2011), 599-605. (IF - 0.38)</i>
4	Synthesis and Crystal Structure of 2-amino-7, 7-dimethyl-4-(4-nitrophenyl)-5-oxo-1, 4, 5, 6, 7, 8-hexahydroquinoline-3-carbonitrile R Kant, VK Gupta, S Anthal, P Sharma, DR Patil, <b>AG Mulik</b> , MB Deshmukh <i>European Chemical Bulletin 3 (3), (2014), 296-299</i>
3	2-Amino-7, 7-dimethyl-5-oxo-4-[3-(trifluoromethyl) phenyl]-1, 4, 5, 6, 7, 8-hexahydroquinoline-3-carbonitrile. R Kant, VK Gupta, K Kapoor, DR Patil, <b>AG Mulik</b> , MB Deshmukh <i>ActaCrystallographica Section E: Structure Reports Online 69 (1), (2013), o105-o105</i>
2	Synthesis and antibacterial evaluations of (3, 5-dimethyl-1H-pyrazol-4-yl)-phenyl-diazenes SA Sankpal, MB Deshmukh, PV Anbhule, DK Salunkhe, KN Alsundkar, PP Patil, DR Chandam, SD Jagadale, <b>AG Mulik</b> , SS Rokade <i>J Chem Pharm Res 2, (2010), 574-579</i>
1	Efficient synthesis of 4H-chromene derivatives using Schiff base metal complex as catalyst S. V. Mulik, S. N. Abdar, D. D. Pawar, N. A. Gadade, H. S. Dure, R. M. Shinde, P. G. Hegade, <b>A. G. Mulik</b> , <i>IJRAR- International Journal of Research and Analytical Reviews, 2019 (Special Issue)</i>

**Selected Conferences and Workshops Attended and Posters presented:**

1.	Protic Ionic Liquids: Rapid, Efficient and Recyclable solvent-catalyst for the Synthesis of Quinoxalines and Phthalazinediones <b>A.G. Mulik</b> , D.R. Chandam, P.P. Patil, D.R. Patil, M.B. Deshmukh <i>International conference at Arya PG College, Panipat, Haryana, India. (2<sup>nd</sup> prize for poster presentation) 2013.</i>
2.	Protic Ionic Liquids: Rapid, Efficient and Recyclable solvent-catalyst for the Synthesis of Quinoxalines, Phthalazinediones and Benzopyrans <b>A. G. Mulik</b> , S. T. Salunkhe, G. N. Mulik, M. B. Deshmukh <i>International conference at Goa University, Goa, India. 2015</i>
3.	Proficient synthesis of Quinoxaline from $\alpha$ -hydroxy ketones using Conventional Acidic Catalyst p-TSA <b>A. G. Mulik</b> , M. B. Deshmukh <i>National Seminar at KBP college, Pandharpur, Maharashtra, India. (1<sup>st</sup> prize for oral presentation) 2011</i>

**Supervised master level projects**

- 2017**      **Title:** Synthesis of tryptanthrin derivatives using Alum as catalyst.
- 2017**      **Title:** Synthesis of Spiroindole derivatives.
- 2016**      **Title:** Synthesis of Silver and Copper oxide Nanoparticles.
- 2015**      **Title:** Synthesis of Schiff's bases and their metal complexes.
- 2014**      **Title:** Synthesis of Transition metal Complexes.

**Technical Skills**

- **Synthesis techniques**
  - a. Synthesis of Heterocyclic compounds.
  - b. Development of greener synthetic methodologies.
  - c. Catalysis using modern tools such as Ionic liquids, Nano particles.
- **Equipments and Machinery handled**
  - a. IR Spectrophotometer
  - b. UV-Visible Spectrophotometer
  - c. NMR (Bruker)
- **Computer proficiency**
  - a. Operating systems Windows Vista, XP, Windows 7/8/8.1/10
  - b. MS-Office 2003/2007/2010/2013
  - c. Chemskech and Chemdraw

**Awards and Honors**

1. Qualified M.Sc. entrance examination with **1<sup>st</sup> rank in Shivaji University, Kolhapur, India**
2. **2<sup>nd</sup> prize for best poster presentation in International conference** "Recent advances in Chemical sciences at Arya College, Panipat, Haryana, India.

3. **1st prize for Oral presentation** in National seminar on 'Advanced spectral methods of analyses' at Pandharpur, India.
4. Awarded with Research Fellowship by UGC-SAP in sciences for meritorious students.

### Extracurricular activities and achievements

- Captain of Inter-zonal Runners up team of Kho-Kho in 2008 of Shivaji University.
- Participated in Zonal Matches of Basketball representing Rayat Shikshan Sanstha's Balwant College, Vita. Dist- Sangli.
- Active Member of NSS for two years (2007-2008).
- Delivered lectures on 'NET-SET Exam Preparation' at various colleges viz- Balwant College Vita, Chhatrapati Shivaji College, Satara Solapur University, Solapur.

### College Duties:

- Always an active and enthusiastic member in various college committees

Committee	Role
M.Sc. Chemistry	Coordinator
Invention, Innovation, Incubation Cell	Chairman
Research Committee	Member

### REFERENCES:

**Prof. M. B. Deshmukh**

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*Ex-Head, UGC BSR fellow,*

Department of Chemistry,

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**Prof. P. V. Anbhule**

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I hereby declare that all the information given above is correct to the best of my Knowledge.

**Dr. Abhijeet Mulik**