

Dr. Dilip Kumar Yadav (+91-8850325119)

Professional Summary:

- Assistant professor, Department of Chemistry, K. J. Somaiya College of Science and Commerce, Vidyavihar, Mumbai.
 - Dynamic and result orientated research aspirant in organic chemistry with excellent background of subject knowledge.
 - Achievement towards new process development for existing products and characterization by various spectroscopic techniques.
 - Good-expertise in both homogeneous and heterogeneous catalytic systems.
 - Published 6 peer-reviewed original scientific articles in international chemistry journals with total impact factor of 18.
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Education and Research:

Ph. D.	2016 Thesis title: Studies in C-N bond formation reactions for organic transformations. Institute of Chemical Technology (Formerly UDCT), Mumbai, India.
M. Sc.	2008 , First Class with 67.00% (Organic Chemistry) University of Mumbai.
B. Sc.	2006 , First Class with 80.13% (Chemistry) University of Mumbai.
H. S. C.	2003 , First Class with 70.00%, Mumbai Board.
S. S. C.	2001 , First Class with 73.20%, Mumbai Board.

Professional Experience:

Research Experience **July 2008- March 2011**, worked in R&D center of Nycomed Pharma Pvt. Ltd., Mumbai.

- ✓ Worked in Combi-Chem department and synthesized several molecules on mg level related with indole, azaindole, imidazopyridine, thiazolopyridine, benzoxazole, benzoxazine, pyranothiophene etc. derivatives for Combi-Chem library.

- ✓ Worked in Med-Chem department for developing cannabinoid receptor-2 agonist for the treatment of osteoporosis and pain, work involved design, synthesis and characterization of new chemical entities and exploring them for biological activity.
 - ✓ Synthesized several reference molecules on gm to kg level related to pain and osteoporosis for the development of cellular assay in hit finding stage.
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Academic Achievements:

- ✓ Qualified **UGC-NET** exam held on DEC-2011.
 - ✓ Qualified **Gate** exam held on March-2012.
 - ✓ Awarded with **Junior Research Fellowship** by University Grants Commission (UGC), New Delhi, India on APR-2011.
 - ✓ Awarded with **Senior Research Fellowship** by University Grants Commission (UGC), New Delhi, India on May-2013.
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List of Publications:

- 1) Rhodium-catalyzed synthesis of quinolines and imines under mild conditions
Dilip Kumar T. Yadav and B. M. Bhanage*
RSC Advances, **2015**, 5, 51570-51575.
- 2) *tert*-Butyl Peroxybenzoate Mediated Selective and Mild *N*-Benzoylation of Ammonia/Amines under Catalyst- and Solvent-Free Conditions.
Dilip Kumar T. Yadav and B. M. Bhanage*
SYNLETT, DOI: 10.1055/s-0034-1380811.
- 3) Base-Catalyzed Synthesis of Amides and Imines *via* C–C and C=C Bond Cleavage.
Dilip Kumar T. Yadav and B. M. Bhanage*
RSC Advances, **2015**, 5, 12387-12391.
- 4) Base-mediated synthesis of imines and amines from *N*-phenylureas and alcohols.
Dilip Kumar T. Yadav and B. M. Bhanage*
SYNLETT, **2014**, 25, 1611–1615.
- 5) *N*-arylation of indoles with aryl halides using copper/glycerol as a mild and highly efficient recyclable catalytic system.
Dilip Kumar T. Yadav, Sanil S. Rajak and B. M. Bhanage*
Tetrahedron Lett., **2014**, 55, 931–935.
- 6) Copper-catalyzed synthesis of nitriles by aerobic oxidative reaction of alcohols and ammonium formate.
Dilip Kumar T. Yadav and B. M. Bhanage*
Eur. J. Org. Chem., **2013**, 5106–5110.

Conferences and workshop:

- 1) Dilip Kumar T. Yadav and B. M. Bhanage: "Copper-catalyzed synthesis of nitriles by aerobic oxidative reaction of alcohols and ammonium formate" **poster presentation**- "EMERGING TRENDS IN CHIRALITY, MEDICINAL CHEMISTRY and PERFUMERY" at V. G. Vaze College, Mulund (E), Mumbai during 4th Feb. 2015.
 - 2) Dilip Kumar T. Yadav and B. M. Bhanage: Studies in C–N bond formation reactions for organic synthesis" **oral presentation** – "DST FIST review meeting" held at Institute of Chemical Technology (ICT), **Mumbai, India** during 27th September 2014.
 - 3) Participated in "**Laboratory Safety Workshop**" organized by Institute of Chemical Technology (ICT), **Mumbai, India** on 20th–21st March 2013.
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Extra Curricular Activity:

- 1) Worked as a Volunteer in "**2nd International Indo-German symposium on Green chemistry and catalysis**" jointly organized by ICT, Mumbai, India and LIKAT Rostock, Germany at Mumbai, on October 29th–31th, 2012.
 - 2) Worked as a Volunteer in "**Indo-Japan conference 2013**" organized by Institute of Chemical technology at Mumbai, on 13th Feb. 2013.
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Technical Skills:

Experienced of working on various organic transformations, cryogenic and pyrophoric reactions, Performed reactions such as Grignard, Wittig, Gewald, Mitsunobu, Riemann-Tiemann, Friedel-Crafts, Diels-Alder, Bartoli indole synthesis and Coupling Reactions such as Suzuki, Ullmann, Buchwald-Hartwig and Negishi etc.

Excellent with Schlenk techniques and handling of various moisture and air sensitive reagents such as BuLi, LDA, K/LiHMDS, Me₃Al, LAH, NaH, NBS, NIS, NCS, NaOMe, KO^tBu, BH₃, B₂H₆, BBr₃, AlCl₃, ZnCl₂, Na, CuCN, DAST, CDI, DCC, EDC.HCl, NaN₃, TMS-N₃ etc.

Expertise in modern spectroscopic and chromatographic techniques and interpretation of data from them such as ¹H NMR, ¹³C NMR, DEPT, LC-MS, GC, GC-MS, MASS, HP/UPLC, FTIR etc.

Instrumental Skills:

Multiwave reactor (Anton Parr), Microwave (Biotage), GC, GC-MS, Huber reactor, Parr Autoclaves, Parr Shaker Hydrogenation, Radleys Parallel synthesizer, Combiflash Rf/ISCO Columns, High Vac, Rotavac, Buchi, Freeze dryer etc.

Chemistry Soft Skills:

Sci-Finder, Beilstein crossfire, Reaxys,
Proux science integrity,
CIMS, SYMYX, CHRIS 2.0,
ACD Labs, Chem Sketch, ISIS Draw,

Exposed to retrieve data from various scientific Journals and abstracts.

Personal Details

- Date of Birth : 17th May 1986
 - Nationality : Indian
 - Sex : Male
 - Language known : English, Hindi, Marathi.
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Declaration

I Dilip Kumar Yadav declare that the information given here is true in my best knowledge and I will responsible for any change.

Dilip Kumar Yadav
