Shivaji College

Faculty Details Performa

Title	Dr.	First Name	YOGESH	Last Name	KUMAR	Photograph
Designation		**Assistant Professor**				
Address		H. No. E-29A, Pandav Nagar Patpad Ganj, New Delhi Delhi-110007, INDIA				
Phone No Office		**NA**				
Residence		**+91-9711743055**				
Mobile		**+91-9711743055**				
Email		**yogeshkumar@shivaji.du.ac.in**, **Yogesh.dixit84@gmail.com**				
Web-Page		https://www.shivajicollege.ac.in/academics/departments/faculty.php?department=chemistry				

Educational Qualifications

Degree	Institution	Year
PhD	University of Delhi	2014
M.Sc. (Inorganic Chemistry)	Ch. Charan Singh University Meerut	2010
M.Sc. (Organic Chemistry)	Ch. Charan Singh University Meerut	2005
B.Sc.	Ch. Charan Singh University Meerut	2003

Career Profile

1. Assistant Professor (Permanent)
   Department of Chemistry — 12th Feb. 2024 to continue
   Shivaji College
   University of Delhi
   Delhi-110027
2. Assistant Professor (Ad-hoc)
   Department of Chemistry — 5th September 2018-11th Feb. 2024
   Bhagini Nivedita College
   University of Delhi
   Delhi-110043
3. Assistant Professor (Ad-Hoc)

Department of Chemistry — 22nd Aug. 2017-4th Sep. 2018
Hans Raj College
University of Delhi
Delhi-110007

4. Young Scientist Fellow
Department of Chemistry — 22nd Aug. 2017-31st March 2019
Hans Raj College
University of Delhi
Delhi-110007

5. Young Scientist Fellow
Department of Chemistry — 1st April 2016-21st Aug. 2017
Malviya National Institute of Technology (MNIT)
Jaipur, Rajashthan-302017

6. Assistant professor (Guest Lecturer) — 5th Aug. 2016 to 10th Nov.2016
Sri Guru Tegh Bahadur Khalsa College
(SGTB Khalsa College),
University of Delhi-110007

7. Assistant Professor (Ad-Hoc) — 26th Feb. 2015 to 22nd May 2015
Sri Venkateshwara College,
University of Delhi-110021

8. Erasmus Mundus Visiting Scholar — 15th Nov. 2013- 15th Sept. 2014
Department of Chemistry
Katholic University (KU) Leuven,
Oude Market 13, 3000 Leuven, Belgium

Administrative Assignments

As assigned from college

Areas of Interest / Specialization

- Organocatalyzed C—H bond activation & Cross-Dehydrogenative Coupling reactions
- Transition Metal-catalyzed C—C & C—N bond formation via C—H bond activation
- Development of catalytic asymmetric reactions / New Synthetic Methodologies. Asymmetric catalysis / Synthesis
- Medicinal chemistry, drug discovery & process development
- Synthesis of Peptidomimetic Small Molecules.
- Biochemistry of malaria parasite and HIV virus.
- Synthesis of enzyme-inhibitor complex.

Subjects Taught

- Theoretical Courses: B.Sc.(H) and B. Sc. (P)

Department of Chemistry, Shivaji College, University of Delhi, Delhi, India

- Reactions, Reagents and Chemical Process
- Chemistry of Carboxylic Acids & their Derivatives, Amines and Heterocycles
- Spectroscopy and Applied Organic Chemistry
- Organometallic & Bio-Inorganic Chemistry
- Practical / Experimental Courses

B. Sc. (P) Physical Science with Chemistry taught Previous year paper at Department of Chemistry, Bhagini Nivedita College, University of Delhi, Delhi, India

- Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons
- Functional Group Organic Chemistry-1
- Functional Group Chemistry-2
- Chemistry of s & p block elements,
- Organometallic & Bio-Inorganic Chemistry
- Practical / Experimental Courses

Research Guidance

1. Supervision of awarded Doctoral Thesis	NIL
2. Supervision of Doctoral Thesis, under progress	NIL

Publications Profile

1. Recent biochemical advances in antitubercular drugs: Challenges and Way Forward. Jain, A.; Kumar, R.; Mothsra, P.; Sharma, A. K.; Singh, A. K.; **Kumar, Y**.* Just Accepted in Current Topics in Medicinal Chemistry, **2024** (IF 3.38).
2. Limitations of current drugs and prospects of plant-based compounds and their constructed analogues as therapeutics for treatment of malaria. Kumar, Y;* Jain, A; Kumar, R. Book Chapter, Nature, November 2023 In book: Natural Product Based Drug Discovery Against Human Parasites (pp.451-469) (DOI:10.1007/978-981-19-9605-4_20) (IF 64.8)
3. Metal-Free, H2O2-Mediated, Regioselective Direct C-3 Hydroxylation of Imidazo[1,2-a]pyridines via C(sp2)-H Bond Functionalization. Yadav, R. K.; **Kumar, Y**.; Chaudhary, S. ChemistrySelect, 2020, 5(29), 9235-9239. (ISSN = 2365-6549) (IF = 1.8)
4. COVID-19: An Update on Clinical Trials. **Kumar, Y.**;* Singh, A. K.; Kumar, S. Current Topics in Medicinal Chemistry, 2020, 20(17), 1516. DOI: 10.2174/1568026620999200511092332. (IF 3.38)

5. COVID-19 Pandemic – Are We Heading From Health Crisis Towards An Unprecedented Nutrition Crisis? **Kumar, Y.;*** Jain, A. Current Topics in Medicinal Chemistry, 2020, 20(16), 1438. DOI: 10.2174/1568026620999200511092629. (IF 3.38)
6. Synthesis of coumarin based triazolyl thiazolidinones and their apoptotic inducer activity against caspase-3. Pooja, Sinha,N.; Kumar, S.; Atul, Kumar, S.; Kumar, P.; Pandey, A.; Sharma, P.; Aggarwal, V.; Poonam, Mothsra, P.; Singh, B. K.; Singh, R. P.; **Kumar, Y.*** Chem. Biol. Lett., 2019, 6(2), 31-38. (IF = 4.7) (ISSN: 2347–9825)
7. Anti-infectious Drugs: Approaches and Achievements-Part I. Rathi, B.; **Kumar, Y**.; Kumar, S.; Poonam. Current Topics in Medicinal Chemistry, 2018, 18(22), 1925. (IF 3.38).
8. Molecules Effective against Infectious Diseases–Part II. Rathi, B.; **Kumar, Y**.; Kumar, S.; Poonam. Current Topics in Medicinal Chemistry, 2018, 18(23), 2007. (IF 3.38).
9. One-pot synthesis and photophysical studies of dihydropyrimidinone-based dyes: Novel violet-blue light emitting Fluorophores. Matta, A.; Kumar, M.; **Kumar, Y**.; Taniike, T.; Van der Eycken, J. V.; Brajendra K. Singh, B. K. ChemistrySelect, 2018, 3(38), 10815-10820. (IF = 1.5)
10. Microwave-Assisted Ruthenium-Catalysed ortho-C-H Functionalization of N-Benzoyl α-Amino Ester Derivatives, Sharma, N; Bahadur, V.; Sharma, U.; Saha, D.; Li, Z.; **Kumar, Y**.; Colaers, J.; Singh, B. K.; Van-Der Eycken, E.; Advanced Synthesis & Catalysis, 2018, 360 (16) Accepted DOI 10.1002/adsc.201800458 (IF = 5.646)
11. New Inhibitors of Plasmepsin II and IV Hydroxyethylamine Analogs as Growth Inhibitors of Plasmodium falciparum. Singh, A. K.; Rajendran, V.; Singh, S.; Kumar, P.; **Kumar, Y.**; Ghosh, P. C.; Singh, B. K.; Dunn, B. M.; Rathi, B.. Bioorganic & Medicinal Chemistry, 2018 Accepted doi.org/10.1016/j.bmc.2018.06.037 (IF = 2.42)
12. Design, Synthesis and Biological Evaluation of Arylpiperazine Based Novel Phthalimides: Active Inducers of Testicular Germ Cell Apoptosis. Singh, A. K.; Bhardwaj, J. K.; Olival, A.; **Kumar, Y**.; Podder, A.; Maheshwari, A.; Agrawal, R.;

Latha, N.; Singh, B. K.; Tomás, H.; Rodrigues, J.; Rupini, B.; Rathi, B. J. Chem. Sci. 2016. DOI No. 10.1007/s12039-016-1122-0.

13. Domino carbopalladation/C-H functionalization sequence: an expedient synthesis of bis-heteroaryls via transient alkyl/vinyl palladium species capture. Sharma, U. K.; Sharma, N.; **Kumar, Y**.; Singh, B. K.; Van Der Eycken, E. V.; · Chem. Eur. J. 2016, 22, 481-485.
14. Cu(I)-catalyzed microwave-assisted synthesis of 1,2,3-triazole linked with 4-thiazolidinones: a one pot sequential approach. **Kumar, Y**.; Matta, A.; Kumar, P.; Parmar, V. S.; Van Der Eycken, E. V.; Singh, B. K., RSC Adv. 2015, 5 (2), 1628-1639.
15. Microwave-Assisted Cu(I)-Catalysed, Three-Component Synthesis of 2-(4-((1-phenyl-1H-1,2,3-triazol-4-yl)methoxy)phenyl)-1H-benzo[d]imidazoles. **Kumar, Y.**; Bahadur, V.; Singh, A. K.; Parmar, V. S.; Van Der Eycken, E. V.; Singh, B. K. Beilstein J. Org. Chem. 2014, 10, 1413-1420.
16. O2-Dependent Efficacy of Novel Piperidine- and Piperazine-Based Chalcones against the Human Parasite Giardia intestinali. Bahadur, V.; Mastronicola, D.; Tiwari, H. K.; **Kumar, Y**.; Giuffre, A.; Singh, B. K.; Antimicrob. Agents Chemother. 2014, 58(1), 543-549.
17. Microwave-Assisted Copper Azide Alkyne Cycloaddition (CuAAC) Reaction using D-Glucose as a Better Alternative Reductant. **Kumar, Y**.;Bahadur, V.; Singh, A. K.; Parmar, V. S.; Singh, B. K. J. Indian Chem. Soc. 2013, 90, 1893.
18. Design, synthesis and biological activity evaluation of regioisomericspiro-(indoline-isoxazolidines) in the inhibition of TNF-a-induced ICAM-1 expression on human endothelial cells. Malhotra, S.; Balwani, S.; Dhawan, A.; Raunak.; **Kumar, Y**.; Singh, B. K.; Olsen, C. E.; Prasad, A. K.; Parmar, V. S.; Ghosh, B. Med. Chem. Commun., 2012, 3, 1536-1547.
19. Arylalkyl Ketones, Benzophenones, Desoxybenzoins and Chalcones Inhibit TNF-α Induced expression of ICAM-1: Structure-Activity Analysis. Kumar, S.; Reddy, C. S. L.; **Kumar, Y**.; Kumar, A.; Singh, B. K.; et al.. Arch. Pharm. Chem. Life Sci. 2012, 345, 368-377.

Publications in the Last one year

1. 1. Recent biochemical advances in antitubercular drugs: Challenges and Way Forward. Jain, A.; Kumar, R.; Mothsra, P.; Sharma, A. K.; Singh, A. K.; **Kumar, Y**.* Just Accepted in Current Topics in Medicinal Chemistry, **2024** (IF 3.38).
2. Limitations of current drugs and prospects of plant-based compounds and their constructed analogues as therapeutics for treatment of malaria. Kumar, Y;* Jain, A; Kumar, R. Book Chapter, Nature, November 2023 In book: Natural Product Based Drug Discovery Against Human Parasites (pp.451-469) (DOI:10.1007/978-981-19-9605-4_20) (IF 64.8)
3. Metal-Free, H2O2-Mediated, Regioselective Direct C-3 Hydroxylation of Imidazo[1,2-a]pyridines via C(sp2)-H Bond Functionalization. Yadav, R. K.; **Kumar, Y**.; Chaudhary, S. ChemistrySelect, 2020, 5(29), 9235-9239. (ISSN = 2365-6549) (IF = 1.8)
4. COVID-19: An Update on Clinical Trials. **Kumar, Y.**;* Singh, A. K.; Kumar, S. Current Topics in Medicinal Chemistry, 2020, 20(17), 1516. DOI: 10.2174/1568026620999200511092332. (IF 3.38)
5. COVID-19 Pandemic – Are We Heading From Health Crisis Towards An Unprecedented Nutrition Crisis? **Kumar, Y.;*** Jain, A. Current Topics in Medicinal Chemistry, 2020, 20(16), 1438. DOI: 10.2174/1568026620999200511092629. (IF 3.38)

Conference Organization/ Presentations (in the last three years)

1. 1st International Conference on Integrative Chemistry, Biology & Translational Medicine (ICBTM-2019) held on 25-26 Feb., 2019 sponsored by Loyola University, Chicago-USA at Hansraj College, University of Delhi, India. { Poster Presentation: Glucose: A Better Alternative Reductant for Copper (I) Catalyzed Heterocyclic Ring Formation"} "Best Poster award"
2. UGC-Sponsered National Conference in Chemistry (NCC-2016) "Environment & Harmonious Development" held on 7-8 April, 2016 at Shyamlal College, University of Delhi, India. { Poster Presentation: Synthesis of Coumarin Based Triazolylated Thiazolidinone Derivatives and to Study Their Apoptotic Inducer/Inhibitor Activity} "Best 3rd Poster award"
3. National Conference in Chemistry "Recent Innovations in Chemical Science and Technology" held on 15-16 Feb, 2016 at Sri Aurobindo College, University of Delhi, India. {Poster Presentation: Green Chemistry Approach for the Synthesis of Coumarin-Thiazolidinone Derivatives as Their Anticancer Activity}

4. International Conference on "Current Challenges in Drug Discovery Research (CCDDR 2015)" held on 23-25th November, 2015 at Malaviya National Institute of Technology (MNIT) Jaipur, Rajasthan, India. {Poster Presentation: Ligand-Based Optimisation, Synthesis And Docking Of 1,2,3-Triazoles, Inhibitors of P450 14 a-Sterol Demthylase (CYP51)}

Research Projects (Major Grants/Research Collaboration)

1. DST-SERB Start-up Research Grant (Young Scientist)

Funding Agency: SERB-DST (2016-2019) Majar Project (34 Lakh + 16 Lakh)

Project Title: "Synthesis of hetero-substituted amino acids via C (sp3)-H functionalization and its applications"

Awards and Distinctions

- Awarded best Distinguished Investigator Award for notable Academia-Industry research excellence from Center for Global Health, Hansraj College, University of Delhi, India & Loyola University Chicago Stritch School of Medicine, USA in association with TCI Chemicals (India) Private Limited, 2019.
- Young Scientist award 2015, DST, India.
- Awarded and availed Erasmus-Mundus Program EXPERT III Fellowship as a visiting PhD Student (2013-2014).
- Awarded Erasmus-Mundus Program Svaagata Fellowship as a visiting PhD Student (2013-2014).
- Qualified UGC-JRF December 2009 and SRF from 2012 to 2013.
- Qualified Graduate Aptitude Test in Engineering (GATE), February 2010 (Rank 1748 out of 8056).
- Stood First Rank in M.Sc. in D.A.V. College Bulandshahar.

Association With Professional Bodies

- Reviewing
- Advisory
- Committees and Boards
- Memberships
- Office Bearer

Other Activities

Signature of Faculty Member