



CURRICULUM VITAE

Name:	Dr Anil Kumar Singh	
Designation:	Assistant Professor	
School:	School of Physical Sciences	
Department:	Chemistry	
Specialisation & Research Interests:	Bio-organic Chemistry, Medicinal Chemistry, Synthetic Organic Chemistry, Physical Organic Chemistry, Metal catalyzed reactions	
Email IDs (Official & Personal)	anilkumarsingh@mgcub.ac.in , anilchemdu@gmail.com	
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2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
Ph.D.	2015	University of Delhi
M.Sc.	2011	Banaras Hindu University
B.Sc. (H)	2009	Banaras Hindu University

3. PROFESSIONAL EXPERIENCE:

Organisation/Institute/University	Position Held	Duration

Assistant Professor	6 th Oct, 2016 to till date	Mahatma Gandhi Central University, Motihari, Bihar
Assistant Professor	4 th Aug. 2016 to 4 th Oct. 2014	Hans Raj College, University of Delhi, Delhi
Assistant Professor	7 th March, 2016 to 3 rd Aug. 2016	Lingaya's University, Faridabad, Haryana

4. COURSES TAUGHT:

- CHEM3003 : Organic Chemistry-I (Basic Organic Chemistry & Reaction Mechanism)
 CHEM3004 : Physical Chemistry-II (Thermodynamics, Chemical Equilibrium and Solution)
 CHEM3006 : Organic Chemistry-II (Chemistry of Halogenated Hydrocarbons, Alcohols, Phenols, Ethers and Epoxides)
 CHEM3010 : Physical Chemistry-IV (Conductance, Electrochemistry and Electric and Magnetic Properties of Atoms and Molecules)
 CHEM3013 : Inorganic Chemistry-IV (Organometallic Chemistry)
 CHEM3019 : Molecular Spectroscopy
 CHEM3033 : Generic Elective I: Atomic structure, Bonding & General Organic Chemistry
 CHEM3034 : Generic Elective II: Thermodynamics, Equilibria & Functional Organic Chemistry I
 CHEM4002 : Organic Chemistry I (Reaction intermediate; Asymmetric Synthesis)
 CHEM4003 : Inorganic Chemistry I (Bonding theories of coordination compounds, Electronic spectra and Group theory)
 CHEM4005 : M.Sc. Chemistry Lab
 CHEM4007 : Inorganic Chemistry II (Metal Carbonyls and ORD CD of coordination compounds)

5. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:

1. Member of Prospectus Drafting Committee
2. Member of Annual report Drafting committee
3. Co-Convener of Sports committee
4. Member of Cultural Committee
5. Special Invitee of Departmental BoS
6. Establishment of Under graduate Chemistry Laboratory
7. Member secretary of National symposium "RTCS-2019"
8. Prepared Departmental Regular Time table.
9. ACS, End Semester examination
10. Contributed to Control Room, CoE
11. Accession number in Library
12. Frisking and flying Squad
13. Attendance compilation
14. Question Paper setting and Answer Script evaluation
15. Invigilation duty

6. PUBLICATIONS :**A. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:**

1. Functionalized hydroxyethylamine based peptide nanostructures as potential inhibitors of falcipain-3, an essential proteases of Plasmodium falciparum. Brijesh Rathi, **Anil K. Singh**, Ram Kishan, Neelu Singh, N. Latha, S. Srinivasan, Kailash C. Pandey, Hemandra K. Tiwari, Brajendra K. Singh *Bioorganic & Medicinal Chemistry* **2013**, *21*, 5503.
2. Entry of chiral phthalimides with significant second order nonlinear optical and piezoelectric properties. **Anil K. Singh**, Ram Kishan, N. Vijayan, V. Balachandran, Taruna Singh, Hemandra K. Tiwari, Brajendra K. Singh and Brijesh Rathi *RSC Advances* **2013**, *3*, 14750.
3. Microwave assisted copper azide alkyne cycloaddition (CuAAC) reaction using D-glucose as a better alternative reductant. Yogesh Kumar, Vijay Bahadur, **Anil K. Singh**, Virinder S. Parmar and Brajendra K. Singh *Journal of Indian Chemical Society* **2013**, *90*, 1893.
4. Synthesis, structural aspects and Nonlinear optical properties of novel phthalimide derivatives: Theoretical and Experimental approach. **Anil K. Singh**, Ram Kishan, Vijay Bahadur, N Vijayan, V. Balachandran, Hemandra K. Tiwari, Brajendra K. Singh and Brijesh Rathi. *Journal of Physical Organic Chemistry* **2014**, *27*, 490.
5. Microwave-assisted Cu(I)-catalyzed, three component synthesis of 2-(4-((1-phenyl-1H-1,2,3-triazol-4-yl)methoxy)phenyl)-1H-benzo[d]imidazoles. Yogesh Kumar, Vijay Bahadur, **Anil K. Singh**, V.S. Parmar, Erik, V. Van der Eycken and Brajendra K. Singh *Beilstein Journal of Organic Chemistry*, **2014**, *10*, 1413.
6. Potentials of Hydrogels in Cancer Therapy. Prem Prakash Sharma, Ravindra Kumar, **Anil K. Singh**, Brajendra K Singh, Ajay kumar and Brijesh rathi *Current Cancer Therapy Reviews* **2014**, *10*, 246.
7. Design, synthesis and biological evaluation of functionalized phthalimides: A new class of antimalarials and inhibitors of falcipain-2, a major hemoglobinase of malaria parasite. **Anil K. Singh**, Vinoth Rajendran, Akansha Pant, Prahlad C. Ghosh, Neelu Singh, N. Latha, Sandeep Garg, Kailash C. Pandey, Brajendra K. Singh and Brijesh Rathi *Bioorganic and Medicinal Chemistry*, **2015**, *23*, 1817.
8. Hydroxyethylamine Based Phthalimides As New Class of Plasmepsin Hits: Design, Synthesis and Antimalarial Evaluation. **Anil K. Singh**, Sumit Rathore, Yan Tang, Nathan E. Goldfarb, Ben M. Dunn, Vinoth Rajendran, Prahlad C. Ghosh, Neelu Singh, N. Latha, Brajendra K Singh, Manmeet Rawat and Brijesh Rathi *PLoS One* **2015**, *10*, e0139347
9. Functionalized Organic Frameworks Explored As Second Order NLO Agents. **Anil K. Singh**, V.V. Medvediev, Vijay Bahadur, Taruna Singh, Brajendra K. Singh, N. Vijayan, V. Balachandran, Nikolay Yu. Gorobets, Brijesh Rathi, *Journal of Chemical Sciences*, **2016**, *128*, 297.
10. Microwave Assisted Metal Free, Base mediated C-N Bond Formation/Cleavage: Synthesis of Benzimidazo[1,2-a]quinazoline Derivatives. Prashant Kumar, **Anil K. Singh**, Vijay Bahadur, Christophe Len, Nigel Richards, Virinder Parmar, Erik V. V. der Eycken, Brajendra K. Singh *ACS Sustainable Chemistry & Engineering*, **2016**, DOI: 10.1021/acssuschemeng.5b01669).
11. Design, Synthesis and Biological Evaluation of Arylpiperazine Based Novel Phthalimides: Active Inducers of Testicular Germ Cell Apoptosis. **Anil K. Singh**, Jitender K. Bhardwaj, Ana Olival, Yogesh Kumar, Avijit Podder, Ankur Maheshwari, Renuka Agrawal, N. Latha, Brajendra K. Singh, Helena Tomás, João Rodrigues, B. Rupini and Brijesh Rathi *Journal of Chemical Sciences*, DOI 10.1007/s12039-016-1122-0, **2016**).

7. INVITED TALKS:

1. Analytical Techniques: Application and its Scope, Department of Chemistry, TNB College, Bhagalpur, Bihar

8. PARTICIPATION & PRESENTATIONS IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:

1. 9th Indo-Italian Workshop on "Chemistry and Biology of Antioxidants: Natural Products based Antioxidants from Medicinal Plants as Lead towards Development of Novel Drugs" held on 10th & 11th October 2011 at Delhi, India.
2. Indo-German workshop on "New Perspectives for Nano-Carriers in Biomedical Applications" held on 14th January 2013 at University of Delhi, India.
3. Lecture Workshop/Conference on "Emerging Trends in Developments of Drug and Devices" held on 21st - 23rd January 2013 at University of Delhi, India.
4. 19th ISCB International conference (ISCB-2013) on "Recent Advances and Current Trends in Chemical and Biological Science" held on 2-5th march 2013 at Sukhadia University, Udaipur, Rajasthan, India. **(Poster Presented:** Chiral phthalimides with greater second harmonic generation response.)
5. "International conference on Chemical Biology disease mechanisms and Therapeutics (ICCB-2014" held on 6th Feb. to 8th, 2014 Organized by Chemical Biology Society of India in association with CSIR-Indian institute of Chemical technology. **(Poster Presented:** Functionalized hydroxyethylamine based peptide nanostructures as potential inhibitors of falcipain-3, an essential proteases of Plasmodium falciparum.)
6. 20th ISCB International Conference (ISCB-2014) On "Chemistry and Medicinal Plants in translational medicine for Healthcare" held on 1st-4th March 2014, organized by Department of Chemistry, University of Delhi. **(Poster Presented:** Functionalized hydroxyethylamine based peptide nanostructures as potential inhibitors of falcipain-3, an essential proteases of Plasmodium falciparum.)
7. 1st international Conference on Emerging trends of Nanotechnology in drug Discovery held on 26-27 May 2014, Organized by Sri Venkateswara College, University of Delhi, India & Department of Biochemistry, University of Delhi, South Campus (UDSC), India in association with Centro de Quimica da Madeira (CQM), University of Madeira, Portugal. **(Poster presented:** Functionalised hydroxyethylamine nanostructures as potential antimalarial agents.)

9. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

1. CSIR-NET with JRF-2010 (December)
2. CSIR-NET with SRF-2013 (July)
3. Erasmus Mundus Action 2: Exchange Ph.D. student, Ghent University, Belgium, 01 December, 2014 -30 Sept. 2015.

10. ANY OTHER SIGNIFICANT INFORMATION:

1. Participated in 119th Orientation Programme at Allahabad University and awarded Grade A

(Anil Kumar Singh)