


## FACULTY PROFILE PROFORMA

Title (Ms/Mr/Dr/Prof)	<b>Dr.</b>	FirstName me	<b>NISHANT</b>	LastName me	<b>VERMA</b>	Photograph
Designation	<b>Assistant Professor</b>					
Department	<b>Chemistry</b>					
Address (Official)	<b>Department of Chemistry, Kalindi College, (University of Delhi) East Patel Nagar, New Delhi- 110008</b>					
Phone No.	<b>+91-8126695049</b>					
Email	<b><u>nishant.sailove@gmail.com</u></b>					
<b>Education</b>						
<b>Subject</b>	<b>Institution</b>		<b>Year</b>	<b>Details</b>		
<b>Chemistry</b>	<b>Indian Institute of Technology Roorkee</b>		<b>2017</b>	<b>Ph.D.</b>		
<b>Chemistry</b>	<b>Dr. B. R. Ambedkar University, Agra</b>		<b>2010</b>	<b>M.Sc.</b>		
<b>Chemistry</b>	<b>Dr. B. R. Ambedkar University, Agra</b>		<b>2008</b>	<b>B.Sc.</b>		
<b>CareerProfile</b>						
<b>Organisation/ Institution</b>	<b>Designation</b>	<b>Duration</b>		<b>Role</b>		
Kalindi College	Assistant Professor	July 2019 onwards		Teaching		
Department of Chemistry, University of Delhi	Post-Doctoral	June 2018 – July 2019		Research		
Indian Institute of Technology Delhi	Research Associate	Oct 2017 – Feb 2018		Research		
<b>Research Interests/Specialization</b>						
<ul style="list-style-type: none"> <li>• <b>Design and Synthesis of Molecular Probes for Biomedical Imaging, Heterocycles synthesis: Synthesis of annulated and functionalized heterocyclic compounds of medicinal relevance.</b></li> <li>• <b>Multicomponent reaction: Design of new MCRs and Isocyanide chemistry.</b></li> <li>• <b>Green Chemistry: Development of new and greener protocols for organic synthesis.</b></li> </ul>						
<b>Administrative Assignments / Contribution to corporate life</b>						
<ul style="list-style-type: none"> <li>• <b>Consultant in Johri Scientific Instruments, New Delhi.</b></li> <li>• <b>Consultant in Ambrotia pharmaceutical, Bhagwan Nagar, Roorkee</b></li> <li>• <b>Joint Secretary, in Aligarh District Chess Sports Association, Aligarh, 2009-2012.</b></li> <li>• <b>As Arbiter in 44th SSBMT (Indoor) Finals-Chess Tournament during 5th -7th April, 2013 in CSIR-Central Building Research Institute of Technology, Roorkee.</b></li> <li>• <b>As Sport Coordinator of Chess of Intra Bhawan Chess Tournament at IIT Roorkee, 2013-15.</b></li> <li>• <b>Served as Core Team Member in Aligarh International FIDE Rating Chess Tournament” held at Aligarh from 22nd to 27th Oct, 2009.</b></li> </ul>						
<b>Teaching Experiences (Subject/Courses taught)</b>						
<ul style="list-style-type: none"> <li>• <b>Organic, Inorganic and Physical chemistry</b></li> <li>• <b>BSc (Life Science) Theory and Practical, Sem III, Core course Chemistry II, Chemical Energetics, Equilibria &amp; Functional Group Organic Chemistry</b></li> </ul>						

- **BSc (Life Science) Theory and Practical, Sem I, Core course Chemistry I, Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons.**
- **BSc (Hons) Chemistry, Sem II, (Practical) Organic Chemistry II**
- **BSc (Life Science) Sem II, Practical, Chemical Energetics, Equilibria & Functional Group Organic Chemistry**
- **BSc (Life Science) Sem IV, Practical, Chemistry of s-and p-block elements, States of matter and Chemical Kinetics.**
- **BSc (Hons) Chemistry, Sem VI, Theory and Practical, Chemistry-DSE: Green Chemistry**

#### Research Guidance

Not Available

#### Publication (Peer Reviewed/Indexed Journals)

1. **N. Verma**, V. Kundi, N. Ahmed, Piperidine-mediated annulation of 2-acylphenols with 4-nitrobenzaldehyde to 3-Benzofuranones, *Tetrahedron Lett.*, 2015, 56, 4175.
2. **N. Verma**, S. Kumar, N. Ahmed, A facile access to novel heterocyclic analogues of chalcone from newly synthesized ketone containing isoxazole and a benzoxazinone, *RSC Adv.*, 2016, 6, 51183-51191.
3. **N. Verma**, S. Kumar, N. Ahmed, Asymmetric Synthesis of 3-Benzofuranones through 5-Exo-trig Cyclization of 4-Nitroaryl Olefins, *Tetrahedron Lett.*, 2016, 57, 3547-3550.
4. **N. Verma**, S. Kumar, N. Ahmed, LiBr/ $\beta$ -CD/IBX/H<sub>2</sub>O-DMSO: a new approach for one pot biomimetic regioselective ring opening of chalcone epoxides to bromohydrins and conversion to 1,2,3-triketones, *Synthetic Communications*, 2017, 47, 1110-1120.
5. S. Kumar, **N. Verma**, N. Ahmed,  $\beta$ -Cyclodextrin in water: Highly facile biomimetic one pot deprotection of phenolic THP/MOM/Ac/Ts ethers and concomitant regioselective cyclization of chalcone epoxides and 2'-aminochalcones *RSC Adv.*, 2015, 5, 85128–85138.
6. S. Kumar, **N. Verma**, N. Ahmed, Microwave assisted highly efficient one-pot multi-component synthesis of novel 2-(tetrasubstituted-1H-pyrrol-3-yl)-4H-chroman-4-ones catalyzed by heterogeneous reusable silica gel supported polyphosphoric acid (PPA/SiO<sub>2</sub>), *J. Saudi. Chem. Soc.* 2016, doi.org/10.1016/j.jscs.2016.01.005. (Accepted)
7. S. Kumar, **N. Verma**, I. Parveen, and N. Ahmed, A Green, Solvent-Free, Microwave-Assisted, High-Yielding YbCl<sub>3</sub> Catalyzed Deprotection of THP/MOM/Ac/Ts Ethers of Chalcone Epoxide and 2'-Aminochalcone and Their Sequel Cyclization, *J. Heterocyclic Chem.*, 2016, 53, 2111.
8. S. Kumar, **N. Verma**, N. Kumar, A. Patel, P. Roy, V. Pruthi, N. Ahmed, Design, Synthesis, Molecular docking and Biological studies of Novel Phytoestrogen-Tanaproget hybrids, *Synthetic Communications*, 2016, 46, 460-474.
9. S. Kumar, N. K. Konduru, **N. Verma**, N. Ahmed,  $\beta$ -Cyclodextrin in Water: Highly Versatile and Green Approach for Biomimetic Regioselective Ring Opening of Chalcone Epoxides with Nitrogen Heterocycles, *Synthetic Communications*, 2015, 45, 2555-2566.
10. Design and synthesis of novel non-steroidal Phytoestrogen based probes as potential biomarker, evaluation of anticancer activity and docking studies, *J. Heterocyclic Chem.*, 2017, 54, 2242-2257.
11. Chapter 8: Synthetic Advances in the Indane Natural Product Scaffolds as Drug Candidates, Book Name: Studies in Natural Products Chemistry, Bioactive Natural Products/Elsevier, 2016, 51, 383-434.

#### Seminar/Workshop/Conferences Presentation/Organisation

1. **N. Verma**, S. Kumar, G. Singh, R. Chandra, Presented a paper entitled Environmentally Friendly: One pot synthesis of highly functionalized Aminocyanohydropyridine and Cyanonaphthyridine, International Conference on " Environmental Challenges and Solutions, 31<sup>st</sup> January to 2<sup>nd</sup> February, 2020, jointly organized by Shiksha Utthan Nyas, New Delhi, Manav Rachna International Institute of Research & Studies, Faridabad and Dkshina Foundation, Delhi.
2. Attended ACS workshop on Greening our Education System Initiatives for Propagating & Preaching beyond Benign Concepts in Classrooms & Laboratories, 19<sup>th</sup> December 2019, Conference Centre, University of Delhi, Delhi.

3. **N. Verma** and N. Ahmed, "Chemoselective Reduction of 2-amino-4-oxo-4H-chromene-3-carbaldehyde by NaBH<sub>4</sub>/Al<sub>2</sub>O<sub>3</sub>", National Conference on Emerging Area in Chemical Education & Research, 16-18 Oct 2014, The IIS University, Jaipur. (Awarded Best Poster Presentation)
4. **N. Verma** and N. Ahmed, "Piperidine-mediated annulation of 2-acylphenols with 4-nitrobenzaldehyde to 3-benzofuranones" Theoretical Chemistry Symposium 2014, 18-21 Dec 2014, CSIR – National Chemical Laboratory, Pune. (Poster Presentation)
5. **N. Verma** and N. Ahmed, "Enantioselectivity based on Atropisomers Intermediate by Organocatalyst piperidine: An Experimental and Theoretical study", 16th Tetrahedron Symposium Asia Edition, 10-13 Nov 2015, **Shanghai, China**. (Poster Presentation)
6. **N. Verma** and N. Ahmed, Poster presentation, in 18th National Symposium in Chemistry & 10th CRSI-RSC joint symposium, 5th -7th Feb-2016, Panjab University, Chandigarh. (Poster Presentation)
7. Participated in "Symposium on Modern Trends in Inorganic Chemistry-XV (MTIC-XV)", IIT Roorkee, held on 13-16 Dec, 2013.
8. Workshop on "Introduction to Gaussian: Theory and Practice", by Gaussian, Inc. 12-16 Dec 2014, IISER Pune.
9. Participated in "International workshop on Chemical Evolution and Origin of Life", IIT Roorkee, held on 21st – 23rd, 2013.
10. Royal Society of Chemistry, Indian Roadshow workshop, 4 November 2014, Indian Institute of Technology, Delhi, India.
11. "Workshop on Scifinder" organized by Mahatma Gandhi Library, IIT Roorkee, held on March, 18, 2015.
12. "Workshop on Scopus, Mendeley and Reaxys" organized by Mahatma Gandhi Library, IIT Roorkee, held on March, 10, 2015.
13. Workshop on Book Publication, Elsevier" organized by Mahatma Gandhi Library, IIT Roorkee held on 2016.
14. NSIC, Technology based Entrepreneurship Development Programme (TEDP) from 12-10-2009 to 20-11-2009, under DST –NIMAT Project 2009-10, implemented by EDI, Ahmadabad, under the aegis of NSTEDB, DST, Govt. of India, New Delhi

#### **Awards & Distinctions**

- Awarded Best Poster Presentation entitled "Chemoselective Reduction of 2-amino-4-oxo-4H-chromene-3-carbaldehyde by NaBH<sub>4</sub>/Al<sub>2</sub>O<sub>3</sub>", National Conference on Emerging Area in Chemical Education & Research, 16-18 Oct 2014, The IIS University, Jaipur.
- Senior Research Fellowship (CSIR, New Delhi, India), 2015- 2017
- Junior Research Fellowship (BARC- BURN, Mumbai and CSIR, New Delhi), June 2012 to 2015.
- Qualified twice joint CSIR - UGC JRF-NET (National Eligibility Test), Dec 2011 & June 2012.
- Qualified twice GATE (Graduate level aptitude Test), 2012 & 2013.

#### **Public Service/ University Service/ Consulting Activity**

- As Consultant in Research Project, Department of Chemistry, University of Delhi, New Delhi, India
- As Organizing Secretary in International Virtual Conference Role of Technology In The Era of Covid-19 For Education 7<sup>th</sup> June to 8<sup>th</sup> June 2020 organized by MIET Kumaun, Haldwani (Nainital) Under the Aegis of Uttarakhand Science Education and Research Centre (U-SERC).

#### **Professional Societies Memberships**

- Member of American Chemical Society since Jan 2016. Membership Number Is: 30742436
- Referee of "Chemistry Select" is part of the family of ChemPubSoc Europe chemistry journals.

#### **Projects (Major Grants/ Collaborations)**

- Project entitled: "Design, Synthesis and Biological Screening of Chiral Pyrazinoindoles and Pyrazinopyrroles as Potential Antibacterial Agent" funded by DST- SERB, Department of chemistry, University of Delhi, New Delhi, Project cost: 67 Lac INR. (as Research Associate)
- Project entitled: "Development of potent small molecule inhibitors against Dopamine β-Hydroxylase to combat Cardiovascular Disease" Department of Biotechnology, Dept. of

Chemistry, IIT Delhi, New Delhi. Grant No: IITD/IRD/RP03076/93882, Project cost: 20 Lac INR. (Project completed) (as Research Associate)

- Project entitled: “Radiopharmaceutical chemistry and Molecular Imaging Research”, Sponsored by Department of Atomic Energy, BRNS, BARC, Mumbai , Grant No: DAE-599-CMD, Letter no; IITR/SRIC/353/I-26(DAE) CMD, Project cost: 28 Lac INR, Time for Project: 3 years (2012-2015).(As JRF)

• **OtherDetails**

- Handling of Instruments: IR, UV, NMR, GC-MS, HRMS etc.
- Software uses: Gaussian 09, Gauss View, Chemkraft, AUTODOCK 4, Discovery studio, Modelling, Simulation, Chem draw, Shell X, WinGX (single crystal), Top spin, Scifinder, Turnitin (Plagiarism).
- Expertise in writing scientific manuscripts/reports,Ability to work in team.