




## Faculty Details Proforma

Title	Dr.	First Name	Avneet	Last Name	Kaur	Photograph
<b>Designation</b>		<b>Assistant Professor</b>				
<b>Address</b>		<b>Daulat Ram College, Patel Marg 4</b>				
<b>Phone No. Office</b>						
<b>Residence</b>						
<b>Mobile No.</b>						
<b>Email – ID</b>		<b>avneet@dr.du.ac.in</b>				
<b>Web Page</b>						
<b>Educational Qualification</b>						
<b>Degree</b>		<b>Institution</b>			<b>Year</b>	
Ph.D.		Department of Chemistry, University of Delhi			2011	
M.Sc. Chemistry		St. Stephens College, University of Delhi			2007	
B.Sc. (H) Chemistry		St. Stephens College, University of Delhi			2005	
<b>Career Profile</b>						
<p>14+ years of teaching experience in the domain of Physical Chemistry. Responsible for teaching Quantum Chemistry, Conductance, Thermodynamics, Applications of Computers in Chemistry, Ionic equilibrium. Delivered complex material in easy to understand terminology to reach largest number of students. Skilled in integration of technology to support classroom instruction and learning activities. Mentored and assisted with student-centered activities on campus for their holistic development. Active participation in workshops/ programmes to up-skill myself on a continuous basis. Contributed as a co-author (second author) in the e-PG Pathshala Project by UGC under the NMEICT mission of MHRD, Govt. of India, in the subject Physical Chemistry-I (Quantum Chemistry).</p>						
<b>Administrative Assignments</b>						
<p>➤ <u>Faculty Member of various committees and societies of the college</u></p> <ul style="list-style-type: none"> <li>• Admission Committee (2019, 2021-22, 2022-23), Eco club, Dhara (2021 – 2023)</li> <li>• NAAC representative from Chemistry (2014 – 2020) , Alumni data for India Today Ranking (2022)</li> <li>• Website Committee (2020 – 2021), Team Manager, Sports events (2018 – 2020), Student Advisory Board (2017 – 2018)</li> </ul> <p>➤ <u>Faculty Member of Departmental committees</u></p> <ul style="list-style-type: none"> <li>• Library books verification (2022)</li> <li>• Maintenance of instruments used in Laboratory</li> <li>• Transitioning physical lab stock book to electronic database (2015)</li> <li>• Staff advisor, Chemical Society (2017-18)</li> <li>• Worked as editor and designer of the Chemistry Society magazine (2017, 2015)</li> </ul>						

**Areas of Interest / Specialization**

Physical Chemistry, Analytical Chemistry

**Subjects Taught (in the last three years)**

S.No	Course	Subject Taught	Semester	Year
1.	B.Sc. (H) Chemistry	Instrumental Methods of Chemical Analysis	VI	2024
2.	B.Sc. (H) Chemistry	Quantum Chemistry & Chemical Bonding	V	2024
3.	SEC	Basic IT Tools	V	2024
4.	B.Sc. (H) Chemistry	Instrumental Methods of Chemical Analysis	VI	2023
5.	B.Sc. (P) Life Sciences	Quantum Chemistry	VI	2022

**Research Guidance**

Supervised (as Co-Principal Investigator) ten students from B.Sc. (H) Chemistry and B.Sc. (P) Life Sciences in Innovation project (DR-304) entitled "Green Synthesis of Iron Nanoparticles for Environmental Remediation and Organic Catalysis" in the academic session 2015-16 at Daulat Ram College, University of Delhi.

**Publications Profile**

- 'Band gap engineering of a ternary copolymer based on polythiophene and its derivatives using genetic algorithm', Kaur Avneet & Bakhshi A.K., International Research Journal of Pure and Applied Chemistry, 2(1), 2012, 55-67.
- Molecular engineering of novel low band gap conducting polymers' Bakhshi A.K., Kaur Avneet, Arora Vinita, Indian Journal of Chemistry, 51A, January 2012, 57-68
- 'Electro-active ternary copolymer design using genetic algorithm', *Kaur Avneet & Bakhshi A.K.*, Indian Journal of Chemistry, 50A, January 2011, 9-14.
- 'Change in optimum genetic algorithm solution with changing band discontinuities and band widths of electrically conducting copolymers', *Kaur Avneet & Bakhshi A.K.*, Chemical Physics, 369, 2010, 122-125.
- 'Designing of Type-I Polymeric Super -lattices using Genetic and Ant Algorithms: A Comparative Study', *Kaur Avneet, Wazir Mohsineen, Garg Aparna & Bakhshi A.K.*, Indian Journal of Chemistry, 48A, Dec 2009, 1652-1656.
- 'Tailoring electrically conducting copolymers using genetic algorithm', *Kaur Avneet & Bakhshi A.K.*, Indian Journal of Chemistry, 48A, May 2009, 631-636.

**Conference Organization / Presentation (in the last three years)**

- Organising Committee member of National workshop "Raising Awareness on Urban Air Quality, Climate Change, Health and e-resilience" jointly organized by Department of Environmental Studies & Daulat Ram College, University of Delhi, 25 June 2022.
- Active Resource Person for SDP's by various Departments and Societies of the college (Chemistry, Botany, Dhara Eco Club):
  - Disease Prevention by Natural Remedies and Identification of active ingredients on 20-27 December 2021 (Module: Boosting Immunity Naturally)
  - Enhancing Learning through ICT tools on 24 – 25 November 2021 (Course coordinator)
  - Think Smart Think Green on 9-14 October 2021 (Organizing Committee Member, Module : Food production and consumption: impact on the environment)

- Summer Internship on “Research Methodology for Chemistry” 16 – 30 May 2020(Module: Use of software and statistical tools for data analysis)