



SHIVAJI COLLEGE

UNIVERSITY OF DELHI

NAAC ACCREDITED 'A' GRADE



Department of Chemistry
(under the aegis of IQAC)

Add-on Course
on

**“ChemDraw & Microsoft Excel
Applications in Chemistry”**

(Online Mode)

February - April, 2025

Who can attend?

This course is open for students of all courses of Shivaji College with basic knowledge of Chemistry. 20% of seats are open for students of other colleges/institute.

ABOUT COLLEGE

Shivaji College is a premier institution in West Delhi, accredited with grade 'A' by NAAC. It was ranked as one of the top 10 science colleges of the country in a survey conducted by India Today in 2017. It was established in 1961 by Hon'ble Dr Panjabrao Deshmukh, Union Minister for Agriculture and a renowned social activist and farmer-leader. The college offers twenty undergraduate courses in Science, Commerce and Humanities, a self-financing course in Bachelors in Business Economics, three post-graduate courses. Several senior faculty members supervise Ph.D. scholars registered with University of Delhi, while some engage in UGC-sponsored major and minor research projects. Some students of the college frequently emerge as rank-holders in the University examinations and many are placed for internships in prestigious organizations annually.

ABOUT DEPARTMENT

The Chemistry department offers undergraduate courses in Chemistry with academically comprehensive syllabi to make one highly employable and provides required skills for scientific and technical roles. The nineteen highly experienced and dedicated teaching faculty is committed to guide students at every step and grooms them to become academically sound. The department has its own Library, scientific journals and magazines. The faculties published research publications in reputed journals of International and National repute. The department has three state-of-art Chemistry laboratories with latest equipment along with all lab safety measures.

PATRON

Prof. Virender Bhardwaj
Principal
Shivaji College

CONVENOR (ADD ON COURSE)

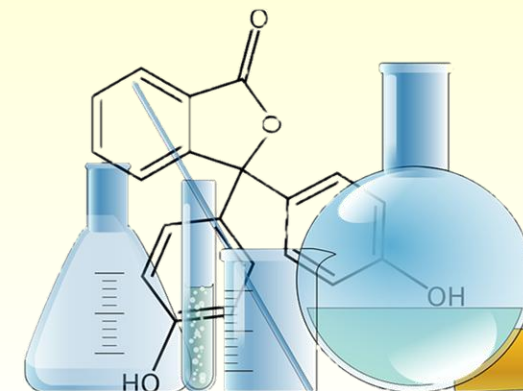
Dr. Richa Arora
Assistant Professor
Department of Chemistry

COURSE CONVENOR

Dr. Reeta
Assistant Professor
Department of Chemistry

COURSE COORDINATOR

Dr. Yogesh Kumar
Assistant Professor
Department of Chemistry



COURSE OBJECTIVE

Objective of this course is to enrich the learners with basic and advanced applications of ChemDraw and Microsoft Excel features relevant to chemistry.

These softwares helps the chemists in drawing of molecular structures, prediction of physiochemical properties of the drawn molecules, data organization, visualization, and analysis.

WHY THIS COURSE?

- This course gives a favor or weightage to the students during the interview in securing jobs or research opportunities.
- Knowledge of chemDraw helps in drawing of chemical structure for better representation in publications and reports.
- ChemDraw helps to predict and confirm the stereochemistry, NMR spectra and various chemical properties of the molecules.
- Knowledge of Excel help to organize and analyse chemical data.
- Application of Excel tools help to solve quantitative problems in chemistry.
- The knowledge of excel facilitates the construction of professional graphs and models for chemical applications.

COURSE CONTENT

• Module 1: ChemDraw Applications in Chemistry

- Installation and applications
- Usage of ChemDraw tools
- Drawing of Chemical molecules
- Conversion of the structures into IUPAC name and vice versa.
- Determination of stereochemistry, molecular weight, chemical formulae, bond length and bond angles.
- Prediction of NMR spectra and chemical shift values.
- Conversion of the 2D structures to 3D.
- Save the molecules in different formats.
- Export and import chemical molecules.
- Summary of ChemDraw

• Module 2: Microsoft Excel Applications in Chemistry

- Introduction to Microsoft Excel in Chemistry
- Basic Excel Functions for Chemists
- Data Analysis Tools in Chemistry
- Data Visualization
- Advanced Excel Tools in Chemistry
- Case Studies and Applications
- Hands-on Practice and Exercises
- Final Summary, Q&A and Assessment

POINTS TO REMEMBER

- The participants must fill the registration form to enroll in the course.
- Limited seats are available on first-come first-served basis.
- Certificates will be issued to students who complete the course successfully based on their assessment and attendance.
- Eligibility criteria : Class 12th with Chemistry.
- Classes will be held in online mode.

LINK FOR REGISTRATION

NO REGISTRATION FEE

Click here for the Registration

<https://forms.gle/C8ixcW5C4mo1Eoke6>



Last date of Registration:
31st January 2025

Contact Details:

Dr. Reeta
Department of Chemistry
Shivaji College
University of Delhi

Email: dr.reeta@shivaji.du.ac.in
Mob. No. :9582856184