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CLUB ACTIVITY ORGANIZED BY DEPARTMENT OF CHEMISTRY 2024-2025

The Department of Chemistry has conducted a Chemistry club activity titled -Experimenting with Chemdraw.

Date and Time of the Event	25-04-2025, 09:30 AM to 11:00 AM
Venue	Room No: 315, MVJ College of
	Engineering, Bangalore
Title of the Event	Experimenting with Chem draw
Coordinators	Dr. Budigi Lokesh, AP and Dr. M. Swetha,
	AP
Organized by (Department name)	Chemistry Department

This program is intended for the first-year students of Chemistry cycle. ChemDraw is a powerful tool used by chemists and researchers to draw chemical structures, reaction mechanisms, and generate chemical properties. This session aimed to familiarize students with the software and allow hands-on experimentation to improve their understanding of molecular structures and chemical notation.

Introduction to ChemDraw:

Brief overview of the software's interface was provided to the participants, like explanation of basic tools: atom placement, bond types, templates, and text annotations.

Hands-On Session:

Drawing simple organic molecules such as methane, ethanol, benzene, and glucose.

Using templates to create ring structures like cyclohexane and aromatic compounds.

Modifying structures with stereochemistry tools (e.g., wedges and dashes).

1. Reaction Mechanism Practice:

Drawing complete reactions, including reactants, products, and reaction arrows.

Annotating reaction conditions (heat, catalysts, solvents).

2. Property Prediction and Nomenclature Tools:

Demonstration of name-to-structure and structure-to-name conversions.

Estimating molecular weight, empirical formula, and IUPAC names



Fig 1. Students participating in first round of the Chem draw activity



Fig 2. Students participating in second round of the chem draw activity

Outcome:

The students successfully created and labelled chemical structures and gained familiarity with key features of ChemDraw. Many expressed their interest in using the software for future science-fair projects and reports. The activity improved their conceptual understanding of molecular geometry and chemical representation.

Feedback:

The participants found the software intuitive and appreciated the visual approach to Chemistry. Suggestions included conducting a follow-up session on advanced features like spectral analysis and integration with chemical databases.

Conclusion:

The activity achieved its goal of introducing ChemDraw as a valuable tool in chemical education. Future sessions will explore more advanced features, including reaction mapping and spectroscopy tools.

The activity was conducted in 2 rounds. In the first round Dr. Lokesh asked students about the models made by students and the chemistry behind it. Dr Swetha announced the results. Mr. Sarathak Singh Bhadauriya (1MJCS205) Ms. Sanjana K.M(1MJ24AI009) secured 1st and 2nd place in the activity.