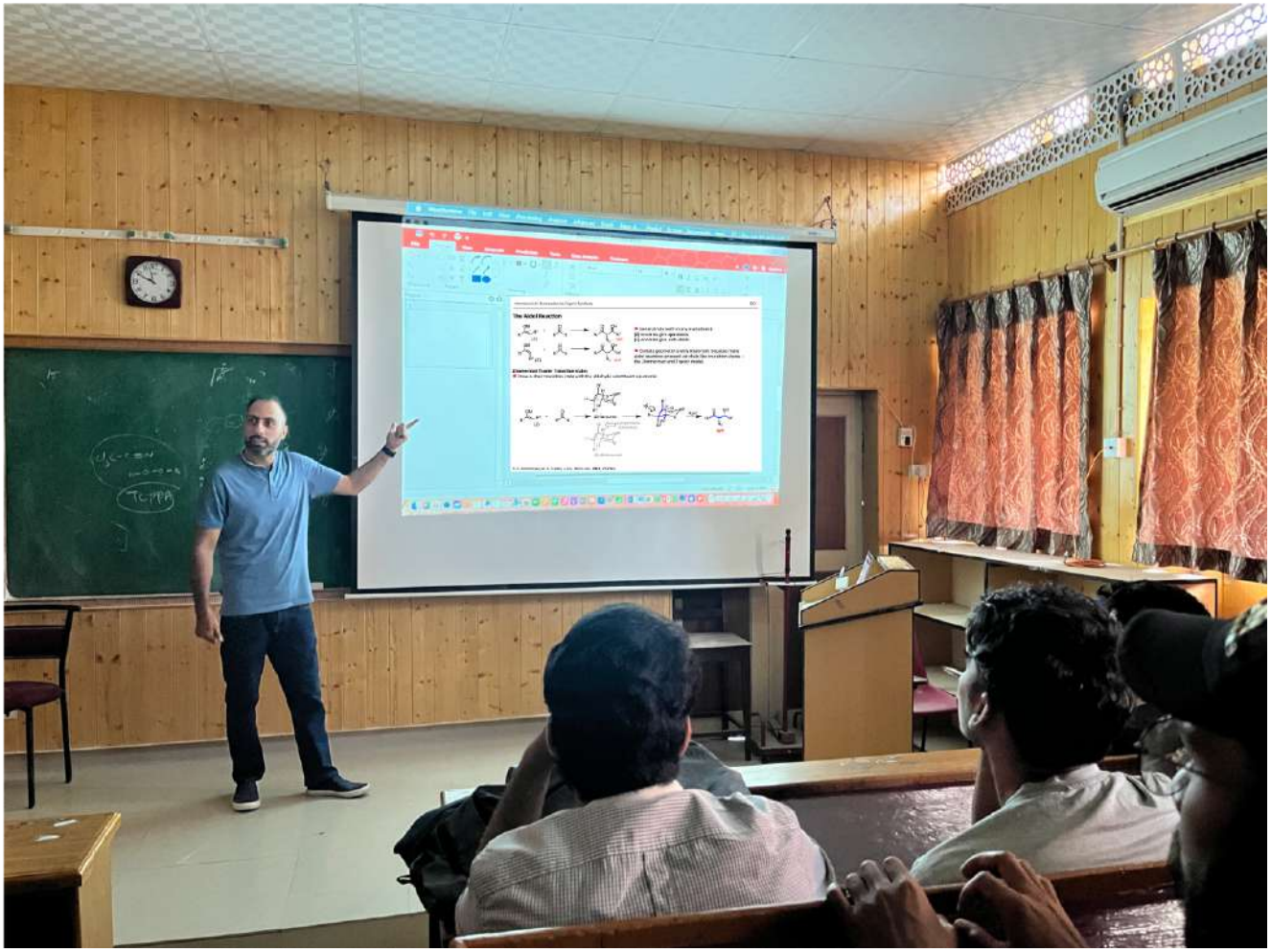
Teachers using ICT Facility

Today, it is essential for the students to learn and master the latest technologies and as a consequence, teachers are combining technology with traditional mode of instruction to engage students in long term learning. Department of Chemistry uses Information and Communication Technology (ICT) in education to support, enhance, and optimize the delivery of education. ICT tools empower both teachers and learners. They transform the teaching and learning processes from being highly teacher-dominated to becoming student-centric and this transformation results in increased learning gains for students, creating and allowing for opportunities for learners.

The following ICT tools are used by the Department-

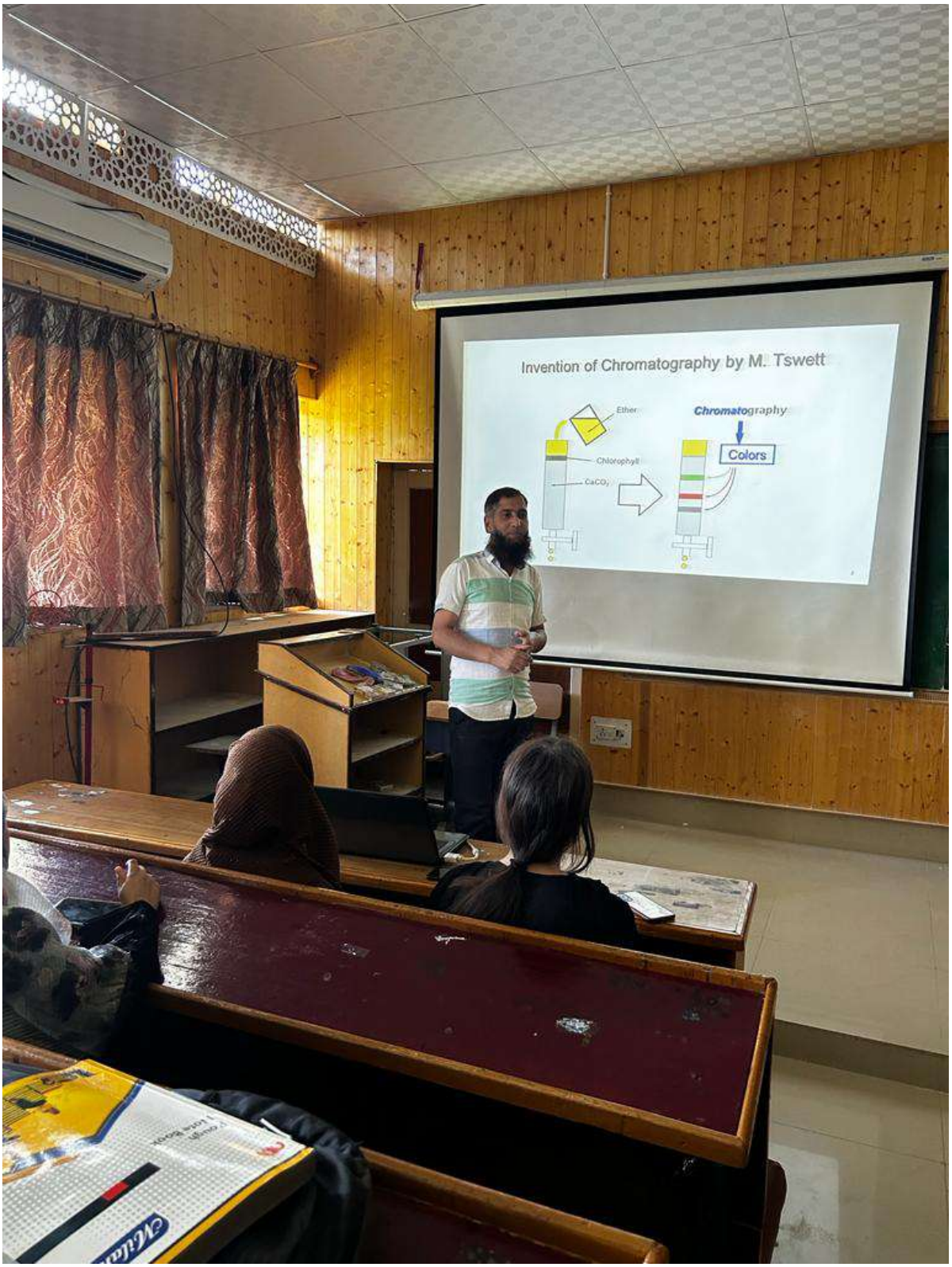
1. Projectors in different classrooms/labs
2. Desktop and Laptops- Computer Lab.
3. Printers.
4. Photocopier machines.
5. Scanners.
6. Seminar Room.
7. Online Classes through Zoom, Google Meet, Microsoft Team, Google Classroom.
8. MOOC Platform (NPTEL etc)
9. Digital Library resources

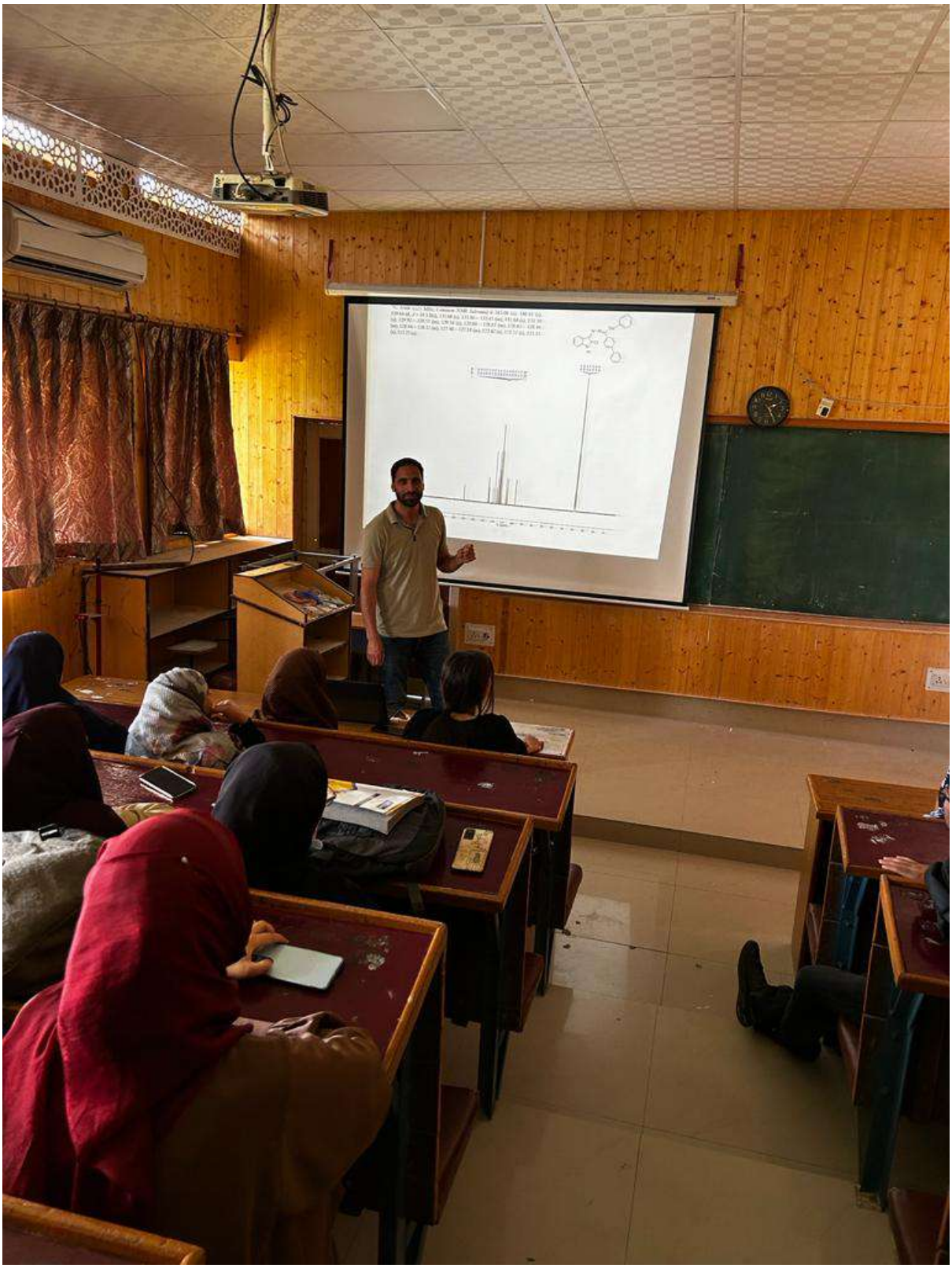
S.No	Name of Teachers	ICT facilities
1	Prof. Wajaht Amin Shah	Power point presentations, Video, Live Streaming, Chemistry/Data analysis Softwares including Teraplot, Chem Office, Ms Excel, Microcal Origin, Mercury, Zoom, Google Meet, Google Classroom.
2	Prof. Aijaz Ahmad Dar	
3	Prof. Mohsin Ahmad Bhat	
4	Dr. Masood Ahmad Rizvi	
5	Dr. Aijaz Ahmad Dar	
6	Dr. Malik Abdul Waseem	
7	Dr. Nayeem Ahmed	
8	Dr. Imtiyaz Ahmad Bhat	
9	Dr. Irfan Hussain Lone	
10	Dr. Abdul Basit Wani	
11	Dr. Manzoor Ahmad Malik	
12	Dr. Muzaffar Ahmad Mir	
13	Dr. Imtiyaz Ahmad Najar	
14	Dr. Umer Rafiq	


The Aldol Reaction

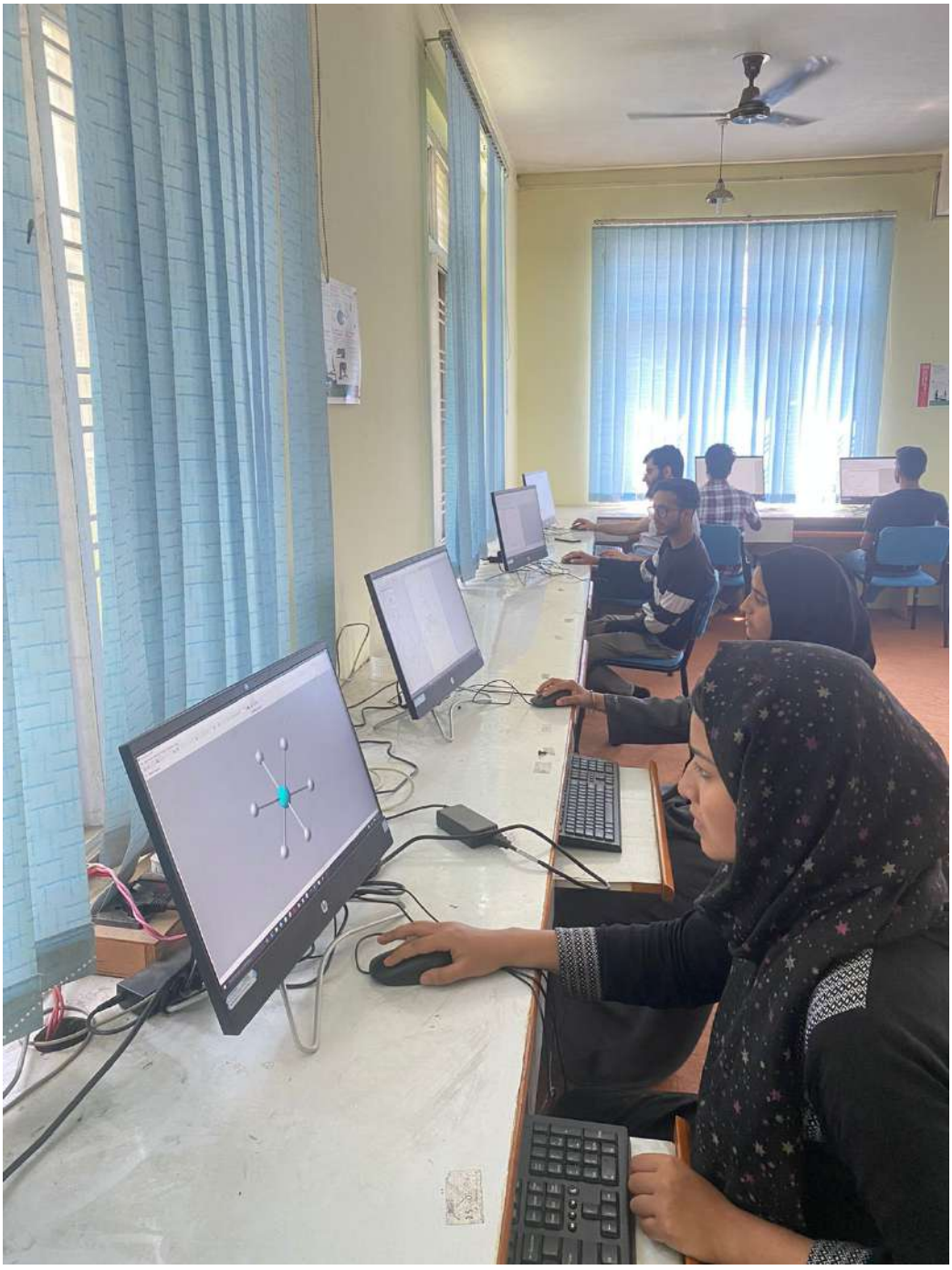
Solvent Delivery Pump
Performance Requirements:
Capacity to withstand high back pressures.
Pulsations that accompany pressure fluctuations are small.
Flow rate does not fluctuate.
Solvent replacement is easy.
The flow rate setting range is wide and the flow rate is accurate.

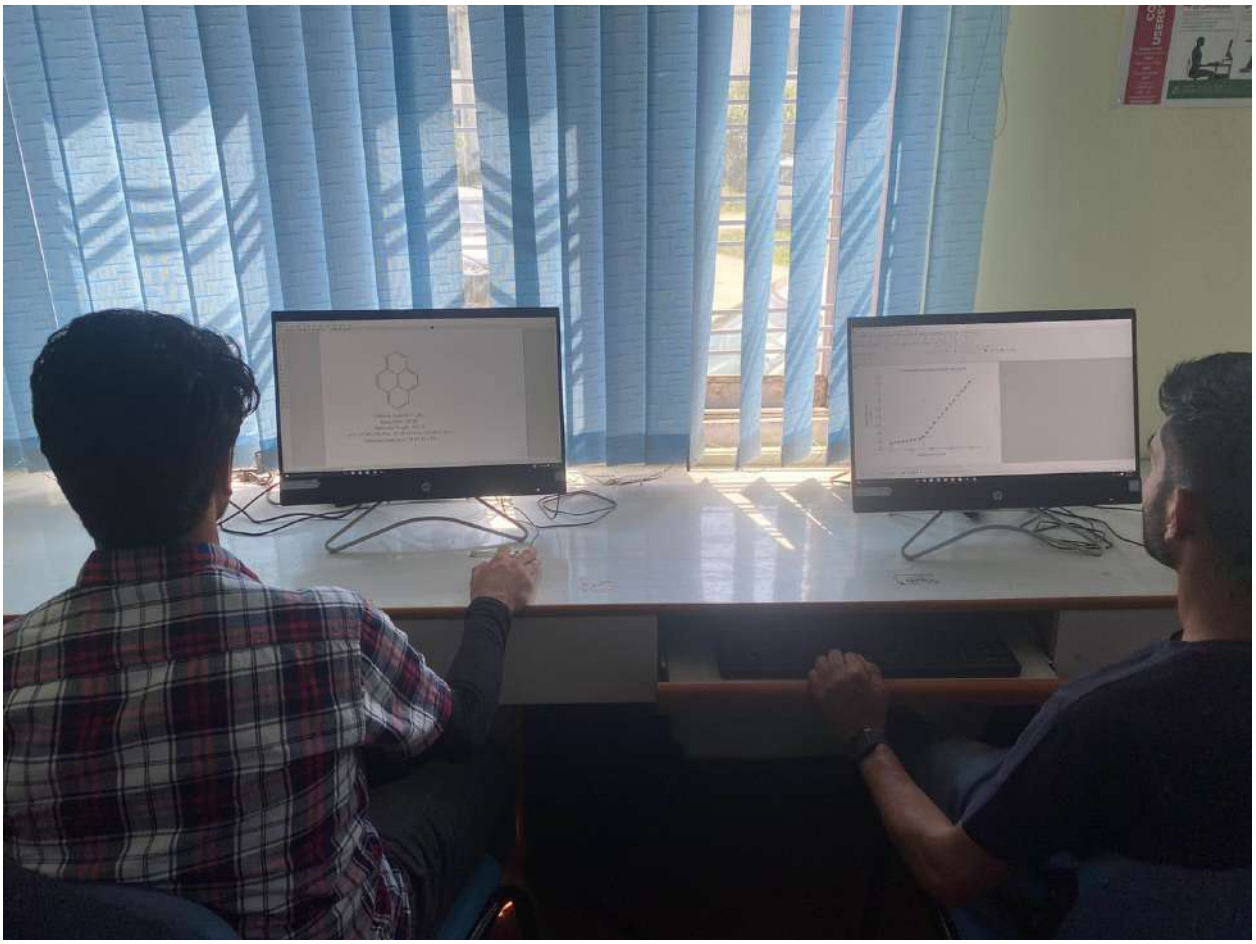
Interaction Between Solutes, Stationary Phase, and Mobile Phase
Solute
Stationary phase
Mobile phase

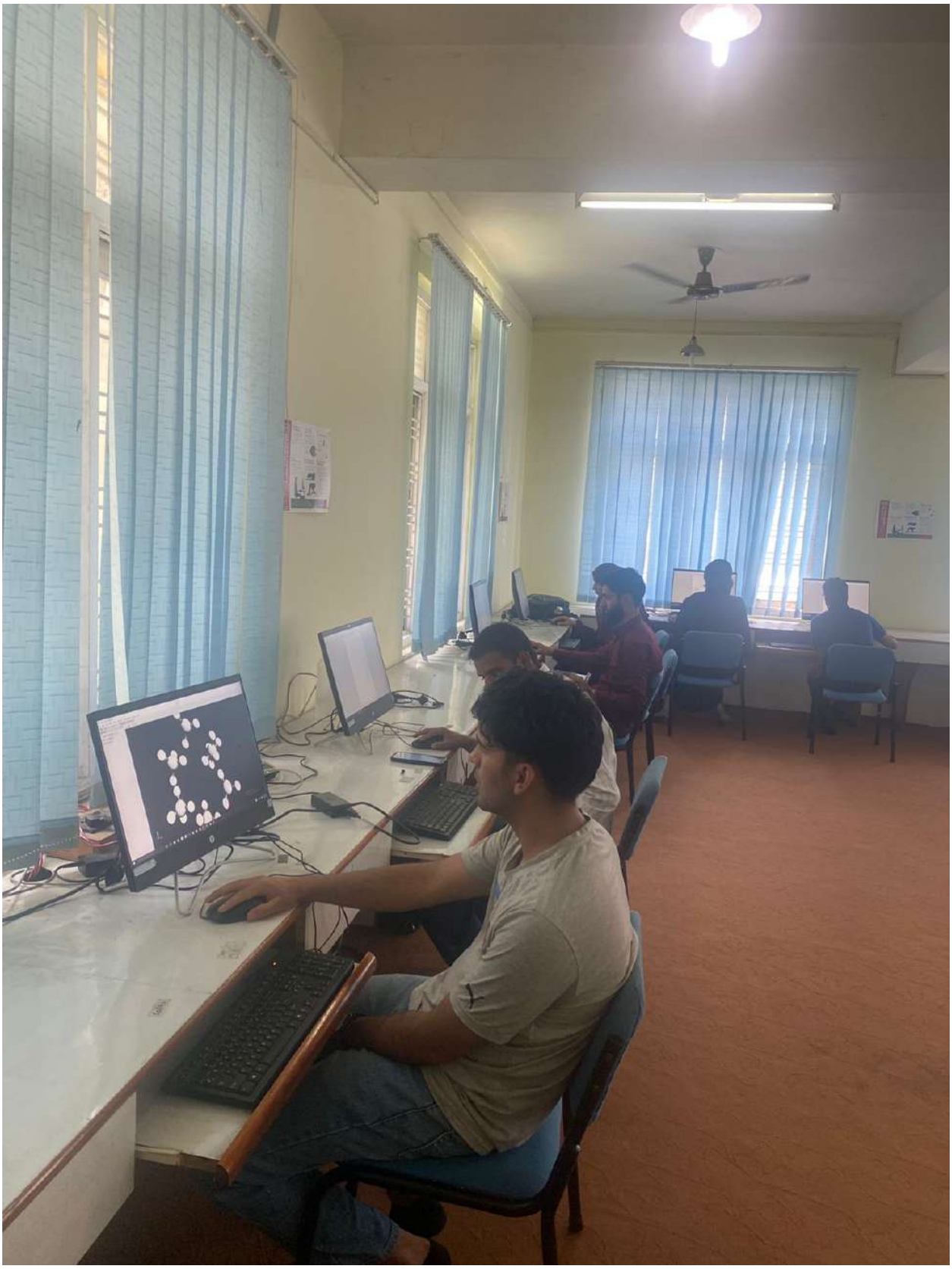

Invention of Chromatography by M. Tswett
Ether
Chromatography
Chlorophyll
$CaCO_3$
Colors

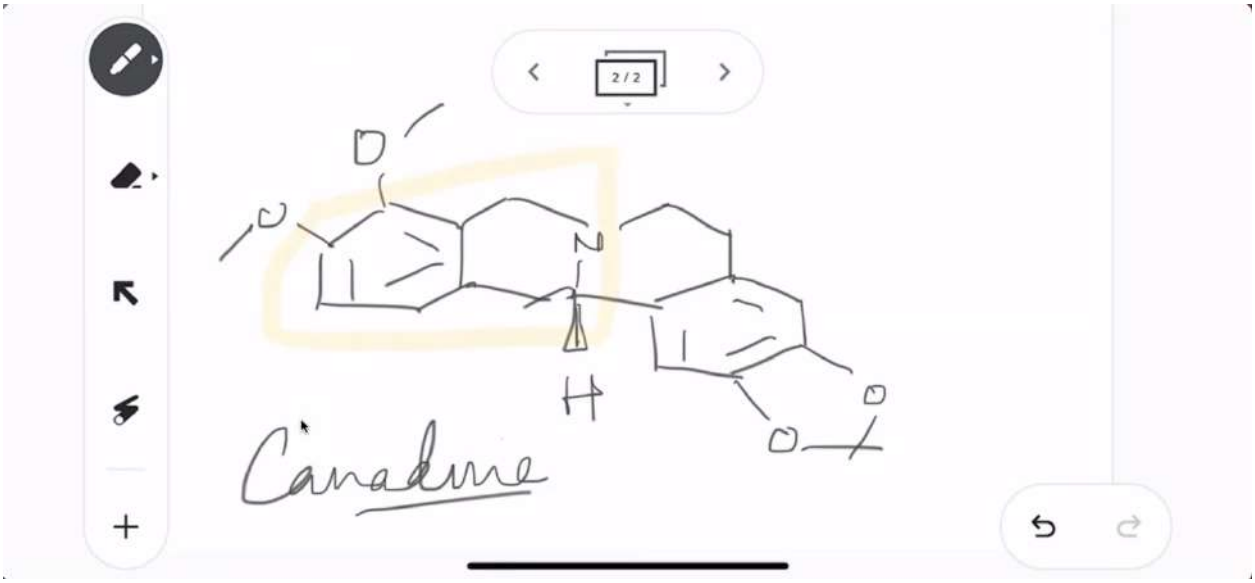


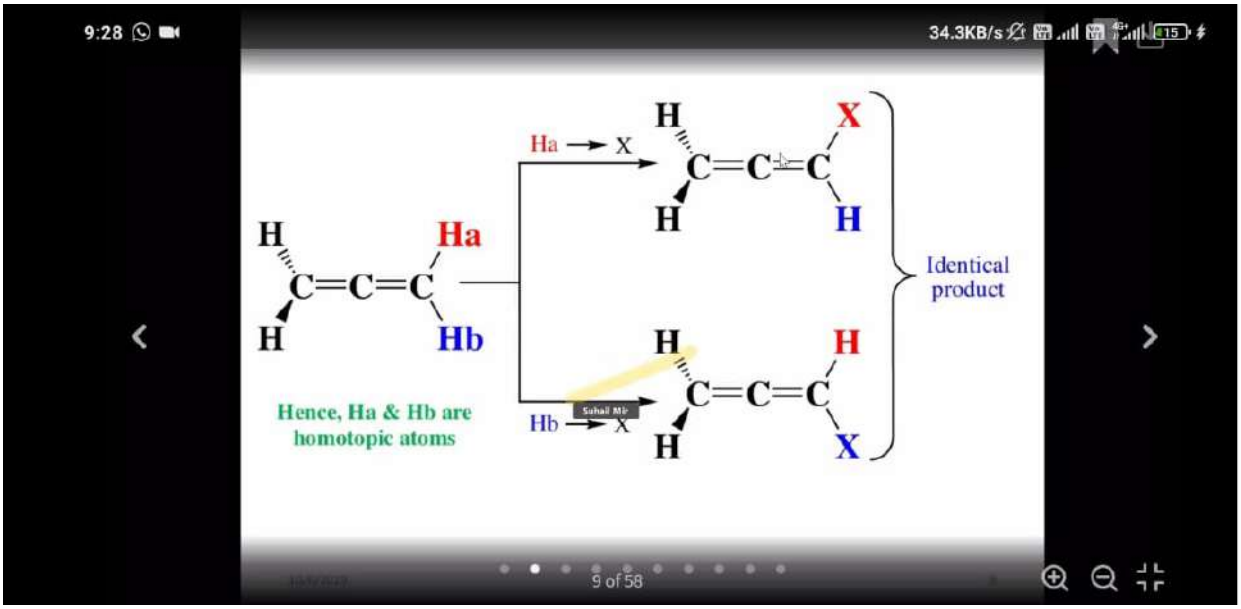
Theoretical Plate Number, N







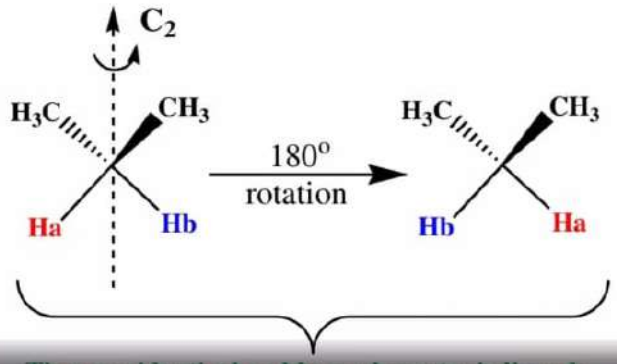

2 / 2
Canadine


9:28
34.3KB/s
Ha → X
Hb → X
Identical product
Hence, Ha & Hb are homotopic atoms
Suhail Mir
9 of 58

2. Symmetry criteria

2. (a) Homo topic ligands

Two homomorphic ligands are homotopic if they can interchange position by rotation around C_n axis.

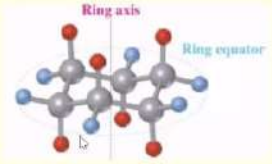


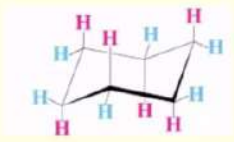
They are identical and hence homotopic ligands

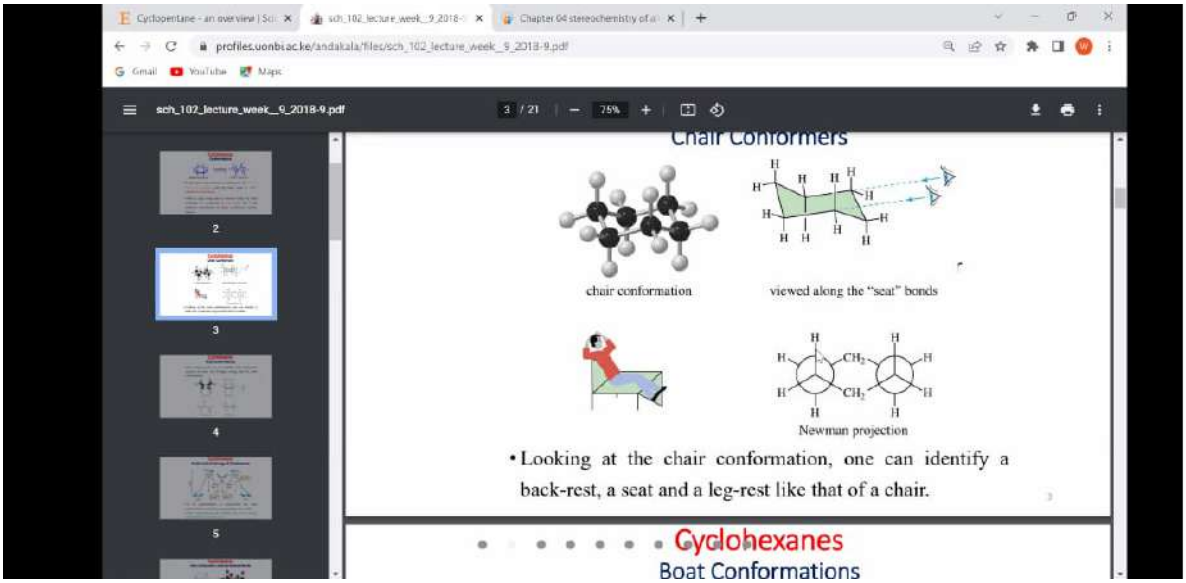
Syed Wajaht Shah's screen

4.9 Axial and Equatorial Bonds in Cyclohexane

- The chair conformation has two kinds of positions for substituents on the ring: *axial* positions and *equatorial* positions
- Chair cyclohexane has six **axial** hydrogens perpendicular to the ring (parallel to the ring axis) and six **equatorial** hydrogens near the plane of the ring



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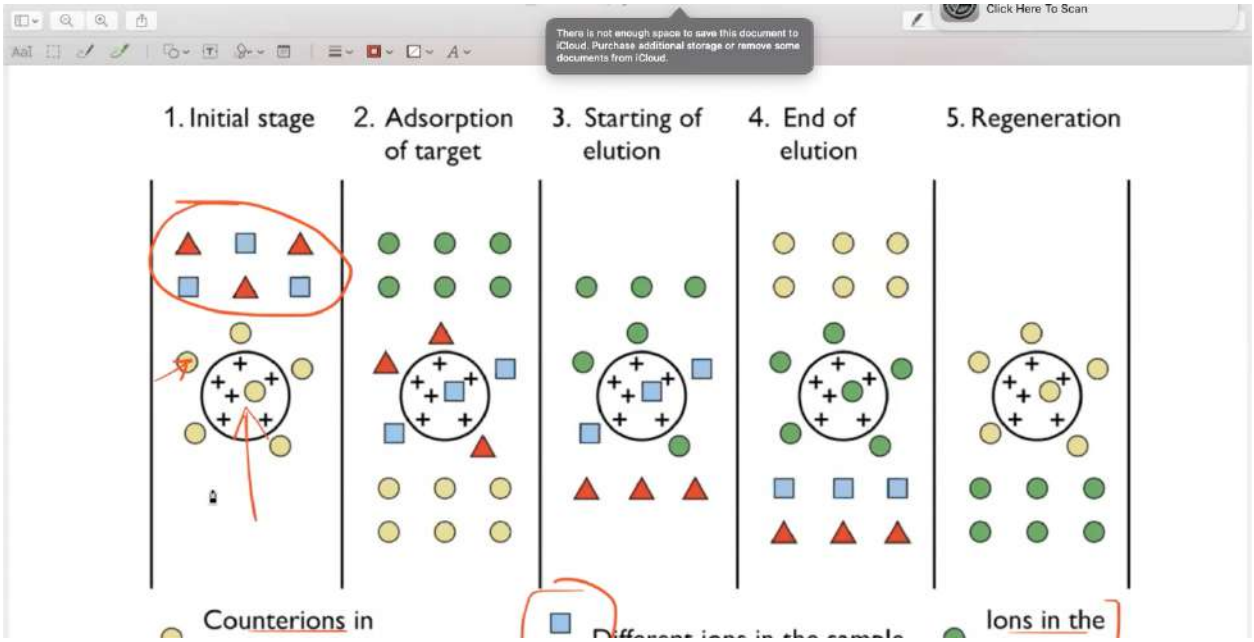
3 / 21
75%
Chair Conformers
chair conformation
viewed along the "seat" bonds
Newman projection
• Looking at the chair conformation, one can identify a back-rest, a seat and a leg-rest like that of a chair.
Cyclohexanes
Boat Conformations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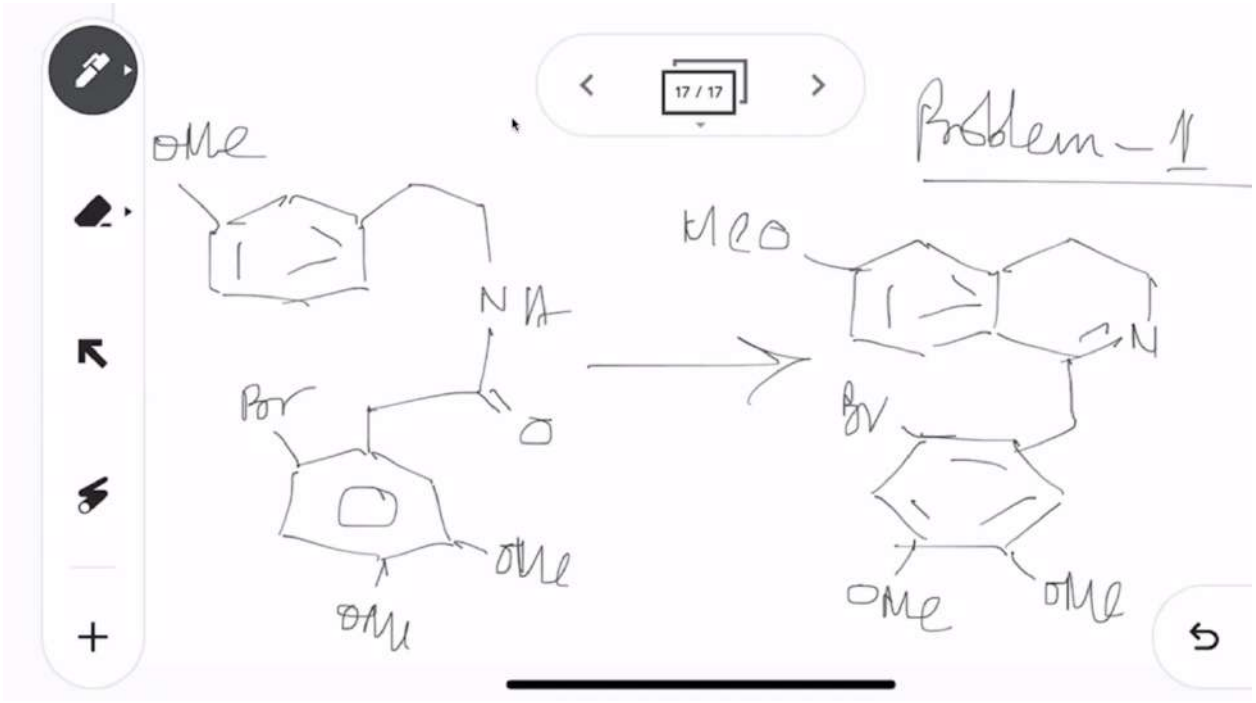
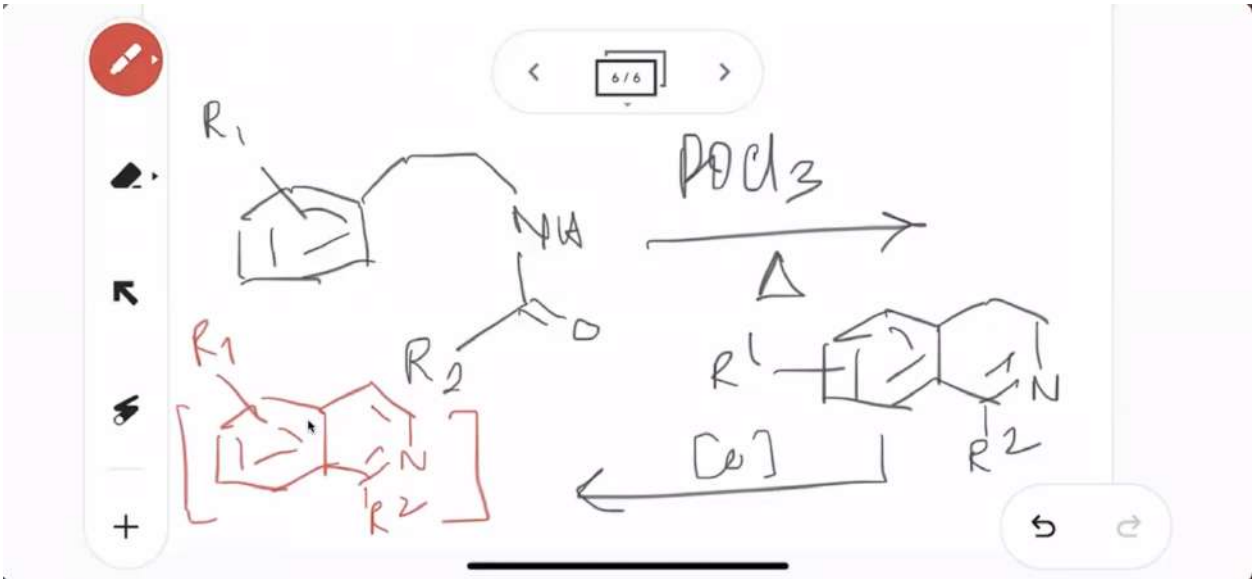
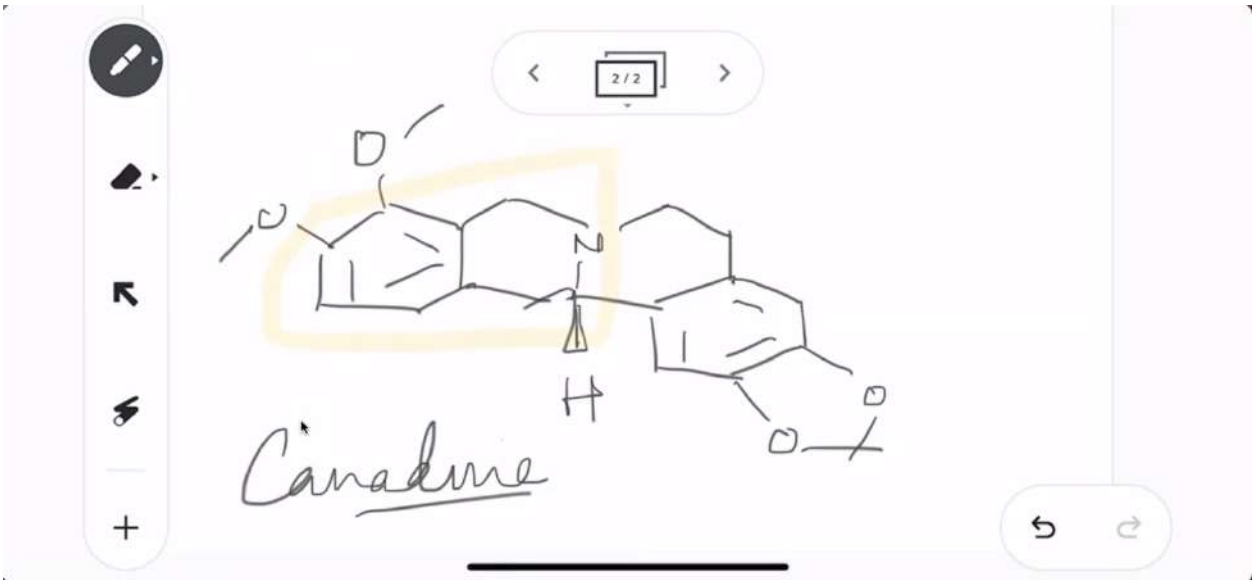
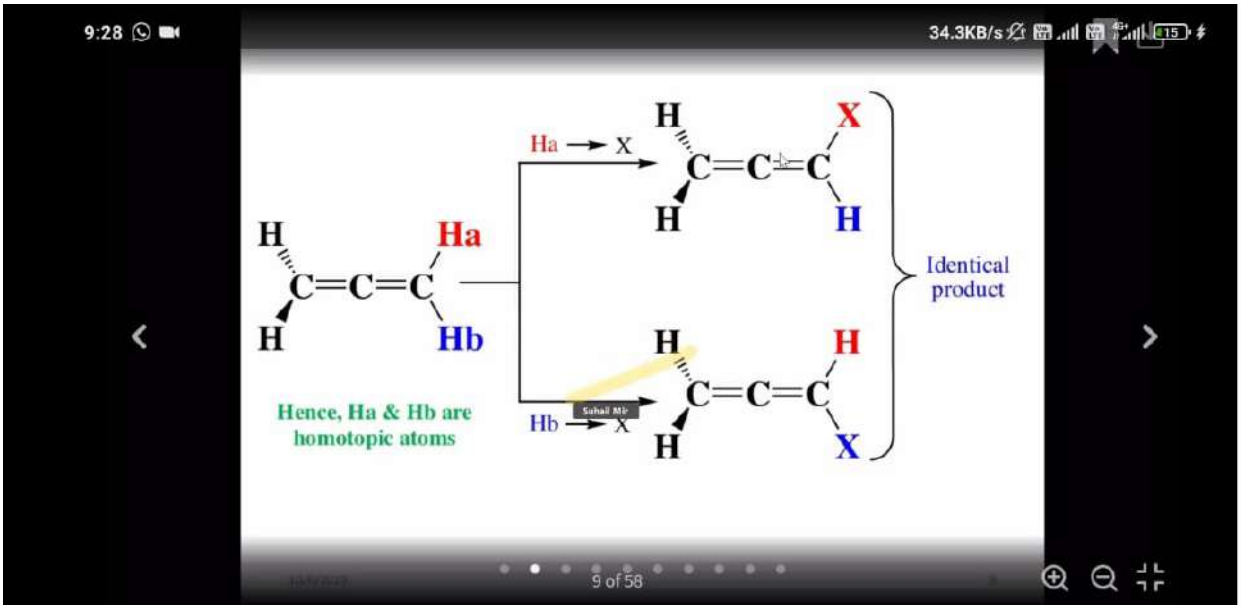
1. Initial stage
2. Adsorption of target
3. Starting of elution
4. End of elution
5. Regeneration
Counterions in
Ions in the


17 / 17
Problem – 1
OMe
NH
O
MeO
N
OMe
OMe
OMe


6 / 6
R1
NH
O
R2
POCl3
Δ
R1
N
R2
[O]

ICT (Online Classes)





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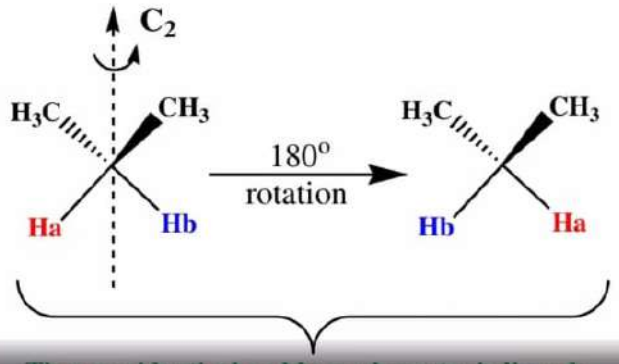

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16 of 58

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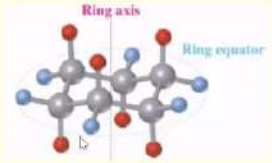

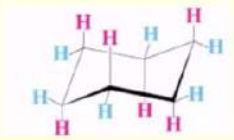

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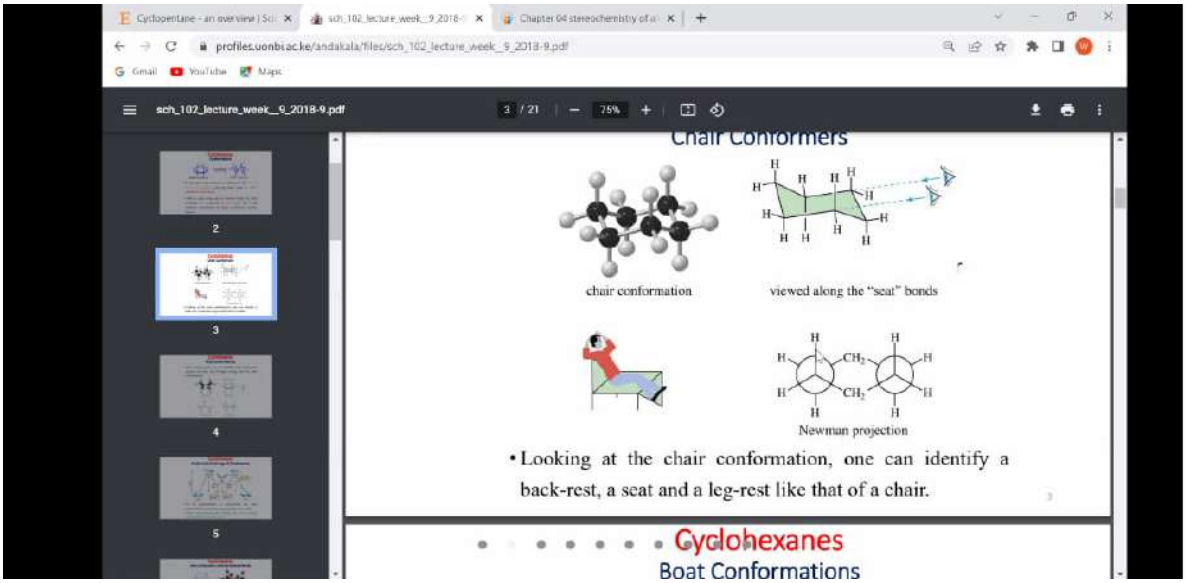
Chair Conformers
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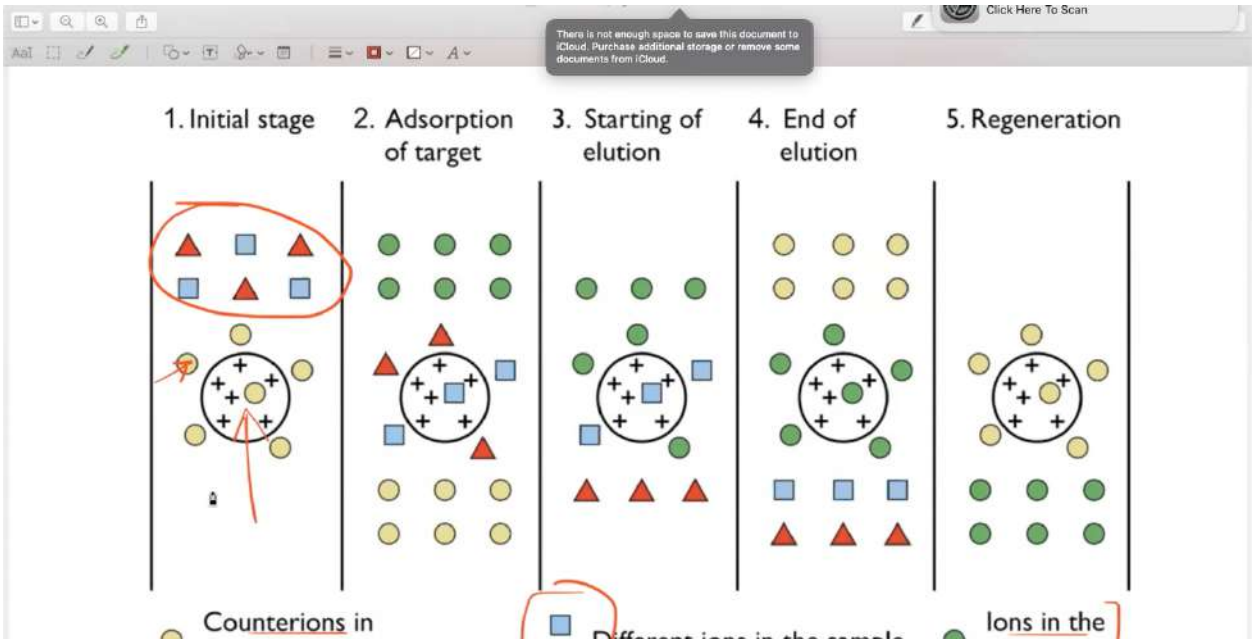
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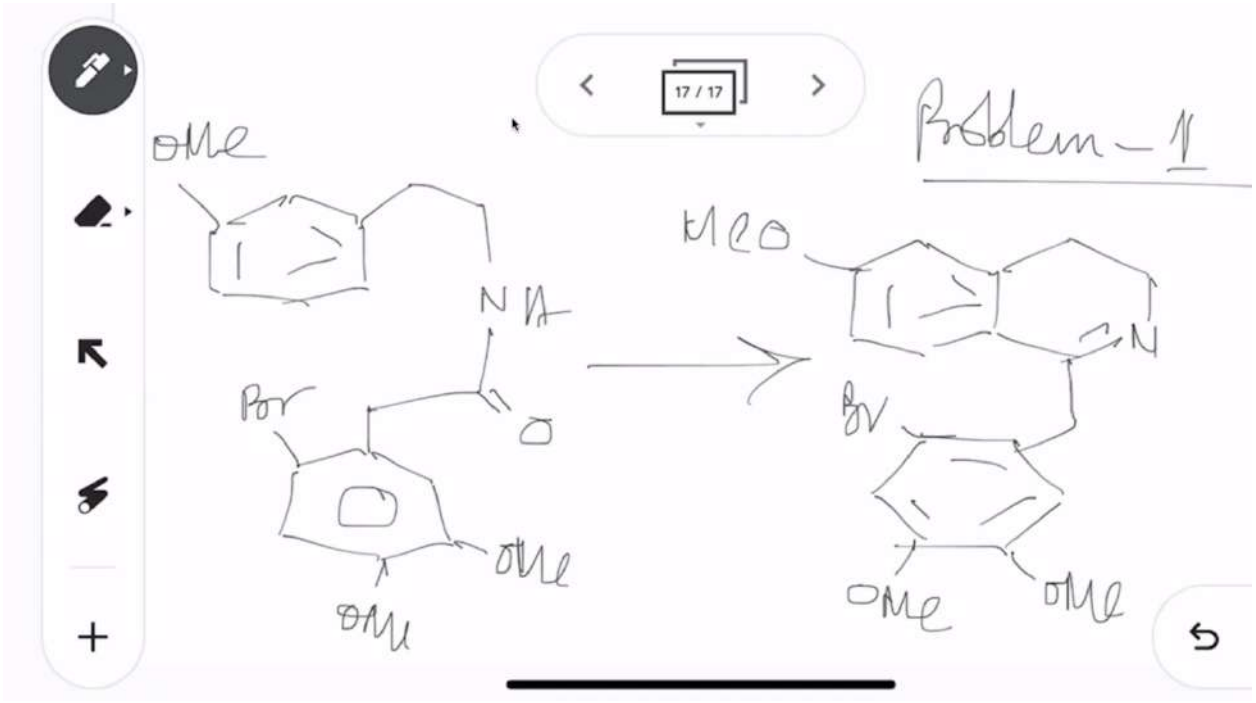
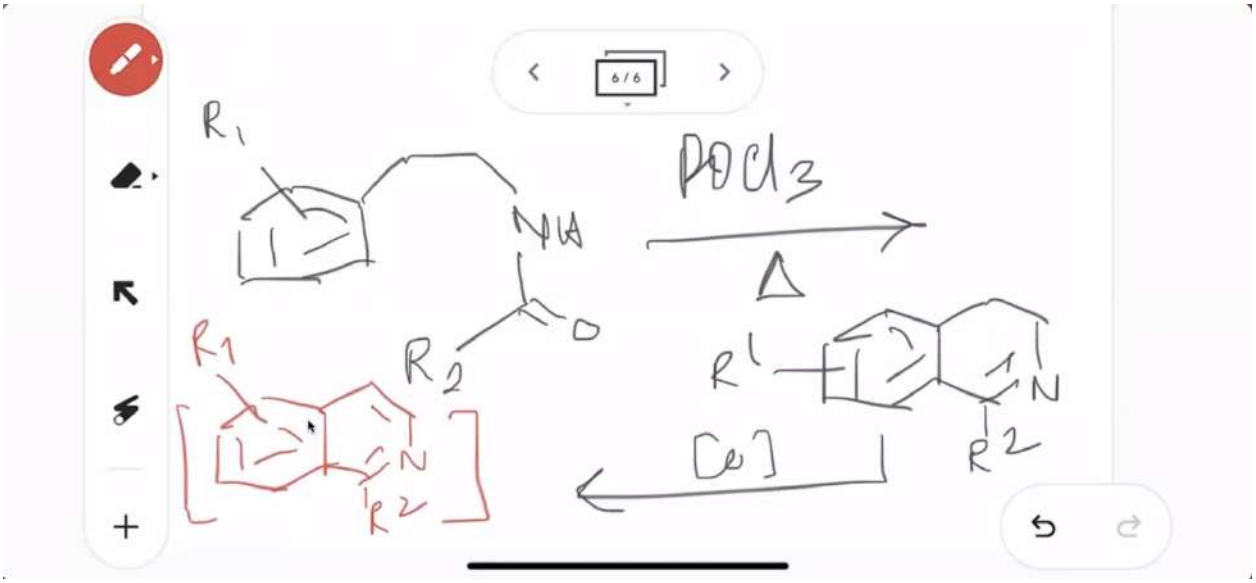
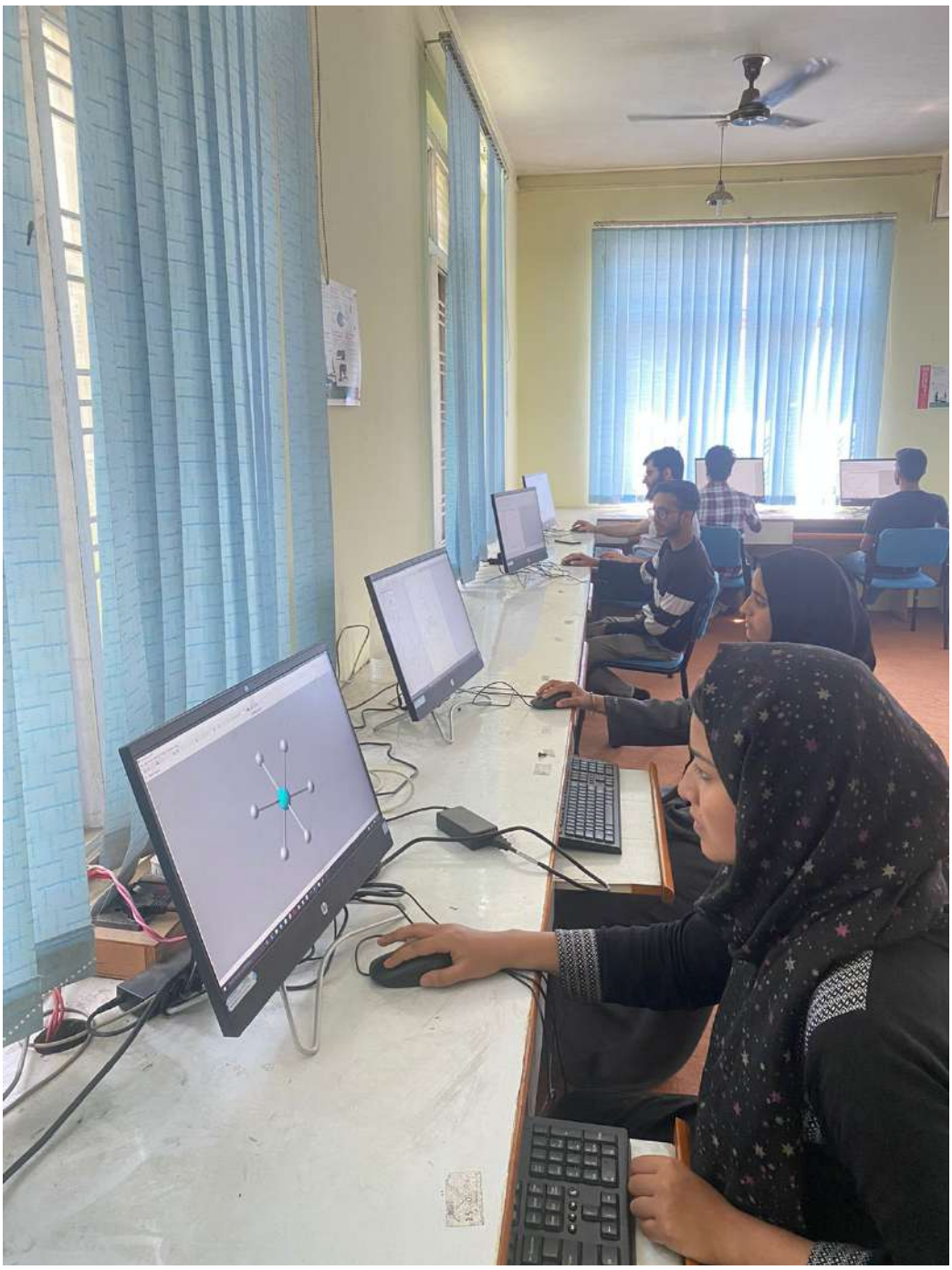
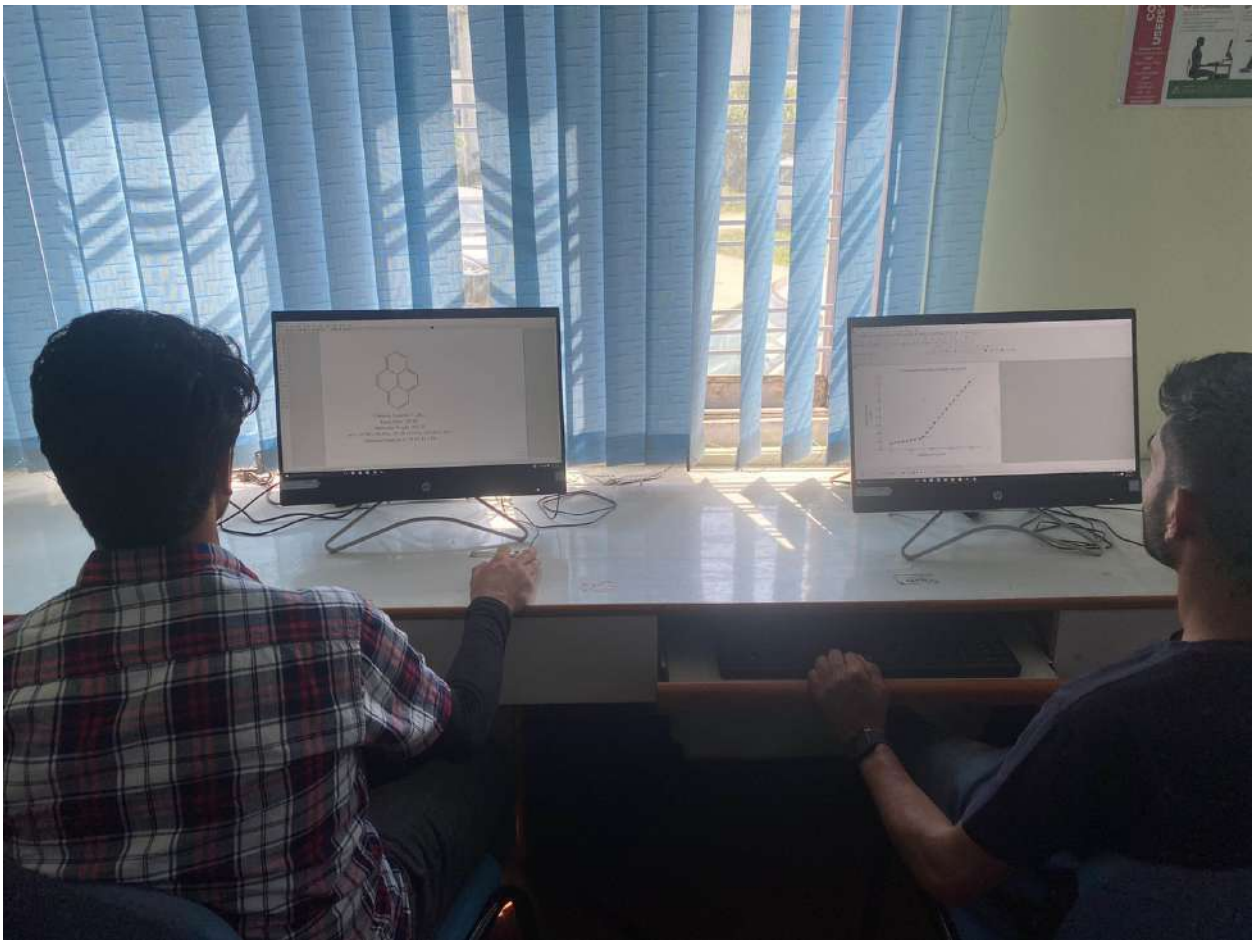
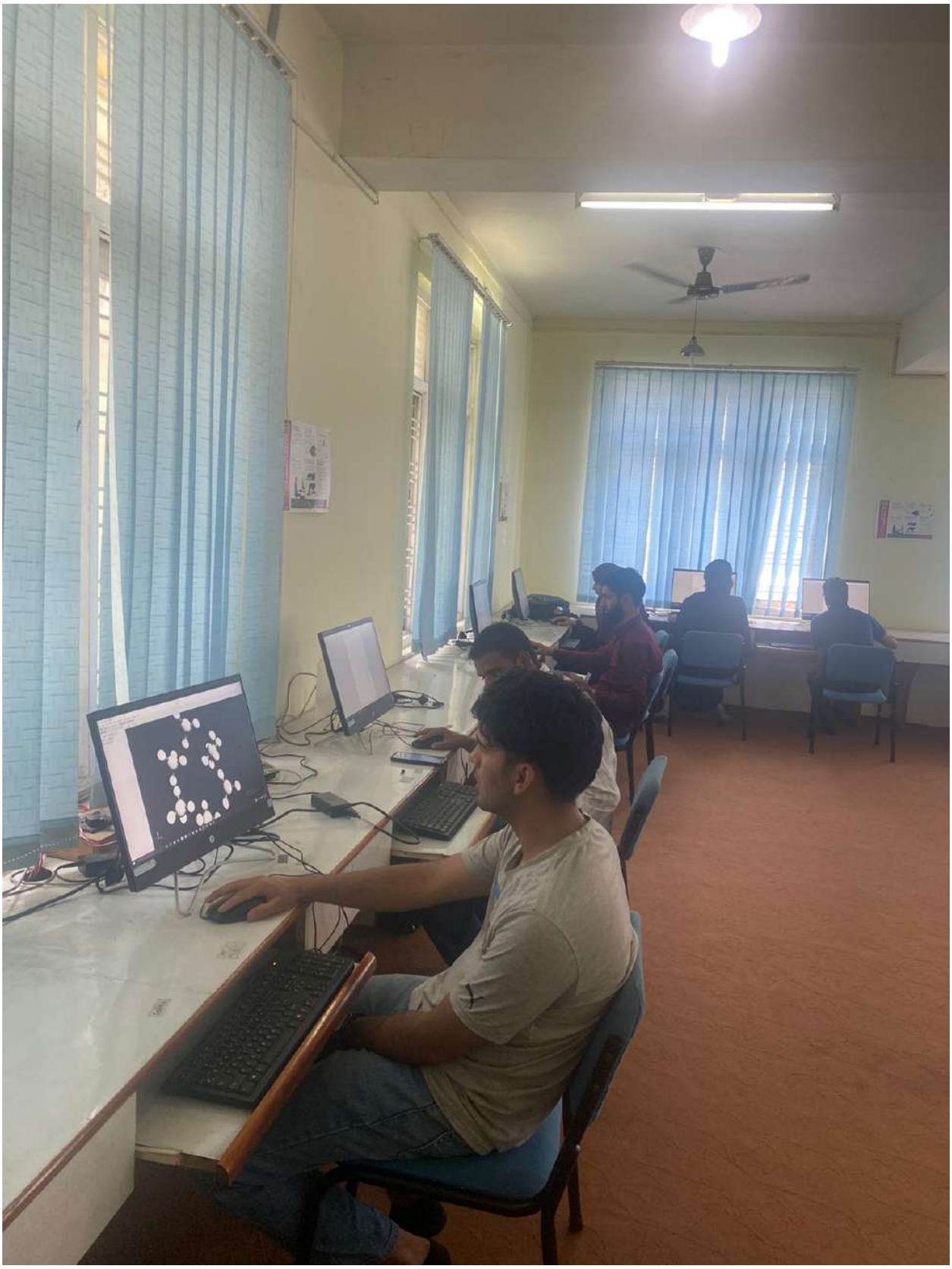

17 / 17
Problem – 1
OMe
NH
Br
O
OMe
OMe
MeO
N
Br
OMe
OMe


6 / 6
R1
NH
O
R2
POCl3
Δ
R1
N
R2
[O]
R1
N
R2

Computing skills enhancement programs
Hands-on Software (Origin, ChemDraw, MNova, Mercury etc)