SuryaSenMahavidyalaya

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A Multi Stream Govt. Aided College & Recognised by UGC u/s 2(f) &1 2(b) (Affiliated to University of North Bengal)

Department of Chemistry



Date: 04.10.2024

There will be seminar presentations by 3rd sem major and 5th sem honours students from 10.11.2024 to 12.11.2024. All 1st sem major, 3rd sem major and 5th sem honours students have to present throughout for all three days. The PPTs are to be sent on or before 05.11.2024 to the following email id: chemistry@suryasencollege.org.in

The schedule will be published later on.

Distribution of seminar topics

Semester	Paper	Topics	Students' Name
		Role of projection Formulae in stereochemistry	Sanjana Chhetri, Dipa Roy, Prasant Sherpa
		Racemization and Resolution	Kamalika Saha, Krity Tamang, Susweta Roy
		Atropisomerism	Barnali Roy, Shreganka Karmakar, mAman Chhetri
		Conformational Analysis of Cyclohexane	Keshav Sharma, Sujal Dey, Anjali Gupta
	Major	Dynamic Stereochemistry of Addition reactions	Sangyukta Rai, Ashis Kumar Singh
III	- 3	Alkyl halides: Naming and structure of alkylhalides, methods of preparation.	Yangjum Sherpa, Abhijeet
		SN1, SN2, and <i>SNi</i> reaction mechanisms with stereochemical aspects.	Mangala Saha, Nandita Sha
		Aryl halides: Preparation, nucleophilic aromatic substitution.	Manisha Prasad, Arpita Bhattacharjee
		Relative reactivity of alkyl and aryl halides towards nucleophilic substitution reactions.	Pratik Bhahman, Subho Mahato
III	Major-	Electrochemical series and its application	Manisha Prasad, Barnali Roy, Mangala Saha, Nandita Sha, Arpita Bhattacharjee
	4	Balancing of redox reactions by ion- electron method	Yangjum Sherpa, Pratik Brahman, Aman Chhetri, Sujal Dey, Anjali Gupta



		Purification methods of metal ions	Krity Tamang, Dipa Roy, Subho Mahato, Prashant Sherpa
		Hydrogen Bonding and its influence on molecular properties	Sanjana Chhetri, Keshav Sharma, Ashis Kumar Singh, Abhijeet Prasad
	-	Different types of Non covalent interactions	Kamalika Saha, Sangyukta Rai, Susweta Roy, Shreyanka Karmakar
		Postulates of kinetic theory gas.	Sanjana Chhetri, Ashish Kumar Singh
		Derivation of pressure form the kinetic theory.	Manisha Prasad, Nandita Sha
		Verification of gas laws on the ground of kinetic theory.	Yangjum Sherpa, Sujal Dey
		Maxwell's distribution of molecular velocities: Expression, Graphical presentation, significant features.	Pratik Brahman
		Maxwell's distribution of molecular Kinetic energy: Expression, Graphical presentation, significant features.	Kamalika Saha, Arpita Bhattacharya
III	Major- 5	Maxwell's distribution of molecular velocities: expression for most probable velocity, average velocity, root mean square velocity & their ratio.	Dipa Roy, Shrayanka Karmakar
		Degrees of freedom & equipartition of energy.	Anjali Gupta , Shubho Mahato
		Collision parameters: Collision diameter, collision cross section, collision frequency, mean free path.	Barnali Roy, Susweta Roy
		Maxwell's distribution of molecular velocities: Derivation.	Sangyukta Rai, Aman Chhetri
		law of rational indices, Miller indices,	Mangala Saha, Prashant Sharpa
		symmetry elements and symmetry operations, qualitative idea of point.	Krity Tamang, Abhijeet Prasad
		X-ray diffraction, Bragg's law.	Keshav Sharma
		Electrocyclic Reactions and the Woodward-Hoffmann Rules	Priti Barman
		Nucleic Acids	Ashutosh Mishra
V	CC-11	Peptides	Shreya Thapa
•		Proteins	Soubhik Dhar
		Zwitterions, pKa values, isoelectric point	Shivam Sharma



		Mechanism of enzyme action (taking trypsin as example)	Manu Kumar Roy
		enzyme inhibitors and their importance.	Adarsh Baraily
		Postulates of quantum mechanics.	Ashutosh Mishra
V		Operators in quantum mechanics.	Soubhik Dhar
		Particle in 1D box: Wave function, Hamiltonian operator, Energy.	Shreya Thapa
	CC-12	Degeneracy in states for the particles in 1D, 2D square box & 3D cubical box.	Adarsh Baraily
	CC-12	Graphical presentation of wave function for a particle in 1D symmetrical box.	Shivam Sharma
		Solutions of spherical harmonics.	Priti Barman
		Determination of volume element in terms of polar coordinates.	Manu Kumar Roy

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