

SIR C R REDDY COLLEGE

*Affiliated to Adikavi Nannaya University,
Rajamahendravaram*



2020-21(ODD)

23-07-2020

MINUTES OF BOARD OF STUDIES MEETING

**DEPARTMENT OF CHEMISTRY
SIR C R REDDY COLLEGE ELURU -AP-
534007**

Course outcomes :

At the end of the Course, the student will be able to ;

CO-1 : Understand the basic concepts of p-block, d-block and f-block elements.

CO-2 : Explain the difference between solid, liquid and gaseous in terms of intermolecular interactions.

CO-3 : Apply the concepts of gas equation, P^H and electrolytes while studying other chemistry courses

CO-4: Understanding about vander waal's equation, Andrew's isotherm of CO₂ gas.

CO-5: Understanding about ideal solutions, colligative properties.

Programme specific outcomes :**PSO-1 : Chemistry of p – block elements**

To gain knowledge about the diborane , borazine, silicones, phosphonitrilic halides, oxides and oxyacids of sulphur , pseudo halogens and interhalogen compounds.

PSO-2 : Chemistry of p – block elements and f-block elements

To gain knowledge about the characteristic properties of d-block elements. And to gain knowledge about Lanthanides and Actinides.

PSO-3 : Solid State Chemistry

To gain Knowledge about the Symmetry in Crystals and Crystal defects.

PSO-4 : Gaseous state and Liquid state

To gain Knowledge about Vander Waal's equation of state, Andrews isotherms of Carbon dioxide, Critical Phenomena, Law of Corresponding states , Joule-Thomson effect and Classification of crystals with applications.

PSO-5 : Solutions, Ionic equilibrium and Dilute solutions :

To gain knowledge about Ideal solutions , Non ideal solutions, CST, Nernst distribution law, Ionic product and common ion effect. And also gain knowledge about colligative properties and abnormal colligative properties.

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CO-2 : Explain the difference between solid, liquid and gaseous

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CO-3 : Apply the concepts of gas equation, P^H and electrolytes while studying other chemistry courses

CO-4: Understanding about vander waal's equation, Andrew's isotherm of CO_2 gas.

CO-5: Understanding about ideal solutions, colligative properties.

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Course outcomes :

At the end of the Course, the student will be able to ;

CO-1 : Understand the basic concepts of d-block and f-block elements.

CO-2 : Understand the Theories of bonding in metals and Structures of Metal Carbonyls.

CO-3 : Understand preparation, properties and reactions of halo alkanes, halo arenes and oxygen containing functional groups.

CO-4 : Use the Synthetic chemistry learnt in this course to do functional transformations.

CO-5 : To propose possible mechanism for any relevant reactions.

Programme specific outcomes :**PSO-1: Chemistry of d-block elements**

To gain knowledge about characteristic properties of d-block elements.

PSO-2: Chemistry of f-block elements

To gain knowledge about Lanthanides and Actinides.

PSO-3: Theories of bonding in metals

To gain knowledge about Theories of Metals like Free Electron theory, VBT,MO.

PSO-4: Metal Carbonyls

To gain knowledge about Preparation and structures of some metal carbonyls.

PSO-5: Halogen Compounds

To gain knowledge about SN_1 and SN_2 reactions.

PSO-6: Hydroxy Compounds

To gain knowledge about preparation and properties of alcohols and phenols.

PSO-7: Carbonyl Compounds

To gain knowledge about preparation and properties of aldehydes and ketones.

PSO-8: Carboxylic acids and its derivatives

To gain knowledge about acid derivatives

PSO-9: Active Methylene Compounds

To gain knowledge about synthesis and reactivity of acetoacetic ester and malonic ester.

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Course outcomes :

At the end of the Course, the student will be able to ;

CO-1 : Understand the basic concepts Coordination Compounds, Spectral and Magnetic properties and Stability of Complexes.

CO-2 : Understand the preparation and properties of Amino acids and basic knowledge on Proteins.

CO-3 : Understand preparation, Structure and Conversions of Glucose and Fructose.

CO-4 : Understand the Laws and properties of Thermodynamics.

Programme specific outcomes :

PSO -1: Co-ordination Chemistry

To gain knowledge about theories of complex compounds.

PSO -2: Spectral and Magnetic properties of Metal Complexes

To gain knowledge about magnetic behaviour of complexes.

PSO-3: Stability of Metal Complexes

To gain knowledge about stability of complexes.

PSO-4: Carbohydrates To gain knowledge about preparation, structure, conversions of Glucose and Fructose.

PSO-5: Amino acids and Proteins

To gain knowledge about preparation and properties of Amino acids.

PSO-6: Thermodynamics

To gain knowledge about Thermodynamic properties

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Course outcomes :

At the end of the Course, the student will be able to ;

CO-1 : Understand the preparation and properties of Nitro Hydro Carbons and Amines.

CO-2 : Understand the preparation , properties and reactivity of Hetero Cyclic Compounds.

CO-3 : Understand the Laws of Absorption of Light energy by molecules and the subsequent photo chemical reactions. And also understand the concept of Quantum efficiency and mechanism of Photo chemical reactions.

CO-4 : Understand the Rate of reactions .

CO-5 : Understand the Biological significance of some elements.

Programme specific outcomes :

PSO -1: Nitro Hydro Carbons

To gain knowledge about preparation and properties of Nitro compounds.

PSO -2: Nitrogen Compounds

To gain knowledge about preparation and properties of amines.

PSO-3: Heterocyclic Compounds

To gain knowledge about preparation and properties of Heterocyclic Compounds.

PSO-4: Reactivity of Metal Complexes

To gain knowledge about SN_1 and SN_2 reactions of metal complexes.

PSO-5: Bio-inorganic Chemistry

To gain knowledge about biological significance of some elements.

PSO-6: Chemical Kinetics

To gain knowledge about rate of the reaction, zero, first, second order reactions.

PSO-6: Photochemistry

To gain knowledge about the photochemical laws.

