

# **SIR C R REDDY COLLEGE**

*Affiliated to Adikavi Nannaya University, Rajamahendravaram*



**2019-20 (ODD)**

**16-02-2019**

**MINUTES OF BOARD OF STUDIES MEETING**

**DEPARTMENT OF CHEMISTRY**

**SIR C R REDDY COLLEGE ELURU -AP-**

**534007**

CO1:To gain knowledge about preparation, structure and applications of compounds formed by the P block elements.

CO2:To gain knowledge about preparation and reactivity of Grignard reagent and it's activities in reactions

CO3:To gain knowledge about basic organic chemistry definitions and types of reactions

CO4:To understand about classification and preparation of acyclic and alicyclic hydrocarbons

CO5:To gain knowledge about preparation , structure, reactivity of benzene and Aromaticity of benzene.

### **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 :OrganometallicChemistry**

To gain knowledge about preparation and reactivity of Grignard reagent and it's activities in reactions

#### **PSO-3 :Structural theory in Organic Chemistry**

To gain knowledge about basic organic chemistry definitions and types of reactions

#### **PSO-4 Acyclic Hydrocarbons & Alicyclic hydrocarbons(CycloAlkanes**

To gain knowledge about basic organic chemistry definitions and types of reactions

**PSO-5 :Benzene and its reactivity::** To gain knowledge To gain knowledge about preparation , structure, reactivity of benzene and Aromaticity of benzene.

**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.

**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.

