

1.	Title of the Course	Inorganic Chemistry Laboratory
2.	Course Number	CY5292
3.	Status of the Course	Core
4.	Structure of Credits	0-0-6-4
5.	Offered To	PG
6.	New Course/Modification to	New
7.	To be Offered by	Department of Chemistry
8.	To take effect from	July 2020
9.	Prerequisite	Nil
10.	Whether approved by the Department	Yes
11.	<b>Course Objective:</b> To provide a hands on experience on several synthetic and structure identification techniques and to provide an exposure to different spectroscopic and electrochemical equipment used in inorganic chemistry.	
12.	<b>Course Content:</b> Synthesis of a number of compounds having different composition, colour, conductivity, electronic and magnetic properties; Estimation of the components by conventional analytical methods; Estimation of the metal ion by spectroscopy methods; Characterization of the compounds by different spectral methods, such as, FTIR, UV-Vis absorption, NMR and ESIMS; Establishing magnetic related parameters by measuring magnetic susceptibility and also by measuring the EPR spectra; Interpretation followed by identification of the compounds using data combined from all these.	
13.	<b>Text book(s):</b> 1. Adams D M, and Raynor J B, <i>Advanced Practical Inorganic Chemistry</i> , John Wiley & Sons (1967). 2. Pass G, and Sutcliffe H, <i>Practical Inorganic Chemistry</i> , Chapman & Hall (1974).	
14.	<b>Reference(s):</b> 1. Drago R S, <i>Physical Methods for Chemists</i> , Saunders (1992). 2. Vogel I, <i>Text Book of Quantitative Inorganic Analysis</i> , ELBS Publications (1978).	