

INORGANIC CHEMISTRY (BS-ADP 8th Semester)

Module Code:	Chem-456
Module title:	Inorganic Polymers
Name of Scheme:	BS-ADP 8th Semester
Department:	School of Chemistry
Faculty:	Science
Module Type:	Compulsory
Module Rating:	2 credits

OBJECTIVES

The aim of this course is to provide the concepts for better understanding of advance study in inorganic chemistry and other interdisciplinary subject related to inorganic chemistry. The students will learn about advanced atomic spectroscopy and radio chemistry, polymeric inorganic compounds, advanced chemistry of s-block elements.

SYLLABUS OUTLINE:

- (a) Chains: Catenation, Homocatenation, Heterocatenation, Silicones, Silicates, Zeolites, talc, mica, clay.
- (b) Rings: (i) Heterocyclic systems of borazines, Phosphazenes, S-N rings.
(ii) Homocyclic system of sulfur and selenium.
- (c) Cages compounds of phosphorus, and boron
- (d) Inorganic Polymers as Conductors.

RECOMMENDED BOOKS:

1. Mark, James E., et al. Inorganic polymers. Oxford University Press on Demand, 2005.
2. Archer, Ronald D. Inorganic and organometallic polymers. Vol. 4. John Wiley & Sons, 2004.
3. Uchimaru, Yuko. "Borazine Polymers." Encyclopedia of Polymeric Nanomaterials. Springer, Berlin, Heidelberg, 2015. 255-262.