## PHYSICAL CHEMISTRY (BS-ADP 8th Semester)

Module Code: Chem-447

Module title: Photochemistry
Name of Scheme: BS-ADP 8<sup>th</sup>Semester
Department: School of Chemistry

Faculty: Science
Module Type: Compulsory
Module Rating: 2 credits

## **OBJECTIVES**

Students will be able to learn fundamentals and applications of photochemistry in this course.

## SYLLABUS OUTLINES

Laws of photochemistry, quantum efficiency and its determination, Photochemical reactions, excited state symbols; photosensitized reactions, phosphorescence, fluorescence, chemiluminescence, Lasers.

## **RECOMMENDED BOOKS**

- 1. Mukherjee, K.K.R., Fundamentals of Photochemistry, Revised Ed., New Age International (P) limited, Publishers, New Delhi, (2000).
- 2. Molecular spectroscopy by KV Raman, R Gopalan, P S Raghavan, Vijay Nicole imprints Ltd. 2004.
- 3. Physical Chemistry by Kundu, N and Jain, S.K.S. Chand and Company Ltd. 1984.
- 4. Physical chemistry by Atkins, P.W. 5th Ed., W.H.Freeman and Company, New York, 1994.
- 5. Physical Chemistry by Alberty, R.A. and Silbey. R.J., John Wiley, New York, 1995.
- 6. Physical chemistry by Engel, T. and Ried, P., 1st Ed., Pearson Education, Inc. 2006.
- 7. Bhatti, H. N. and Farooqi, Z. H., Modern Physical Chemistry, Revised ed., Caravan Book House, (2014).