

Reference Book for CSIR-UGC-NET/GATE Chemistry

PHYSICAL CHEMISTRY:

Thermodynamics

1. Physical Chemistry - Thomas Engel & Philip Reid
2. Principles of Physical Chemistry - Puri, Sharma & Pathania
3. A text book of Physical Chemistry (Vol-II) - K. L. Kapoor

Chemical Kinetics & Catalysis:

1. Chemical Kinetics and Catalysis - Richard Mishel
2. Chemical Kinetics - Keith J Laidler
3. A text book of Physical Chemistry (Vol-V) - K. L. Kapoor

Electrochemistry

1. An Introduction to Electrochemistry - Samuel Glasstone
2. Electrochemistry - Philip H. Rieger
3. A book of Physical Chemistry (Vol-III) - K L Kapoor

Quantum Chemistry

1. Quantum Chemistry through Problems and Solutions - R.K. Prasad
2. Quantum Chemistry - Donald A. McQuarrie

Molecular Spectroscopy

1. Fundamentals of Molecular Spectroscopy - Colin N. Banwell
2. Physical Methods - Russel S. Drago

Group Theory

1. Chemical Applications of Group Theory – F. Albert Cotton

Collides & Surfaces

1. Surface Chemistry - A Goel
2. Introduction to Surface Chemistry & Catalysis - Gabor A. Somorjai

ORGANIC CHEMISTRY:

Principles of Stereochemistry

1. Stereochemistry Conformation and Mechanism -P.S. Kalsi
2. Stereochemistry of Organic Compounds - E. L. Eliel

Organic Reaction Mechanism

1. A Guidebook to Mechanism in Organic Chemistry - Peter Sykes
2. Organic Chemistry -Clayden, Greeves, Warren and Wothers

Advanced Organic Chemistry

1. Part-A: Structure and Mechanism - Francis A. Carey, Richard J. Sundberg
2. Part-B : Reactions and Synthesis - Francis A. Carey, Richard J. Sundberg

Reagents in Organic Synthesis

1. Modern Methods of Organic Synthesis - William Carruthers, Iain Coldham

Organic Synthesis

1. Organic Synthesis the disconnection approach - **Stuart Warren**

Spectroscopy

1. Spectrometric Identification of Org. Compounds - **R. M. Silverstein, F. X. Webster**
2. Organic Spectroscopy - **William Kemp**

Pericyclic Reactions

1. Pericyclic Reactions - **R T Morrison, R N Boyd**

Photochemical Reactions

1. Organic Photochemistry - **James H. Coxon, B. Halton**

INORGANIC CHEMISTRY:

Chemical Bonding and Shapes of compounds

1. Inorganic Chemistry - **J. E. Huheey**
2. Inorganic Chemistry - **Meissler & Tarr**

Main Group Elements (s and p blocks)

1. Concise Inorganic Chemistry - **J. D. Lee**

Transition Metal & Coordination Compounds (d block)

1. Concise Inorganic Chemistry - **J. D. Lee**
2. Inorganic Chemistry - **Meissler & Tarr**
3. Mechanism of Inorganic Reactions - **Fred Basolo, Ralph G. Pearson**

Organometallic Compounds

1. Concept and Models of Inorganic Chemistry - **Bodie Douglas, Darl McDaniel, John Alexander**
2. Inorganic Chemistry - **Catherine E. Housecraft, Alan G. Sharpe**

Bioinorganic Chemistry

1. Inorganic Chemistry - **Shriver & Atkins**
2. Inorganic Chemistry - **James E. Huheey, E.A. Keiter, R. L. Keiter, O. K. Medhi**

Analytical Chemistry

1. Instrumental Method - **Skoog, Holler & Crouch**