

Webinar on “Crystal Field Theory”

Date: 10-05-2020

Participants: 80

Resource Person: Prof. Mohan N. Patel, Department of Chemistry, SPU, Vallabh Vidyanagar



Sarvajanic Education Society
Sir P. T. Sarvajanic College of Science, Surat

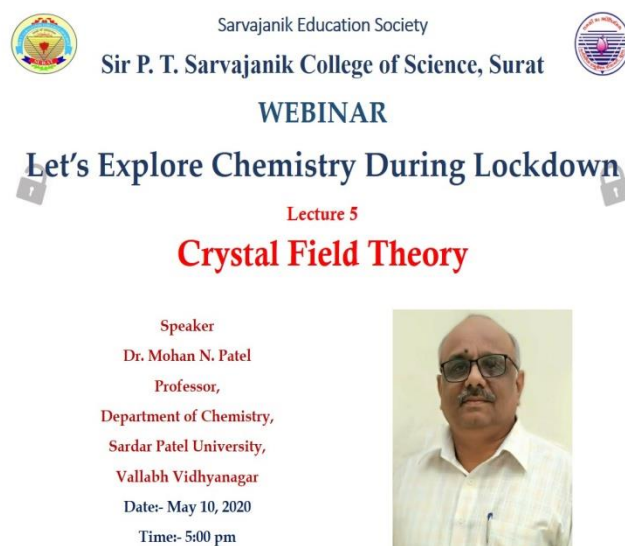
WEBINAR

Let's Explore Chemistry During Lockdown

SPEAKERS

2 May, 2020	Prof. K. K. Desai, Retired Professor, Department of Chemistry, VNSGU, Surat Time: 4:00 pm
4 May, 2020	Prof. K. H. Chikhalia, Department of Chemistry, VNSGU, Surat Time: 12:00 pm
6 May, 2020	Dr. Rahul B. Tailor, Department of Chemistry, JNM Patel Science College, Surat Time: 12:00 pm
8 May, 2020	Dr. Mehul R. Khimani, Department of Chemistry, P. P. Savani University, Kosamba, Surat Time: 12:00 pm
10 May, 2020	Prof. Mohan N. Patel, Department of Chemistry, S.P. University, Vallabh Vidyanagar. Time: 5:00 pm

Organized by: Department of Chemistry




Sarvajanic Education Society
Sir P. T. Sarvajanic College of Science, Surat

WEBINAR

Let's Explore Chemistry During Lockdown

Lecture 5
Crystal Field Theory

Speaker
Dr. Mohan N. Patel
Professor,
Department of Chemistry,
Sardar Patel University,
Vallabh Vidhyanagar
Date- May 10, 2020
Time- 5:00 pm



Brief Report:

Dr. Mohan N. Patel delivered a lecture on the Crystal Field Theory. He explained the basic assumptions of CFT. It is mainly concerned with the interaction of the d-orbitals of metal ion with the surrounding ligands that produce the crystal field effect which is responsible for the splitting of d-orbitals. He also showed the splitting of d-orbitals in octahedral ligand field, tetrahedral ligand field, tetragonal ligand field and square planar ligand field. He defined the Jahn Teller Theorem. With it he explained the t_{2g} and e_g orbitals and how electrons are filled with strong and weak ligand. He also explained the distortion in octahedral complexes and also the idea of Term symbol, L-S coupling and spin multiplicity. The talk was very informative and it would help the students till T. Y. B. Sc. The vote of thanks was given by Dr. Sambhav Vora.