NPTEL Video Course - Chemistry and Biochemistry - NOC:Biological Inorganic Chemistry

Subject Co-ordinator - Prof. Debashis Ray

Co-ordinating Institute - IIT - Kharagpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - Cell signaling by (Ca2+) binding and sensing
Lecture 31 - Functions of iron ions and iron ion proteins
Lecture 32 - Heme proteins for (O2) transport and storage
Lecture 33 - Activators of (O2) and electron transport proteins
Lecture 34 - Iron-sulfur proteins
Lecture 35 - Mononuclear and dinuclear non-heme enzymes
Lecture 36 - Oxygen transport and SOD activity
Lecture 37 - Type 1 blue copper proteins
Lecture 38 - Type 2 non-blue copper proteins
Lecture 39 - Type 3 dinuclear copper proteins
Lecture 40 - Multicopper and mixed-copper enzymes
Lecture 41 - Coordination chemistry and function of zinc ions
Lecture 42 - Carbonic anhydrase and lyases
Lecture 43 - Carboxypeptidase and metalloproteinases
Lecture 44 - Alcohol dehydrogenase and Beta-lactamase
Lecture 45 - Redox catalysis by manganese ions
Lecture 46 - Redox catalysis by manganese ions
Lecture 47 - Catalysis by manganese and cobalt ions
Lecture 48 - Cobalt ion dependent proteins and enzymes
Lecture 49 - Nickel proteins and enzymes
Lecture 50 - More nickel ion bearing enzymes
Lecture 51 - Carbon, hydrogen and oxygen
Lecture 52 - Nitrogen and Silicon
Lecture 53 - Phosphorus
Lecture 54 - Sulfur and Selenium
Lecture 55 - Chlorine and Iodine
Lecture 56 - Brain and blood-brain barrier (BBB)
Lecture 57 - Zinc and copper ions
Lecture 58 - Iron ions
Lecture 59 - Metal ion based drugs and metallotherapeutics
Lecture 60 - Chemotherapy, radiotherapy and contrast agents