NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Biotechnology - NOC: Aspects Of Biochemical Engineering
Subject Co-ordinator - Prof. Debabrata Das
Co-ordinating Institute - IIT - Kharagpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction
Lecture 2 - Microbiology - I
Lecture 3 - Microbiology - II
Lecture 4 - Fundamentals of Biochemistry
Lecture 5 - Bioproducts and their market values
Lecture 6 - Stoichiometry of Biochemical Processes - I
Lecture 7 - Stoichiometry of Biochemical Processes - II
Lecture 8 - Stoichiometry of Biochemical Processes - III
Lecture 9 - Reaction Thermodynamics - I
Lecture 10 - Reaction Thermodynamics - II
Lecture 11 - Kinetics of homogeneous chemical reactions - I
Lecture 12 - Kinetics of homogeneous chemical reactions - II
Lecture 13 - Kinetics of homogeneous chemical reactions - III
Lecture 14 - Kinetics of homogeneous chemical reactions - IV
Lecture 15 - Kinetics of homogeneous chemical reactions - V
Lecture 16 - Different types of reactors
Lecture 17 - Reactor analysis - I
Lecture 18 - Reactor analysis - II
Lecture 19 - Reactor analysis - III
Lecture 20 - Reactor analysis - IV
Lecture 21 - Kinetics of enzyme catalyzed reactions using free enzymes - I
Lecture 22 - Kinetics of enzyme catalyzed reactions using free enzymes - II
Lecture 23 - Kinetics of enzyme catalyzed reactions using free enzymes - III
Lecture 24 - Kinetics of enzyme catalyzed reactions using free enzymes - IV
Lecture 25 - Kinetics of enzyme catalyzed reactions using free enzymes - V
Lecture 26 - Kinetics of enzyme catalyzed reactions using free enzymes - VI
Lecture 27 - Immobilization of Enzymes - I
Lecture 28 - Immobilization of Enzymes - II
Lecture 29 - Kinetics of enzyme catalyzed reactions using immobilized enzymes - I
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Lecture 30 - Kinetics of enzyme catalyzed reactions using immobilized enzymes - II
Lecture 31 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 32 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 33 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 34 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 35 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 36 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 37 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 38 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 39 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 40 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 41 - Kinetics of substrate utilization, product formation and biomass production of microbial cells -
Lecture 42 - Design and analysis of activated sludge process - I
Lecture 43 - Design and analysis of activated sludge process - II
Lecture 44 - Design and analysis of anaerobic digestion process
Lecture 45 - Scale up of Bioreactor - I
Lecture 46 - Scale up of Bioreactor - II
Lecture 47 - Transport Phenomenon in Bioprocess - I
Lecture 48 - Transport Phenomenon in Bioprocess - II
Lecture 49 - Transport Phenomenon in Bioprocess - III
Lecture 50 - Transport Phenomenon in Bioprocess - IV
Lecture 51 - Air sterilization - I
Lecture 52 - Air sterilization - II
Lecture 53 - Medium sterilization - I
Lecture 54 - Medium sterilization - II
Lecture 55 - Operation of industrial fermenter and material analysis
Lecture 56 - Process control of the biochemical processes
Lecture 57 - Downstream processing - I
Lecture 58 - Downstream processing - II
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Lecture 59 - Economic analysis of the biochemical processes

Lecture 60 - Summary and Conclusion