NPTEL Video Course - Chemical Engineering - Advanced Chemical Reaction Engineering (PG)

Subject Co-ordinator - Prof. H.S. Shankar

Co-ordinating Institute - IIT - Bombay

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

NPTEL Video Course - Chemical Engineering - Advanced Process Control

Subject Co-ordinator - Prof. Sachin C. Patwardhan

Co-ordinating Institute - IIT - Bombay

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

NPTEL Video Course - Chemical Engineering - Chemical Reaction Engineering II

Subject Co-ordinator - Prof. A.K. Suresh, Prof. Ganesh A. Viswanathan, Prof. Sanjay M. Mahajani

Co-ordinating Institute - IIT - Bombay

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

Lecture 30 - Distribution of residence time
Lecture 31 - Measurement of residence time distribution
Lecture 32 - Residence time distribution function
Lecture 33 - Reactor diagnostics and troubleshooting
Lecture 34 - Modeling non-ideal reactors
Lecture 35 - Residence time distribution
Lecture 36 - Non-ideal Reactors
Lecture 37 - Non-ideal Reactors
Lecture 38 - Non-ideal Reactors
Lecture 39 - Non-ideal Reactors

NPTEL Video Course - Chemical Engineering - Advanced Numerical Analysis

Subject Co-ordinator - Prof. Sachin C. Patwardhan

Co-ordinating Institute - IIT - Bombay

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

NPTEL Video Course - Chemical Engineering - Heterogeneous Catalysis and Catalytic Processes

Subject Co-ordinator - Dr. K.K. Pant

Co-ordinating Institute - IIT - Delhi

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

Lecture 30
Lecture 31
Lecture 32
Lecture 33
Lecture 34
Lecture 35
Lecture 36
Lecture 37
Lecture 38
Lecture 39
Lecture 40

NPTEL Video Course - Chemical Engineering - Mass Transfer Operations I

Subject Co-ordinator - Dr. B. Mandal

Co-ordinating Institute - IIT - Guwahati

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

NPTEL Video Course - Chemical Engineering - Process Design Decisions and Project Economics

Subject Co-ordinator - Dr. Vijay S. Moholkar

Co-ordinating Institute - IIT - Guwahati

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

Lecture 30 - Energy Balance, Process Alternatives and Design of the Absorber
Lecture 31 - Rules of Thumb & Their Limitations and Tutorial
Lecture 32 - General Concepts & Principles and Cost Allocation Procedure
Lecture 33 - Lumped Cost Diagram and Cost Allocation Diagram (Case Study of Hydro-dealkylation Process)
Lecture 34 - Assessment of Process Alternatives with Cost Allocation Diagram (Case Study of Hydrodealkylation
Lecture 35 - Tutorial on Lumped Cost Diagram and Cost Allocation Diagram
Lecture 36 - Introduction to Chemical Projects and Their Economic Aspects
Lecture 37 - Selection of the Process and Project Site - Part I
Lecture 38 - Selection of the Process and Project Site - Part II
Lecture 39 - Project Cost Estimation - Part I
Lecture 40 - Project Cost Estimation - Part II
Lecture 41 - Simplified Cost Model and Depreciation
Lecture 42 - Time Value of Money
Lecture 43 - Measures of Profitability and Project Evaluation - Part I
Lecture 44 - Measures of Profitability and Project Evaluation - Part II
Lecture 45 - Tutorial on Project Economics - Part I
Lecture 46 - Tutorial on Project Economics - Part II

NPTEL Video Course - Chemical Engineering - Fluid Mechanics

Subject Co-ordinator - Dr. V. Shankar

Co-ordinating Institute - IIT - Kanpur

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

Lecture 30
Lecture 31
Lecture 32
Lecture 33
Lecture 34
Lecture 35
Lecture 36
Lecture 37
Lecture 38
Lecture 39
Lecture 40

NPTEL Video Course - Chemical Engineering - Mass Transfer II

Subject Co-ordinator - Prof. Nishith Verma

Co-ordinating Institute - IIT - Kanpur

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

Lecture 30
Lecture 31
Lecture 32
Lecture 33
Lecture 34
Lecture 35
Lecture 36
Lecture 37
Lecture 38
Lecture 39
Lecture 40

NPTEL Video Course - Chemical Engineering - Plantwide Control of Chemical Processes

Subject Co-ordinator - Dr. Nitin Kaistha

Co-ordinating Institute - IIT - Kanpur

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

Lecture 30 - The Luyben design procedure
Lecture 31 - Role of equipment capacity constraints
Lecture 32 - Recycle process case study
Lecture 33 - Recycle process case study (Continued...)
Lecture 34 - C4 isomerization process case study
Lecture 35 - C4 isomerization process case study (Continued...)
Lecture 36 - C4 isomerization process case study
Lecture 37 - Systematic economic plantwide control design procedure
Lecture 38 - Ethyl benzene process case study
Lecture 39 - C4 isomerization process revisited
Lecture 40 - Contrasting conventional and top-down approach
Lecture 41 - Cumene process plantwide control

NPTEL Video Course - Chemical Engineering - Biochemical Engineering

Subject Co-ordinator - Dr. Saikat Chakraborty, Dr. Rintu Banerjee

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - Microscale Transport Processes

Subject Co-ordinator - Dr. Somnath Ganguly, Prof. S. Dasgupta

Co-ordinating Institute - IIT - Kharagpur

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

Lecture 30 - Immiscible flow in microchannel (Continued...)
Lecture 31 - Immiscible flow in microchannel (Continued...)
Lecture 32 - Scaling dimension and issues (Continued...)
Lecture 33 - Immiscible flow in microchannel (Continued...)
Lecture 34 - Plastic device making
Lecture 35 - Transport processes and their descriptions
Lecture 36 - Convective fluid dynamics in microchannels
Lecture 37 - Microfluidic networks
Lecture 38 - Electrohydrodynamic atomization
Lecture 39 - Electrohydrodynamic atomization (Continued...)
Lecture 40 - Interfacial phenomena in thin liquid films

NPTEL Video Course - Chemical Engineering - Multiphase Flow

Subject Co-ordinator - Prof. P.K. Das, Prof. Gargi Das

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - Novel Separation Processes

Subject Co-ordinator - Prof. S. De

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - Process Control and Instrumentation

Subject Co-ordinator - Dr. D. Sarkar, Dr. A.K. Jana

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - Instability and Patterning of Thin Polymer Films

Subject Co-ordinator - Dr. R. Mukherjee

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - Advanced Mathematical Techniques in Chemical Engineering

Subject Co-ordinator - Prof. S. De

Co-ordinating Institute - IIT - Kharagpur

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

Lecture 30 - Solution of Elliptic and Hyperbolic PDE (Continued...)
Lecture 31 - PDE in Cylindrical and Spherical Coordinate
Lecture 32 - Solution of non-homogeneous PDE
Lecture 33 - Solution of non-homogeneous PDE (Continued...)
Lecture 34 - Solution of non-homogeneous Parabolic PDE
Lecture 35 - Solution of non-homogeneous Elliptic PDE
Lecture 36 - Solution of non-homogeneous Elliptic PDE (Continued...)
Lecture 37 - Similarity Solution
Lecture 38 - Similarity Solution (Continued...)
Lecture 39 - Integral Method
Lecture 40 - Laplace Transform
Lecture 41 - Fourier Transform

NPTEL Video Course - Chemical Engineering - NOC:Introduction to Process Modeling in Membrane Separation Proce

Subject Co-ordinator - Prof. S. De

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - NOC:Soft Nano Technology

Subject Co-ordinator - Dr. R. Mukherjee

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - NOC:Adiabatic Two-Phase Flow and Flow Boiling in Microchannel

Subject Co-ordinator - Prof. Gargi Das

Co-ordinating Institute - IIT - Kharagpur

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

NPTEL Video Course - Chemical Engineering - Chemical Engineering Thermodynamics

Subject Co-ordinator - Prof. M.S. Ananth

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Thermodynamic Consistency / Reverse Osmosis
Lecture 31 - Miscellaneous topics in phase equilibria
Lecture 32 - Absorption Refrigeration
Lecture 33 - Summary of Classical Thermodynamics
Lecture 34 - Molecular basis of Thermodynamics - I
Lecture 35 - Molecular basis of Thermodynamics - II

NPTEL Video Course - Chemical Engineering - Computational Fluid Dynamics

Subject Co-ordinator - Prof. Sreenivas Jayanti

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Illustration of the Multigrid method for the Laplace equation
Lecture 31 - Overview of the approach of numerical solution of NS equations for simple domains; Introduction
Lecture 32 - Derivation of the energy conservation equation
Lecture 33 - Derivation of the species conservation equation; dealing with chemical reactions
Lecture 34 - Turbulence; Characteri stics of turbulent flow; Dealing with fluctuations and the concept of tim
Lecture 35 - Derivation of the Reynolds -averaged Navier -Stokes equations; identification of the closure pro
Lecture 36 - Reynol ds stresses in turbulent flow; Time and length scales of turbulence; Energy cascade; Mixi
Lecture 37 - One-equation model for turbulent flow
Lecture 38 - Two -equation model for turbulent flow; Numerical calculation of turbulent reacting flows
Lecture 39 - Calculation of near-wall region in turbulent flow; wall function approach; near-wall turbulence
Lecture 40 - Need for special methods for dealing with irregular flow geometry; Outline of the Body-fitted gr
Lecture 41 - Transformation of the governing equations; Illustration for the Laplace equation; Appearance and
Lecture 42 - Finite vol ume method for complicated flow domain; Illustration for the case of flow through a c
Lecture 43 - Finite volume method for the general case
Lecture 44 - Generation of a structured grid for irregular flow domain; Algebraic methods; Elliptic grid gene
Lecture 45 - Unstructured grid generation; Domain nodalization; Advancing front method for triangulation
Lecture 46 - Delaunay triangulation method for unstructured grid generation
Lecture 47 - Co -located grid approach for irregular geometries; Pressure correction equation for a co -locat

NPTEL Video Course - Chemical Engineering - Computational Techniques

Subject Co-ordinator - Dr. Niket S. Kaisare

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Ordinary Differential Equations (initial value problems) - Part 6
Lecture 31 - Ordinary Differential Equations (initial value problems) - Part 7
Lecture 32 - Ordinary Differential Equations (initial value problems) - Part 8
Lecture 33 - Ordinary Differential Equations (initial value problems) - Part 9
Lecture 34 - Ordinary Differential Equations (boundary value problems) - Part 1
Lecture 35 - Ordinary Differential Equations (boundary value problems) - Part 2
Lecture 36 - Ordinary Differential Equations (boundary value problems) - Part 3
Lecture 37 - Partial Differential Equations - Part 1
Lecture 38 - Partial Differential Equations - Part 2
Lecture 39 - Partial Differential Equations - Part 3
Lecture 40 - Partial Differential Equations - Part 4

NPTEL Video Course - Chemical Engineering - Particle Characterization (PG)

Subject Co-ordinator - Dr. R. Nagarajan

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Nano-particle Characterization
Lecture 31 - Nano-particle Characterization
Lecture 32 - Nano-particle Characterization
Lecture 33 - Practical Relevance of Particle Characterization
Lecture 34 - Practical Relevance of Particle Characterization
Lecture 35 - Practical Relevance of Particle Characterization
Lecture 36 - Practical Relevance of Particle Characterization
Lecture 37 - Practical Relevance of Particle Characterization
Lecture 38 - Practical Relevance of Particle Characterization
Lecture 39 - Practical Relevance of Particle Characterization
Lecture 40 - Summary

NPTEL Video Course - Chemical Engineering - Statistics for Experimentalists

Subject Co-ordinator - Dr. A. Kannan

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Example Set - VI - Part B
Lecture 31 - Factorial Design of Experiments - Part A
Lecture 32 - Factorial Design of Experiments - Part B
Lecture 33 - Fractional Factorial Design - Part A
Lecture 34 - Fractional Factorial Design - Part B
Lecture 35 - Factorial Design of Experiments
Lecture 36 - Factorial Design of Experiments
Lecture 37 - Factorial Design of Experiments
Lecture 38 - Regression Analysis
Lecture 39 - Regression Analysis
Lecture 40 - Hypothesis Testing in Linear Regression
Lecture 41 - Discussion on Regression Output
Lecture 42 - Regression Analysis
Lecture 43 - Regression Analysis
Lecture 44 - Regression Analysis
Lecture 45 - Orthogonal Model Fitting Concepts - Part A
Lecture 46 - Orthogonal Model Fitting Concepts - Part B
Lecture 47 - Experimental Design Strategies - A
Lecture 48 - Experimental Design Strategies - B
Lecture 49 - Experimental Design Strategies - C
Lecture 50 - Response Surface Methodology - A
Lecture 51 - Response Surface Methodology - B
Lecture 52 - Optimal Designs - Part A
Lecture 53 - Optimal Designs - Part B
Lecture 54 - Statistics for Experimentalists - Summary Part A
Lecture 55 - Statistics for Experimentalists - Summary Part B

NPTEL Video Course - Chemical Engineering - Multiphase Flows - Analytical solutions and Stability Analysis

Subject Co-ordinator - Prof. S. Pushpavanam

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Rayleigh-Taylor instability (Continued...)
Lecture 31 - Capillary jet instability
Lecture 32 - Capillary jet instability
Lecture 33 - Capillary jet instability
Lecture 34 - Tutorial Session
Lecture 35 - Turing patterns
Lecture 36 - Turing patterns
Lecture 37 - Marangoni convection
Lecture 38 - Marangoni convection
Lecture 39 - Flow in a circular curved channel
Lecture 40 - Flow in a circular curved channel
Lecture 41 - Stability of flow through curved channels
Lecture 42 - Stability of flow through curved channels
Lecture 43 - Viscous Fingering
Lecture 44 - Viscous Fingering
Lecture 45 - Shallow Cavity flows

NPTEL Video Course - Chemical Engineering - NOC:Introduction to Time-Frequency Analysis and Wavelet Transform

Subject Co-ordinator - Dr. Arun K.Tangirala

Co-ordinating Institute - IIT - Madras

Lecture 34 - Affine class and closing remarks
Lecture 35 - Continuous Wavelet Transform
Lecture 36 - Continuous Wavelet Transforms
Lecture 37 - Scale to Frequency
Lecture 38 - Computational aspects of CWT
Lecture 39 - Scalogram and MATLAB demonstration
Lecture 40 - Scalogram and MATLAB demonstration
Lecture 41 - Scaling function
Lecture 42 - Scaling Function
Lecture 43 - Wavelets
Lecture 44 - Wavelets
Lecture 45 - Applications of CWT
Lecture 46 - Applications of CWT

NPTEL Video Course - Chemical Engineering - Chemical Engineering Principles of CVD Processes

Subject Co-ordinator - Dr. R. Nagarajan

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Basics of Nano-Structured Material Synthesis
Lecture 31 - Undesirable CVD
Lecture 32 - Undesirable CVD
Lecture 33 - Undesirable CVD
Lecture 34 - Multi-component Transport Fundamentals
Lecture 35 - Multi-component Transport Fundamentals
Lecture 36 - Multi-component Transport Fundamentals
Lecture 37 - Multi-component Transport Fundamentals
Lecture 38 - Multi-component Transport Fundamentals
Lecture 39 - Multi-component Transport Fundamentals

NPTEL Video Course - Chemical Engineering - Chemical Reaction Engineering 1 (Homogeneous Reactors)

Subject Co-ordinator - Prof K. Krishnaiah

Co-ordinating Institute - IIT - Madras

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

NPTEL Video Course - Chemical Engineering - Chemical Reaction Engineering 2 (Heterogeneous Reactors)

Subject Co-ordinator - Prof K. Krishnaiah

Co-ordinating Institute - IIT - Madras

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

NPTEL Video Course - Chemical Engineering - NOC:MATLAB Programming for Numerical Computation

Subject Co-ordinator - Dr. Niket S.Kaisare

Co-ordinating Institute - IIT - Madras

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

Lecture 30 - Using MATLAB command fsolve (multi-variable)
Lecture 31 - Newton-Raphson (multi Variable)
Lecture 32 - Introduction
Lecture 33 - Linear Least Squares Regression
Lecture 34 - Nonlinear and Functional Regression
Lecture 35 - Interpolation Functions in MATLAB
Lecture 36 - Introduction and Euler\'s Method
Lecture 37 - Runge-Kutta (RK-2) method
Lecture 38 - MATLAB ode45 algorithm
Lecture 39 - Higher order Runge-Kutta Methods
Lecture 40 - Error Analysis
Lecture 41 - Multi-Variable ODE
Lecture 42 - Stiff Systems & Solution using ode15s
Lecture 43 - Method of Lines for transient PDEs
Lecture 44 - A Final Example
Lecture 45 - Tutorial

NPTEL Video Course - Chemical Engineering - NOC:Computational Fluid Dynamics

Subject Co-ordinator - Prof. Sreenivas Jayanti

Co-ordinating Institute - IIT - Madras

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

NPTEL Video Course - Chemical Engineering - NOC:Introduction to Statistical Hypothesis Testing

Subject Co-ordinator - Dr. Arun K.Tangirala

Co-ordinating Institute - IIT - Madras

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

NPTEL Video Course - Chemical Engineering - Chemical Technology - I

Subject Co-ordinator - Dr. I.D. Mall

Co-ordinating Institute - IIT - Roorkee

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

Lecture 30 - Aromatics product profile, Ethyl benzene & Styrene, Cumene and phenol, Bisphenol, Aniline
Lecture 31 - Introduction to polymer, Elastomer and Synthetic Fibre, Polymerisation
Lecture 32 - Polymers
Lecture 33 - Polyvinylchloride, polycarbonate, thermoset resin
Lecture 34 - Elastomers
Lecture 35 - Polymides or Nylons(PA)
Lecture 36 - DMT and Terephtalic Acid, Polyester, PET resin, PTB resin
Lecture 37 - Acrylic Fibre, Modified Acrylic Fibre, Acrylonitrile, Acrolein, Propylene Finber, Polyurethane
Lecture 38 - Viscose Rayon and Acetate rayon
Lecture 39 - Pesticide
Lecture 40 - Dye and Intermediates

NPTEL Video Course - Chemical Engineering - Process Integration

Subject Co-ordinator - Dr. B. Mohanty

Co-ordinating Institute - IIT - Roorkee

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

Lecture 30 - Driving Force Plot
Lecture 31 - Low Temperature process Design - Part 1
Lecture 32 - Low Temperature process Design - Part 2
Lecture 33 - Integration of Gas turbine with process - Part 1
Lecture 34 - Integration of Gas turbine with process - Part 2
Lecture 35 - Placement and Integration of Distillation Column
Lecture 36 - Heat Integration of evaporators
Lecture 37 - Integration of heat pump
Lecture 38 - Placement of Heat Engine, Heat pump and Reactors
Lecture 39 - Integration of Furnace
Lecture 40 - Problem solving using HINT Software - Part 1
Lecture 41 - Problem solving using HINT Software - Part 2
Lecture 42 - Problem solving using HINT Software - Part 3
Lecture 43 - Problem solving using HINT Software - Part 4

NPTEL Video Course - Chemical Engineering - Mechanical Operations

Subject Co-ordinator - Prof. Shabina Khanam

Co-ordinating Institute - IIT - Roorkee

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

NPTEL Video Course - Chemical Engineering - Chemical Reaction Engineering

Subject Co-ordinator - Prof. Jayant M Modak

Co-ordinating Institute - IISc - Bangalore

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

Lecture 30 - Case Study - Ethane dehyrogenation
Lecture 31 - Case Study - Hydrogenation of Oil
Lecture 32 - Case Study - Ammonia Synthesis
Lecture 33 - Autothermal reactors
Lecture 34 - Parametric Sensitivity
Lecture 35 - CSTR - multiple steady states
Lecture 36 - Stability Analysis - Basics
Lecture 37 - Stability Analysis - Examples
Lecture 38 - Nonideal flow and reactor performance - I
Lecture 39 - Nonideal flow and reactor performance - II
Lecture 40 - Problem solving

NPTEL Video Course - Chemical Engineering - Fundamentals of Transport Processes

Subject Co-ordinator - Prof. V. Kumaran

Co-ordinating Institute - IISc - Bangalore

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

Lecture 30 - Diffusion Equation Spherical Co-ordinates Seperation of Variables (Continued...)
Lecture 31 - Diffusion Equation Spherical Co-ordinates Effective Conductivity of a Composite
Lecture 32 - Diffusion Equation Spherical Harmonics
Lecture 33 - Diffusion Equation Delta Functions
Lecture 34 - Diffusion Equation Multipole Expansions
Lecture 35 - Diffusion Equation Greens Function Formulations
Lecture 36 - High Peclet Number Transport Flow Past a Flat Plate
Lecture 37 - High Peclet Number Transport Heat Transfer from a Spherical Particle - I
Lecture 38 - High Peclet Number Transport Heat Transfer from a Spherical Particle - II
Lecture 39 - High Peclet Number Transport Heat Transfer from a Gas Bubble
Lecture 40 - Summary

NPTEL Video Course - Chemical Engineering - Fundamentals of Transport Processes - II

Subject Co-ordinator - Prof. V. Kumaran

Co-ordinating Institute - IISc - Bangalore

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

Lecture 30 - Conformal transforms in potential flow
Lecture 31 - Boundary layer theory
Lecture 32 - Boundary layer past a flat plate
Lecture 33 - Stagnation point flow
Lecture 34 - Falkner-Skan Boundary Layer Solutions
Lecture 35 - Falkner-Skan Boundary Layer Solutions
Lecture 36 - Vorticity Dynamics
Lecture 37 - Vorticity Dynamics
Lecture 38 - Turbulence
Lecture 39 - Turbulence
Lecture 40 - Turbulent flow in a channel

NPTEL Video Course - Chemical Engineering - Modern Instrumental Methods of Analysis

Subject Co-ordinator - Dr. J.R. Mudakavi

Co-ordinating Institute - IISc - Bangalore

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