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

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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 1 - Introduction to catalysts and catalysis
Lecture 2 - Steps in catalytic reaction
Lecture 3 - Derivation of the rate equation
Lecture 4 - Heterogenous data analysis for reactor design - I
Lecture 5 - Heterogenous data analysis for reactor design - II
Lecture 6 - Catalyst deactivation and accounting for it in design - I
Lecture 7 - Catalyst deactivation and accounting for it in design - II
Lecture 8 - Synthesize the rate equation
Lecture 9 - Introduction to intraparticle diffusion
Lecture 10 - Intraparticle diffusion
Lecture 11 - Intraparticle diffusion
Lecture 12 - Intraparticle diffusion
Lecture 13 - Effectiveness factor and Introduction to external mass transfer
Lecture 14 - External Mass Transfer
Lecture 15 - Implications to rate data interpretation and design - I
Lecture 16 - Implications to rate data interpretation and design - II
Lecture 17 - Packed-bed reactor design
Lecture 18 - Fluidized bed reactor design - I
Lecture 19 - Fluidized bed reactor design - II
Lecture 20 - Gas-liquid reactions-1
Lecture 21 - GLR-2
Lecture 22 - GLR-3
Lecture 23 - GLR-4
Lecture 24 - GLR-5
Lecture 25 - GLR-6
Lecture 26 - GLR-7
Lecture 27 - Fluid-solid non-catalytic reactions - I
Lecture 28 - Fluid-solid non-catalytic reactions - II
Lecture 29 - Fluid-solid non-catalytic reactions - III
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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