Mindluster Platform

About the course Calculations in Chemical Engineering

Calculations in Chemical Engineering course in hindi, in this course we explore essential calculations and problem-solving techniques crucial in chemical engineering processes.

Engineering Category's Courses

Course Lesson(36)

Lesson 1 : **Basic Principles and Calculations in Chemical Engineering Introduction Video**

Lesson 2 : **Lec 1 Definition History Role of Chemical Engineer**

Lesson 3 : **Lec 2 Basic Features of Chemical Process**

Lesson 4 : **Lec 3 Unit systems and dimensions**

Lesson 5 : **Lec 4 Variables and Properties of Material in System**

Lesson 6 : **Lec 5 Pressure and Temperature of Flow Process**

Lesson 7 : **Lec 6 Rate of Process**

Lesson 8 : **Lec 7 Principles of material balance and calculation**

Lesson 9 : **Lec 8 Material Balances on Processes with Recycle Bypass**

Lesson 10 : **Lec 9 Material balances on reactive processes**

Lesson 11 : **Lec 10 Material balances on combustion reactions**

Lesson 12 : **Lec 11 State Equation of Ideal Gas and Calculation**

Lesson 13 : **Lec 12 State Equation of non Ideal Gas and Calculation**

Lesson 14 : **Lec 13 Phase equilibrium**

Lesson 15 : **Lec 14 Equilibrium Laws Humidity and Saturation**

Lesson 16 : **Lec 15 Humidity Saturation Psychrometric chart**

Lesson 17 : **Lec 16 Process of phase change Condensation and vaporization**

Lesson 18 : **Lec 17 Principles of Energy**

Lesson 19 : **Lec 18 Laws and properties of thermodynamics**

Lesson 20 : **Lec 19 Standard Heat of Formation**

Lesson 21 : **Lec 20 The mechanical energy balance**

Lesson 22 : **Lec 21 Enthalpy balances without reaction**

Lesson 23 : **Lec 22 Energy balance with multiplle streams without reaction**

Lesson 24 : **Lec 23 Energy balance on heat of solution**

Lesson 25 : **Lec 24 Energy balance with heat of reaction**

Lesson 26 : **Lec 25 Energy balance with heat of reaction contd**

Lesson 27 : **Lec 26 Energy balance with heat of combustion**

Lesson 28 : **Lec 27 Material balance of transient process**

Lesson 29 : **Lec 28 Unsteady state energy balance**

Lesson 30 : **Lec 29 Least Square Method Linear equation fitting**

Lesson 31 : **Lec 30 Non linear algebraic equation system**

Lesson 32 : **Lec 31 Numerical Integration**

Lesson 33 : **Lec 32 Process Degrees of Freedom**

Lesson 34 : **Lec 33 Process Flowsheeting and codes**

Lesson 35 : **Lec 34 Case Study Cumene Production**

Lesson 36 : **Lec 35 Case Study Cumene Production Continuation**

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