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

```
NPTEL Video Course - Biotechnology - Analytical Technologies in Biotechnology
Subject Co-ordinator - Dr. Ashwani K. Sharma
Co-ordinating Institute - IIT - Roorkee
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Basic concepts in microscopy - 1
Lecture 2 - Basic concepts in microscopy - 2
Lecture 3 - Dark-field and phase contrast microscopy
Lecture 4 - Differential interference contrast and polarization
Lecture 5 - Fluorescence and confocal microscopy
Lecture 6 - Transmission electron microscopy
Lecture 7 - Transmission electron microscopy cont. and scanning electron microscopy
Lecture 8 - Basic concepts - 1
Lecture 9 - Basic concepts - 2
Lecture 10 - GM counting and Scintillation counting
Lecture 11 - Scintillation counting continued
Lecture 12 - Autoradiography and RIA
Lecture 13 - Safety aspects and applications
Lecture 14 - Introduction and Basic concepts in chromatography - 1
Lecture 15 - Basic concepts in chromatography - 2
Lecture 16 - Low-pressure liquid chromatography (LPLC) and high performance liquid chromatography (HPLC)
Lecture 17 - Ion-exchange chromatography
Lecture 18 - Gel-filtration chromatography
Lecture 19 - Affinity chromatography
Lecture 20 - Gas-liquid chromatography
Lecture 21 - Basic concepts in electrophoresis
Lecture 22 - Horizontal and vertical gel electrophoresis
Lecture 23 - Native gel electrophoresis and SDS-PAGE
Lecture 24 - Isoelectric focusing (IEF), 2-D gel electrophoresis and protein detection methods
Lecture 25 - Electrophoresis of nucleic acids
Lecture 26 - Immunoelectrophoresis and capillary electrophoresis
Lecture 27 - Introduction and Basic Concepts - 1
Lecture 28 - Basic concepts - 2
Lecture 29 - Types of centrifuges and analytical ultracentrifugation method
```

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

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

Lecture 30 - Separation methods in preparative ultracentrifuges
Lecture 31 - Types of rotors
Lecture 32 - Types of rotors cont. and care of rotors
Lecture 33 - Introduction and basic concepts
Lecture 34 - UV-Visible spectroscopy
Lecture 35 - Infrared and fluorescence spectroscopy
Lecture 36 - Circular dichroism (CD) spectroscopy
Lecture 37 - Nuclear magnetic resonance (NMR) spectroscopy and X-ray crystallography
Lecture 38 - Atomic spectroscopy and mass spectrometry
Lecture 39 - Polymerase chain reaction(PCR)
Lecture 40 - DNA sequencing methods

Lecture 41 - Enzyme linked immunosorbent assay (ELISA)