

ANALYICAL SPECTROSCOPY

Item Text	Option Text 1	Option Text 2	Option Text 3
What is disadvantage of radio active source used x ray analysis	high intensity radiation	required large space	continously emitted radiation
Balanced filter method is used in?	EXAFS	Wave Method	wave length dispersive devices
Radiation in the x ray region can be emitted from radioactive sources by ... methods	electron capture	gamma emission	beta emission
Gamma emission is caused by transition between	electron level	nuclear levels	vibrational level
Alpha particle is a	argon nucleous	hydrogen nucleous	helium nucleous
Beers law in x ray absorption shows by Equation	$m=mer$	$m=mrt$	$m=mrj$
Energy dispersive device is works on	$E=hv$	$E = cmv$	$E = Xuv$
Photo cathode is used in which of the following detector	scintillation	gas ionization	semiconductor
K Caputre process means	electron captured by K shell	K shell captured M shell electron	K shell electron captured by nucleous
Energy absorbed by the atom is equal to	kinetic energy of ejected electron	potential energy of form ion with vacant shell	kinetic energy of ejected electron and potential
Dispersive device in X ray absorption spectroscopy is used for	selection of monochromatic radiation	selection of polychromatic radiation	selection of balanced energy source
In x ray absorption spectroscopy two filter that are used to	isolate analyte at markable edge	isolate wavelength at the absorptive	isolate spectra of molecules
In ESCA analyzer analyzes	kinetic energy	difusion energy	recoil energy
Which of the following analyzer is used in ESCA	Retarding potential	Magnetic field	Spherical electrostatic

In electrostatic field analyzers	inner sphere is positive and outer sphere is negative	inner sphere is negative and outer sphere is	both inner sphere and outer sphere is positive
The KLL process deals with	Spin electron spectroscopy	PIXE	Auger Spectroscopy
The source is used in Auger electron spectroscopy is	electron gun	proton gun	neutron gun
UPS deal with	inner shell	inner orbitals	valence orbitals
Filler gas used in UPS source lamp	Ar	Kr	He
UPS most oftenly used to study	Gaseous molecules	Solid molecules	Liquid molecules

Option Text 4
Very high energy radiations
Energy dispersive device
Electron capture, gamma emission, beta emission
Rotational level
helium atom
$m = m_l$
$E = 2n$
Fluorescence
K shell eject electron to conduction band
Energy loss by electron
Selection of wavelength
Isolate wavelength absorbed by sample
none of the above
All of the above

both inner sphere and outer sphere is negative
PMR
atom gun
inner core
All of the above
Vaporized molecules