

Raman spectroscopy

Preparatory questions

1. Explain the principle of operation of the Raman spectrometer. Show a diagram.
1. Briefly explain the difference between Rayleigh and Raman scattering. Which type of scattering results in a longer wavelength than the incident light, Rayleigh Raman Stokes or Raman Anti-Stokes?
3. What is the relation between energy, frequency, wave number and wave length of electromagnetic radiation?
4. Discuss the origin of the finite Raman line-widths in a Raman spectrum.