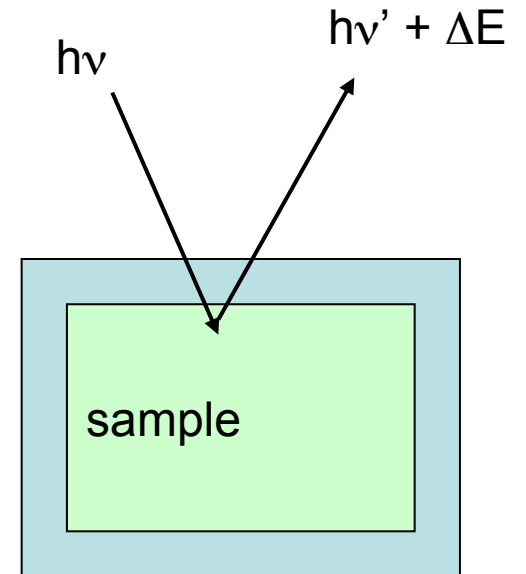
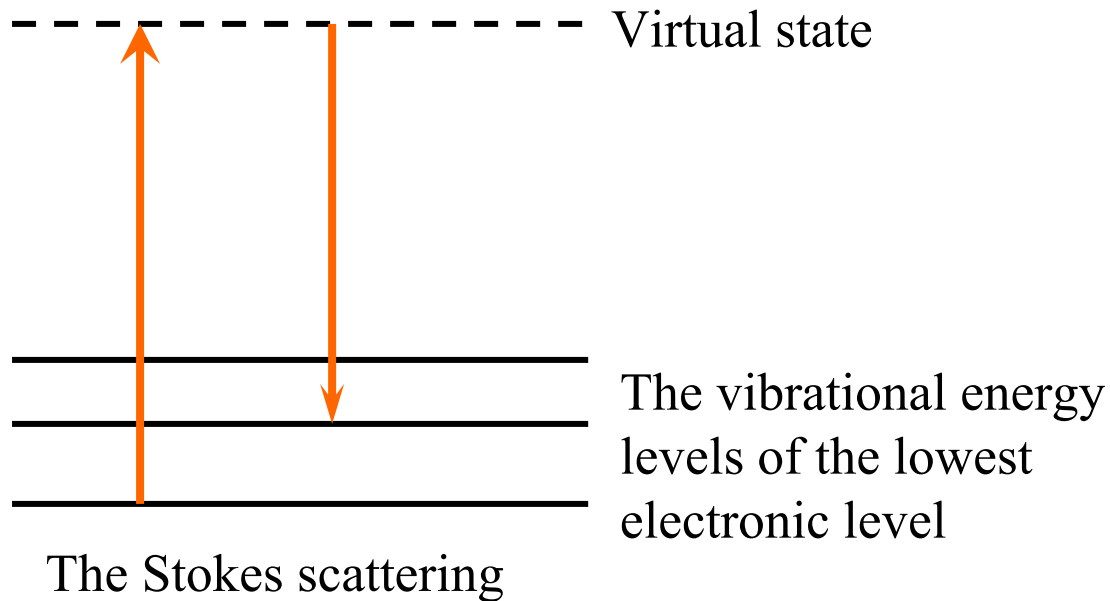
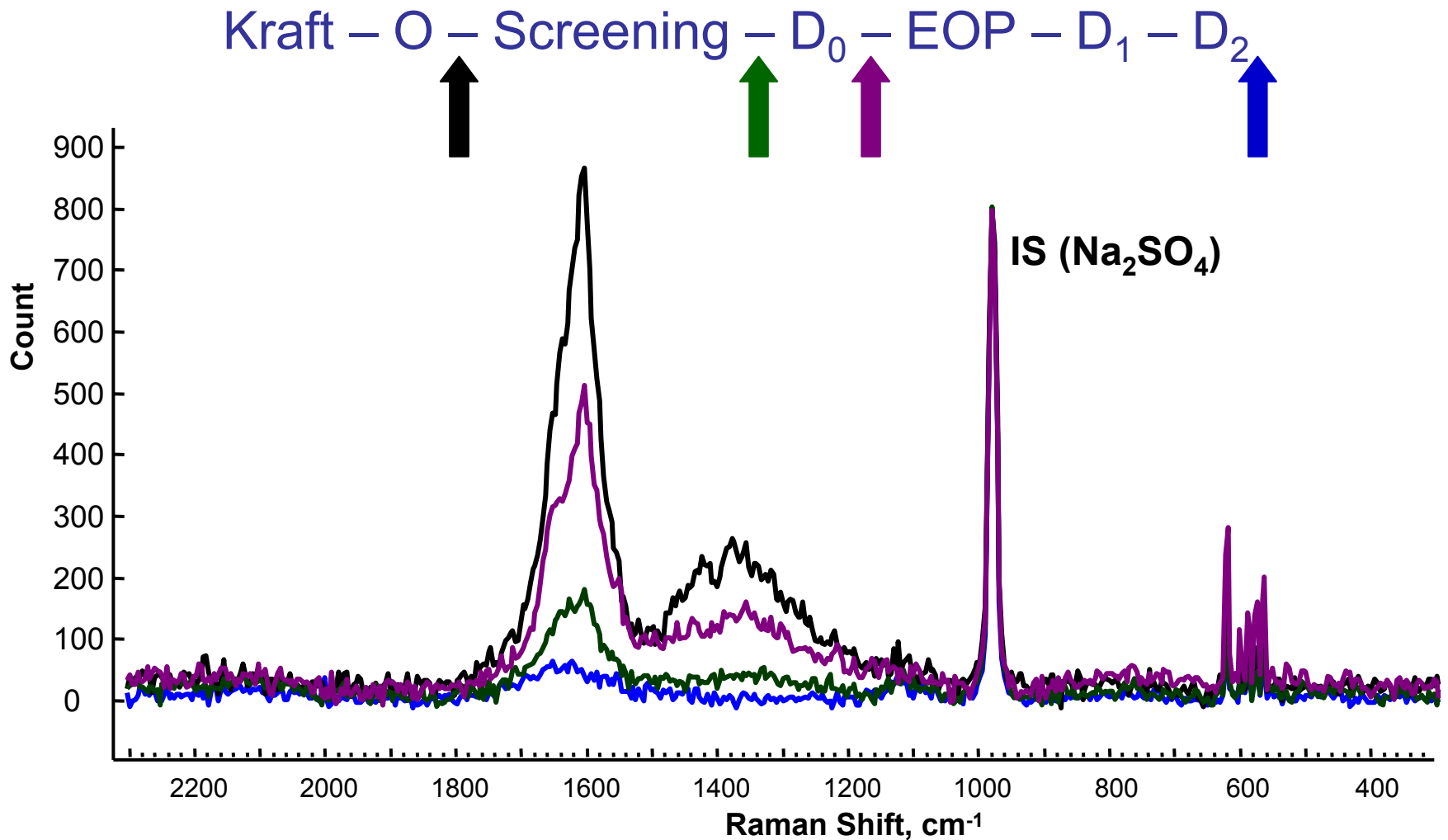


On-line monitoring of process waters by Raman spectroscopy

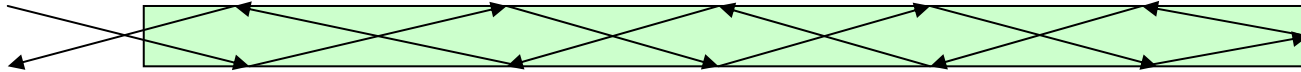
Raman spectroscopy



UV resonance Raman spectra of bleach plant waters



Enhancement of sensitivity using a sampling cell



Increasing the sampling volume increases the number of molecules detected (sensitivity)

Examples of applications

- Process waters in pulp mill
 - Efficiency of washing
 - Analysis of different bleaching chemicals
- Paper mill water circulations
 - Concentration of dissolved substances