





RECENT TRENDS IN RAMAN SPECTROSCOPY: A REVIEW

P. S. Ghodke, L. R. Gandhi, N. S. Bhajipale

S.G.S.P.S INSTITUTE OF PHARMACY, AKOLA

ABSTRACT:

Raman spectroscopy, a molecular spectroscopy which is observed as inelastically scattered light, allows for the interrogation and identification of vibrational states of molecules. In 1928, sir C.V Raman documented the phenomenon of inelastic light scattering. As Raman spectroscopy enables rapid, nondestructive measurements, the technique appears a most promising tool for on-line process monitoring and analysis in the pharmaceutical industry. This article gives a short introduction to Raman Spectroscopy and presents several applications in the pharmaceutical field. A recent market report confirmed that NMR and UV – vis spectroscopy take the top two places in market share but suggested that Raman spectroscopy will grow at the fastest rate. The renaissance in Raman spectroscopy began with the application of reliable laser excitation sources; since then, many new techniques have been developed which permit the recording of Raman spectra of a great variety of compounds, from deeply coloured or even black materials, to highly fluorescent molecules.

KEYWORD: Raman spectroscopy, NMR, Spectroscopy.

Corresponding Author: P. S. Ghodke

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