Vibrational Circular Dichroism: Ensuring Quality of Pharmaceutical Products

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1 BACKGROUND

Aside from very early interests in optical rotation as well as rotatory dispersion and circular dichroism (CD), "optical activity" of chiral molecules has motivated chemists and physicists for some time (1). Pertinent for the purpose of this article is that optical activity can arise from *electronic* transitions, which normally occur in the *visible* and *ultraviolet* spectral regions, or from *molecular vibrations* observed in the *infrared* (IR) region. Of specific interest in the text to follow are the differences in absorption between left and right circularly polarized light. Known respectively as *electronic* circular dichroism (ECD) and *vibrational* circular dichroism (VCD), both

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