INFRARED QUANTITATIVE ANALYSIS OF MULTICOMPONENT

FIBER BLENDS BY LEAST-SQUARES CURVE-FITTING

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The five different least-squares curve-fitting methods proposed by Antoon and Haaland were applied to the infrared quantitative estimation of multicomponent composition in various fiber blends and were compared with each other. The spectral region for each blend and threshold value were suggested to obtain the accurate result.

Accurate results could be obtained by method I-III for all fiber blends, but method IV and V, inspecial, could not be applied to the quantitative analysis of cotton/nylon 6, cotton/cellulose acetate and all fiber blends having three components.