Analysis of IR thin-fim transmission spectra of liquid tri-n-propylamine.

Autorzy

Władysław Wrzeszcz

Andrzej S. Muszyński

Jerzy P. Hawranek

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A detailed numerical analysis of infrared thin-film transmission spectra of liquid tri-*n*-propylamine, measured in layers ranging from 1.8 to 21.6 μm, was carried out. The spectrum of the absorption index, $k(\upsilon)$, was determined and the number of bands was estimated with the use of differentiation and Fourier self-deconvolution. Subsequently optimization of band envelopes and calculation of band intensities was carried out. Vibrational frequencies and potential energy distribution were calculated and tentative band assignements were proposed for numerous observed bands. A considerable coupling of modes was demonstrated.

Adres publiczny

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