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Title:THz and IR spectroscopy of molecular systems that simulate function-related structural changes of proteins

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Abstract:The activity of enzymes in organic solvents substantially increases in the presence of crown ethers. Tris(hydroxymethyl)aminomethane (tris) is chosen as a model compound to simulate the interaction of surface amino groups of proteins with crown ether. The methods of FTIR and time-domain THz spectroscopy are used to study the interaction of tris with 18-crown-6. The THz spectra of the complexes are measured for the first time. © 2012 N. N. Brandt et al.

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Main heading:Terahertz spectroscopy

Controlled terms:Crown ethers - Fourier transform infrared spectroscopy - Ligands - Methanol - Organic solvents - Time domain analysis

Uncontrolled terms:18-crown-6 - Amino group - FTIR - Model compound - Molecular systems - Structural change - Thz spectroscopy - Time domain - Trishydroxymethylaminomethane

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