On electromagnetic wave propagation in systems of adsorbed monolayers IRINA BARIAKHTAR, Boston College, VALERI LOZOVSKI, National University of Kiev, Ukraine — Taking into account the discrete nature of the adsorbed layer, the authors study electromagnetic waves in the system of insulating substrate with the monolayer of adsorbed molecules. Calculated are the dispersion relations of the excitations with s- and p- polarizations localized at the adsorbed layer. To obtain the linear response of such systems, Green's function approach was undertaken. The susceptibility tensor of the system is expressed in terms of Green's function, and the pole structure of the susceptibility is investigated.

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