

COLLECTIVE VIBRATIONS IN THE RAMAN SPECTRUM OF LIQUID BENZENE

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In liquid benzol, the wing of exciting line (length wave = 488 nm) was measured in the areal of 52000 1/cm in Stokes and anti-Stokes regions. To simulate the obtained intensity of scattering in terms of the fluctuation dissipative theorem, functions of response of relaxing excitations and quasi-harmonic oscillators are used. It has been found that the $I(f)$ dependence can be represented as two contributions. These are the wing produced by relaxations $I=B*\exp(-kf)$ and a wide band which corresponds to super-damping cooperative vibrations of quasi- crystalline collective clusters ($f=75$ 1/cm , $G =75$ 1/cm).