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## Scaling of the dielectric response of supercooled disordered phases

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Spectrum of a dielectric permittivity for supercooled disordered phases most often is composed of two relaxation processes [1]: a main relaxation process (called  $\alpha$  process) followed by resolved, unresolved (also called 'excess wing phenomena'), or both secondary processes ( $\beta$  processes). Although there are many models describing dielectric relaxation [2-6] none of them describes the relaxation processes in supercooled disordered phases with a good precision, because of some simplifications introduced. Debye model [2] describes relaxation for non-interacting electric dipoles or electric dipoles in diluted non-polar medium whereas Debye-like models, i.e. Cole-Cole [3], Cole-Davidson [4], Havriliak-Negami [5], describe relaxation for non-interacting electric dipoles in viscous medium. Therefore, some scaling equations of the dielectric response were proposed [7-9] to describe molecular dynamics as a function of frequency of measuring field for various temperatures. However, they are limited to scaling of the imaginary part of dielectric permittivity only [7-9], and Nagel and co-authors model [7-8] refers in fact to systems with 'special' values of long-range and short-range correlation parameters of molecular interactions. Therefore, we have proposed a general form of scaling equation [10-11] that can be applied to the imaginary part of permittivity  $\epsilon''(f)$  as well as to the real part of permittivity  $\epsilon'(f)-\epsilon_\infty$ . The proposed scaling of the dielectric response applied to supercooled disordered phases, i.e. supercooled isotropic liquid phase and supercooled plastic-crystal phase, shows that behavior of resolved and/or unresolved  $\beta$  relaxations strictly depends on the parameters of the main relaxation process. One can conclude that the main relaxation process and the secondary ones are not independent processes.

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