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As it was mentioned above the generalized Maxwell model consists of parallel jointed i-numbered Maxwell models. e simple i- numbered Maxwell model is described by successively jointed i - numbered elastic element, for which the following correlation is acceptable $_{1i}$ = E_i $_{1i}$ and i - numbered elastic element for which the following correlation is acceptable $\dot{\&}_{2i}$ = $_i$ $_{2i}$.

ere are following designations: index «1» and «2» correlate to elastic and viscous elements of i - numbered model conformably, $_{1i}$, $_{2i}$ and $_{1i}$, $_{2i}$ strain and deformation of each above mentioned elements, E_i - elasticity modulus, μ_i - viscosity coe cient of corresponded i- numbered element of simple Maxwell model. e dot demonstrates the derivative on time t.

Let us accept, $_{1i}$ = $_{2i}$ and designate it $_i$, i. . $_{1i}$ = $_{2i}$ $_i$ at consecutive joint in i - numbered simple Maxwell model. en for generalized model $= \sum_{i=1}^{n} {}_i$, where - strain, applied to body, n - number of simple models (Figure 1). en the deformation of i- numbered Maxwell model is de ned by correlation

$$_{1i} + {}_{2i} = {}_i \quad (1)$$

Where $_i$ - general deformation of i- numbered Maxwell model (Figure 1). Correlation (1) follows from condition of consecutive joint of elastic and viscous elements. It should be noted that parallel joint of elastic and viscous elements the deformation of generalized model is general for all these elements, i. . $_i$ = .

en accepting E_i = const, μ_i = const, is:

nanoparticles: C/MC6f3686 T27.401MC6f e uid5(l,s)4C6f (o)12se ee le908 TD T

$$V_i = c_{Ni}\frac{a_0}{2R_x}\;{}_i\;\{\mathcal{H} E_{Ni}\;{}_i\;H \quad H_i = \frac{V_i}{E_{Ni}}, \tag{8}$$

Where «i» and «N» - means that this quantity relates to i-numbered model of Maxwell and nanoparticle. It is assumed that nanoparticle is placed between atoms, in the middle of the "chain". It should be noted that this location is energetically more pro table.

e uid5(l,s)49tle905.908 Ttw9ty9ti(.)-51et9t9te . It be not

At the constant on time tension load, in case $_i$ (t) = const = $_i$ (0) > 0 expression (11) is transformed as: