

CRITICAL PHENOMENA IN MODERN TECHNOLOGICAL PROCESSES

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Abstract: Examples of the main qualitative manifestations of the rheological effects of thixotropy and superanomalies of viscosity associated with modern chemical technologies are considered: additive technology, thixotropic metallurgy, and self-propagating high-temperature synthesis under conditions of a combination of combustion processes and high-temperature shear deformation.

Keywords: rheology; thixotropy; viscosity superanomaly; combustion; high-temperature deformation; cermet materials; additive technology; thixotropic metallurgical processes; self-propagating high-temperature synthesis (SHS)

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