

EFFECT OF COAGULATION OF DROPS ON FUEL SPRAY CHARACTERISTICS BEHIND ATOMIZERS

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Coagulation (fusion) of particles is one of the main reasons of dispersion evolution, which means mechanical mixture of environment (gaseous and liquid) with particles of disperse phase (solid or liquid). The phenomenon is observed in various physical situations: in solutions – Brownian coagulation, in rain drops formation process – gravitation coagulation in combustion chambers over atomizers – turbulent coagulation. The time evolution of particle size distribution due to Brownian and turbulent coagulation in combustion chambers was systematically investigated.

Coagulation, nozzle, spray

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