**Theoretical Foundations of Chemical Engineering**  
Editor-in-Chief: N.N. Kulov

**SCOPE**

The journal *Theoretical Foundations of Chemical Engineering* (Teoreticheskie osnovy khimicheskoi tekhnologii) publishes original articles on transport phenomena, chemical hydrodynamics, nonlinear processes in chemistry and chemical engineering, surface phenomena (e.g., the Marangoni effect), self-organization in nonequilibrium systems, synergetics, macrokinetics of chemical reactions, and the theory and methods for calculating chemical reactors. Processes where the separation of mixtures are encountered play the key role in processing industries. Still of current importance are the theory and practice of diffusion processes (distillation, gas absorption, adsorption, drying, liquid extraction, dissolution, and crystallization), among which the maximum attention is drawn to integrated reaction-mass-transfer processes and all types of membrane processes. An important field is the intensification of heat and mass transfer processes under the action of various factors such as electric and magnetic fields, ultrasonic waves, vibrations and pulsations, and increased velocities of interacting phases. The journal publishes articles on large-scale chemical engineering systems (energy-closed, resource-saving, economically optimized, etc.) as well as works devoted to automated system design and flexible automated production systems.

**TOPICS COVERED**

- Transport phenomena; surface phenomena; processes of mixture separation; theory and methods of chemical reactor design; combined processes and multifunctional reactors; hydromechanic, thermal, diffusion, and chemical processes and apparatus, membrane processes and reactors; biotechnology; dispersed systems; nanotechnologies; process intensification; information modeling and analysis; cost-effectiveness analysis; energy- and resource-saving processes; environmentally clean processes and technologies.

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