FOUNDATIONS OF MOLECULAR KINETIC THEORY

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Abstract. *This article presents a scientific analysis of the fundamental concepts of molecular kinetic theory, the molecular structure of matter, and its connection with gas physics. The random motion of molecules, the relationship between kinetic energy and temperature, and the principles of the ideal gas model are discussed.*

Keywords: *molecular kinetic theory, molecule, atom, ideal gas, pressure, temperature.*

Introduction. Molecular kinetic theory is a fundamental physical theory that explains the properties of matter through the motion of atoms and molecules. It provides the microscopic basis of thermodynamics and allows macroscopic physical quantities to be interpreted scientifically.

According to molecular kinetic theory, all substances consist of very small particles that are in constant random motion. The pressure of a gas arises from molecular collisions with the walls of a container, while temperature characterizes the average kinetic energy of the molecules. The ideal gas model simplifies the analysis of these processes.

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Conclusion. Molecular kinetic theory plays a crucial role in understanding the structure and physical properties of matter. It provides a solid theoretical foundation for explaining physical processes and remains an essential part of modern physics.

REFERENCES:

1. Saveliev I.V. General Physics Course. Tashkent: O‘qituvchi.
2. Landau L.D., Lifshitz E.M. Statistical Physics. Moscow: Nauka.