

Macroscopic features. Physical characteristics. Microscopic structure. Chemical composition and microstructure of wood. Mechanism of wood production. Variability of normal structure. Wood structure defects. Physical properties of wood, density of wood, hygroscopicity of wood, shrinkage and swelling of wood, strength of wood, mechanical, thermal, acoustic and electrical properties of wood. Wood deterioration. Physical strength of wood. Characteristics and alteration of basic wood species, methods and techniques for macroscopic and microscopic identification of wood species and structural defects.