



WOOD SUBSTANCE INVESTIGATION IN THE PILE SUPPORTED BASEMENTS OF HISTORICAL ARCHITECTURE MONUMENTS DURING LONG EXPLOITATION

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The wood substances of pile supported basements from different places (Uspenskiy Cafedral of the Sergieva Lavra (it is located in Sergiev Posad);vallum of the Sergieva Lavra and Rostov Kremlin) have been studied. Exploitation periods in average are about 150-300 years . Lignocarbhydrate structure, it's content alteration (it's components are lignin and cellulose) and chemical composition also have been studied . Metalized phenomenon of lignin under reservation of basic polymer strands of cellulose was developed. Phisico-mechanical properties of pile samples were developed. They are: density, strength along grain during stretch and strength along grain during pressure, bending and so on. Main causes of wood grain destruction are developed. That reason now it's possible to predict wood pile basement condition during long exploitation period.