

Scientists from the Technical Institute, headed by Professor O.A. Terent'ev, Doctor of Technical Sciences, set out to improve the technology. They were looking for substances which would retain the glue mixture more securely in the pulp and which would also be harmless to the environment.

Their long and difficult search was crowned with success. At first glance their solution would appear to be rather unexpected. Apparently, the toxicity of the effluent is reduced by adding peat. Peat contains humic acid which makes the tar settle onto the pulp fibres more fully and evenly, and in the effluent. The addition of peat has other advantages: the board-hardening process is speeded up significantly; the boards are stronger and the pleasant brown colouring makes them look more attractive; there is no unpleasant smell. What is particularly important is that the addition of peat has made it possible to replace up to 15% of the initial wood pulp use.

The new technology was successfully tested at the Grigishkes mill in Lithuania. All its advantages were demonstrated convincingly. Economists believe that the application of peat in board production throughout the country will make it possible to save more than half a million cubic metres of timber, or approximately seven million roubles annually.

The scientists' discovery was designated an official invention. Its innovative features were recognized abroad: the scientists obtained patents in the USA, Sweden and Finland. Last year the technology was demonstrated at the Exhibition of the Achievements of the National Economy of the USSR and was highly rated: the designers were awarded exhibition medals.