

ABSTRACTS

The object of the master's thesis is to improve efficiency by polystyrene block through the development of adaptive control system, accepted problems forecasting brand products, determine the desired temperature in the first side-bar of polymerization column, temperature control based on neural networks.

Under the theme of master's thesis published 1 article in professional publications, 3 conference abstracts.

Master's thesis contains an explanatory note of 90 page. Explanatory note contains 33 figures, 6 tables, 14 references.

The results can be used and implemented in control systems in manufacturing polystyrene. Developed in the software package Matlab models and circuit management systems can be used in the course "Technology Artificial Intelligence", "Special sections of the theory of automatic control."

Keywords: polystyrene, block method, system control, adaptive control system, neural network control, facility management, mathematical model, channel management, dynamic characteristics, safety.