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## SEPARATION OF POLLUTANTS FROM WATER USING THE FREEZE - CONCENTRATION PROCESS

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### Abstract

In this study, the application of freeze-concentration method to treat low-concentration polluted water was demonstrated. The effects of stirring, the temperature in a freezing cabinet and the volume of water involved in the freeze-concentration treatment of pollutants were investigated under laboratory conditions. The removal of pollutant by freeze-concentration treatment was also attempted. Results had shown that the ratio of pollutants removed was about 83% when the experiment was carried out in the freezing cabinet. Therefore, the freeze-concentration method can become a powerful, simple and low-cost treatment method for polluted water in environment.

*Key words:* freeze-concentration, nitrobenzene, pigments, polluted water treatment, separation

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