

REMOVAL OF KYANIDES FROM MODEL WATERS

**Jana Muselíková¹⁾, Jíří Palarčík¹⁾, Eva Slehová¹⁾, Zuzana Blažková¹⁾, Vojtěch Trousil¹⁾,
Sylva Janovská²⁾**

¹⁾*Institute of Environmental and Chemical Engineering, Faculty of Chemical Technology, University of Pardubice, Studentská 573, 532 10 Pardubice, Czech Republic,
e-mail: jana.muselikova@student.upce.cz*

²⁾*Department of Biological and Biochemical Sciences, Faculty of Chemical Technology, University of Pardubice, Studentská 573, 532 10 Pardubice, Czech Republic*

Abstract

This thesis is introducing a theme of biodegradation cyanide in a model sample of wastewater by microorganism *Escherichia coli* and *Pseudomonas aeruginosa*. Apart from monitoring an effect of choosen microorganism on a speed of degradation there was also an effect of an initial concentration of cyanides and temperature monitored. Another tested factor was an efect of used organic substrate on degradation of cyanides. It was proved that tested microorganisms are able to successfully eliminate those cyanides from sample.

Key words:

Biodegradation, wastewater treatment, cyanide, *Escherichia coli*, *Pseudomonas aeruginosa*