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LAPORAN AKHIR

DETERMINATION OF THE HEAVY METALS CONTAMINATION FROM BATIK FACTORY EFFLUENTS TO ITS SURROUNDING

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2016

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A	**PROJECT DETAILS**
i	**Title of Research:** Determination of The Heavy metals Contamination From Batik Factory Effluents To Its Surrounding.
ii	**Account Number:**
iii	**Name of Research Leader:** Dr. Noor Zuhartini Md Muslim
iv	**Name of Co-Researcher:** Dr. Rohasliney Hashim
v	**Duration of this research:** a) **Start Date** : 15 August 2011 b) **Completion Date** : 31 August 2015 **c) Duration** : 48 Months **d) Revised Date** (*if any*) :
B	**ABSTRACT OF RESEARCH**
	(An abstract of between 100 and 200 words must be prepared in Bahasa Malaysia and in English. This abstract will be included in the Report of the Research and Innovation Section at a later date as a means of presenting the project findings of the researcher/s to the University and the community at large) ***ABSTRACT*** Batik industries may produce a large amount of effluents with a high concentration of pollutants such as heavy metals. Heavy metals are environmentally stable, non-biodegradable, and toxic to living beings. Heavy metals tend to accumulate in soils, plants and eventually cause chronic and adverse effects on human health. In this study, the levels of heavy metals in effluent, soil and plant around batik factories were determined using atomic absorption spectrophotometer (AAS). Effluent, soil and plant samples were collected from three batik factories in Kota Bharu, Kelantan. Cadmium (Cd), lead (Pb), zinc (Zn), copper (Cu), chromium (Cr), and iron (Fe) were chosen as representative metal elements. The results indicated that high concentration of heavy