

## Prince of Songkla University Surat Thani Campus

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Head of Promotions and Student Admissions Division, International Affairs, Mulawarman University,

Dear Sir,

On behalf of Prince of Songkla University, Surat Thani Campus, I am writing to sincerely thank you for visiting Prince of Songkla University, Surat Thani Campus to advise staff at Faculty of Sciences and Industrial Technology on Tuesday 24<sup>th</sup> February 2015. Your visit provided us with an invaluable opportunity to learn from the experience of International Affairs.

- 1. Widi Sunaryo,Ph.D. Title: Genetic Diversity Analysis of Durio SP. in East Kalimantan (Plant Biotechnology Research Center)
- 2. Erwin, Ph.D Title: Research, academic and collaboration activities of laboratirium of information and biology of woody plant, Faculty of forestry Mulawarman University: A Brief Information.
- 3. Suhardi, M.Sc, Title: The Development of Swamp Buffalo in Kutai Kertanegara District, East Kalimantan (Animal Science)
- 4. Ari Wibowo, M.Sc, Title: The Effect of Traditional and Conventional Slaughter Method (Animal Science)
- 5. Blego Sedionoto, M.Sc. Title: Environmetal Health Risk Analysis Exposure of Lead (Pb) in Drinking Water to Urban Communities: Case Study in Samarinda City in East Kalimantan (Public Health).

I know that all those that participated in your program found it extremely beneficial and greatly welcomed the opportunity to exchange perspectives and learn from your expertise. As you are aware, we are constantly seeking to develop our academic cooperation. We are certainly most grateful for your continuing efforts and support in this area.

Once again, thank you, and we look forward to continuing our successful cooperation in the years ahead.

Yours singerely,

Asst. Prof. Dr. Suwit Srimai

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## Environmental Health Risk Analysis Exposure of Lead (Pb) in Drinking Water to Urban Communities: Case Study in Samarinda City East Kalimantan

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IPA PDAM in Samarinda which the object research has been the highest results obtained laboratory analysis in unit IPA Loabakung is equal to 0.197 mg / L has exceeded standards Permenkes No. 492 / Menkes / Per / IV / 2010 of < 0.01 mg / L. The aimed of study determine the level of carcinogenic and non-carcinogenic risk due to the pattern of consumption of drinking water from the IPA unit Loabakung and perform management and risk control. This design of research is using Environmental Health Risk Analysis (ARKL) capable of providing Predictive potential risk of disease resulting from exposure to environmental hazards by starting at a dose response, the characteristics of risk and risk management in the design of experiments to continue treatment of drink water treatment. Result of Pb measurements on water PDAM in residential Loabakung with concentration levels between 0,001-0,045 mg/ L analysis has been showed Noncarcinogenic and carcinogenic risk level of 67% (78) of the respondents and 84.5% Noncarcinogenic risk (98) at a concentration of carcinogenic risk measurement highest station 0,045 mg / 1 use of water from the PDAM in the highest simulation only 0.97 L or 970 ml. Carcinogenic risk reduction and Noncarcinogenic in populations has exposed to a reduction in the amount of volume of water use in the provision of drinking water PDAM as well as food processing and chemical quality improvement, especially the decline of heavy metals in the production of processed water PDAM Loabakung with presedimentasi and metal absorbs system both physically and chemically. Environmental management is indispensable as a major determinant of the presence of heavy metals in raw water taps with optimum wastewater treatment mining activities, industrial and domestic waste.

Keywords: ARKL, Pb exposure, water of PDAM, IPA Loabakung