

**PHOTODEGRADATION LINEAR ALKYL SULPHONATE (LAS) SURFACTANT
BY USING UV LIGHT $\lambda = 254$ NM WITH SEMICONDUCTOR ZNO AS
PHOTOCATALYST**

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Abstract: Research about fotodegradation Linear Alkyl Sulphonate (LAS) Surfactant by using UV 254 nm with semiconductor ZnO as photocatalyst have been done. Through photocatalysis process surfactant LAS was degradated with constructively ZnO as photocatalyst using mercury low pressure vapour lamp 254 nm as source of light. By using 20 mg ZnO and illuminated by during 1 hour with light from UV 254 nm, 40 ml LAS surfactant 10 ppm having ability to degradation until 82.12%. Otherwise if we not used ZnO as photocatalyst, LAS surfactant only have ability to degradation until 49.88%. If sunlight used as the source of the light, the ability of degradation surfactant LAS only as 77.48%. Finally, from the research that have been done we can made conclusion, fotodegration surfactant LAS with using light from UV 254 nm can be improved efficiency time and usage of its source energy if ZnO used as photocatalyst.

Keyword : Photodegradation, surfactant, ZnO, photocatalyst