



508/E1

**The effect on the surface tension of brilliant white paint coatings by chemical and detergent additives**

D R A Mendis and W J M Samaranayake\*

*Department of Physics, University of Kelaniya, Kelaniya*

The property, surface tension of paints plays a very important role to minimize the stagnant layer on paints and to maximize the adhesion of paints. The surface tension of commercially widely available white paint (brilliant white) and that with different additives such as sodium acetate ( $\text{CH}_3\text{COONa}$ ), sodium chloride ( $\text{NaCl}$ ), sodium nitrate ( $\text{NaNO}_3$ ), calcium chloride ( $\text{CaCl}_2$ ), magnesium chloride ( $\text{MgCl}_2$ ) and also with two types of washing powders were measured in this study. A relatively low surface tension is required for better adhesion. Surface tension of brilliant white paint was the highest than that with additives. However sodium acetate, sodium chloride and sodium nitrate can be used to improve the adhesion property of the paint.