Turkish Journal

of

Physics

Keywords
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Turkish Journal of Physics

The Langmuir Properties of a Mixed Copolysiloxane Monolayer

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Abstract: A family of linear copolysiloxanes [1-3] substituted with side chains containing carboxylic head groups has been synthesised. The Langmuir properties of the mixed monolayer at the water-air interface has been studied using a single layer Langmuir trough. The area per molecule for the mixed monolayer is calculated theoretically and experimentally. This study has not only shown that there is an excellent agreement between theoretical and experimental values, but has also shown that this mixed monolayer at the water-air interface can be transferred as a monolayer onto a solid substrate.

Key Words: Langmuir properties, polysiloxane.

Turk. J. Phys., **25**, (2001), 445-449.
Full text: pdf
Other articles published in the same issue: Turk. J. Phys.,vol.25,iss.5.