

# Influence of naphthalene on the arachidic acid monolayers formation

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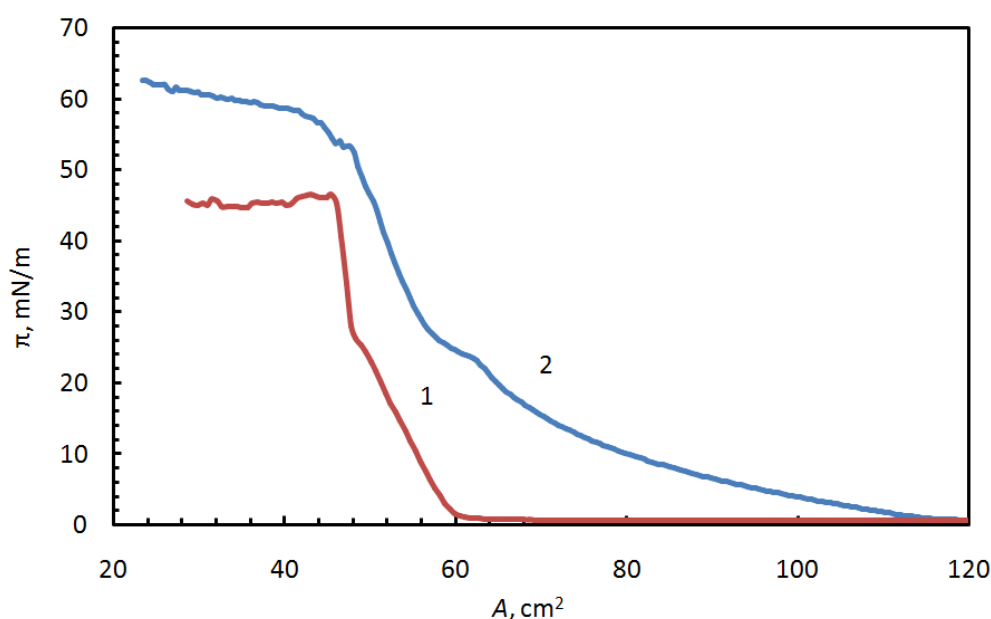
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Nowadays, graphene structures are very interesting material for photovoltaic devices. This interest stems from the fact that graphene have unique properties that can be used for transparent electrode for photovoltaics and display applications [1]. The most promising technology for obtaining of large surface area graphene is 'bottom-up' approach (graphene sheets self-assembly of the polycyclic aromatic hydrocarbon individual molecules). In the present work we investigated the of Langmuir monolayers consisting of arachidic acid and naphthalene mixture. Earlier liquid phase formation was observed with the addition of naphthalene in arachidic acid (fig. 1). In addition, there is a characteristic point of inflection on the curve 2 (by the surface pressure value is about 22 mN/m). Supposedly this point is a point of phase transition and molecular rearrangement arachidic acid and naphthalene molecules occur from monolayer to a more complex structure.



**Figure 1** Compression isotherms: 1 – Arh (solution 1); 2 –Arh-Naph (solution 2)

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