

## عنوان مقاله:

The investigation of surface activity behavior and physico-chemical extracted surfactants detergents from Alliaceae plants

## محل انتشار:

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## خلاصه مقاله:

Although the detergents have advantageous features, in recent years their widespread use all over the world has provided a new source of pollution to our environment. Detergents have high chemical surface activity therefore possess cleaning and washing property. But as these groups of chemicals do not decompose easily, they provide so many problems to the environment. By taking the high pollution of chemical surfactants in to consideration, in this paper, we have investigated the possibility of extracting natural surfactants from Alliaceae plants and their nanostructures. At first the dried samples were milled by planetary ball mill instrument and then their surface activity were measured by tensiometer. Our investigations showed that they have a considerable surface activity and thus they can be used as decomposable surfactants in medical and washing industries. Furthermore, they can be used as antibacterial disinfectants in water purification. These surfactants also have the potent to interact with colors. In this paper natural surfactant-dye interaction was investigated in order to prevent of dye aggregation by UV-visible technique.

## کلمات کلیدی:

Detergents, Alliaceae, ball mill, surfactants

## لینک ثابت مقاله در پایگاه سیویلیکا:

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