

#### عنوان مقاله:

Microbial biosurfactants and their potential applications

### محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

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#### خلاصه مقاله:

Surfactants are amphiphilic compounds containing both hydrophobic (nonpolar) and hydrophilic (polar) moieties that confer ability to accumulate between fluid phases, reducing the surface and interfacial tensions and forming emulsions. The surface activity properties make surfactants one of the most important and versatile class of chemical products, used on a variety of applications in household, industry, pharmacy and agriculture. Tightening environmental regulations and increasing awareness for the need to protect ecosystems have effectively resulted in an increase interest for the use of biosurfactants, considered as possible alternatives to chemical surfactants. Microbial biosurfactants are chemicals produced by microorganisms, such as bacteria, yeasts and fungi. There are many advantages of biosurfactants as compared to their chemically synthesized counterparts including biodegradability, low toxicity, biocompatability and digestibility, which allows their application in cosmetics, pharmaceuticals and as functional food additives. This review provides an outline of trend in recent biosurfactant .notably microbial biosurfactant research, encluding their applications and advantages over chemical compounds

# كلمات كليدى:

surfactant, biosurfactant, amphiphilic compounds, surface activity

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