

Review Form 1.6

Journal Name:	Asian Journal of Applied Chemistry Research
Manuscript Number:	Ms_AJACR_81007
Title of the Manuscript:	Bio-based products for water-in-crude oil Emulsification/Demulsification processes: An Update
Type of the Article	Review Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>Introduction should be completely written by native English language Please rewrite and put your priority of the research first: The formation of water in oil emulsion is a critical issue in industrial applications such as the petroleum sector. In fact, emulsified water can corrode refinery equipment and the water dissolved salt can poison catalyst in downstream processing facilities (1) Also water in oil emulsion usually exhibit viscosities significantly higher than crude oil. This will increase the pumping cost for the transportation of oil in pipeline. Water and oil are generally immiscible. Their miscibility is enhanced by the presence of a surfactant during the process of refining (2). An emulsion is a <u>mixture</u> of two or more <u>liquids</u> that are normally <u>immiscible</u> because of the liquid-liquid <u>phase separation</u>. Emulsions are part of a more general class of two-phase systems of matter called colloids. Although the terms colloid and emulsion are sometimes used interchangeably, emulsion should be used when both phases, dispersed and continuous, are in their liquid states. In an emulsion, one liquid must be the dispersed <u>phase</u> while the other is the continuous phase (3). The dispersed phase is <u>dispersed</u> in the continuous phase. Examples of emulsions include homogenized <u>milk</u>, liquid bimolecular condensates, and some <u>cutting fluids</u> for <u>metal working</u>. When two immiscible liquid is in contact there is a chance for the formation of emulsion.</p>	
Minor REVISION comments	<p>What's meaning Ostwald ripening in emulsion is a process of gradual growth of the larger droplets at the expense of smaller ones due to mass transport of soluble dispersed phase (oil) through the continuous phase (water). The solubility of the oil phase increases with decreasing droplet radius. Even though droplet flocculation and coalescence are the most common factors of emulsion instability, Ostwald ripening is an important cause of instability in some food emulsion application, like soft drink emulsions</p>	
Optional/General comments		

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PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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