## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 8, March 2025



## NIOSOMES: A Review of Their Structure, Types, Method of Preparation, Characterization and Application

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Abstract: Drug targeting is a type of phenomenon in which a drug is distributed in the body in such a way that the drug interacts with the target tissue at the cellular or subcellular level to achieve the desired therapeutic response at the desired site without unwanted interactions at other sites. This can be achieved by modern methods of drug delivery system targeting such as niosomes. Niosomes are a type of non-ionic surfactant vesicles that are biodegradable, non-toxic, more stable and cheaper, which is a new approach to liposomes. Their structure is similar to liposomes and therefore they may represent alternative vesicular systems to liposomes. Niosomes tend to load different types of drugs. This review article presents niosomes structure, advantages, disadvantages, niosomes preparation methods and characterization of pharmaceutical NSVs. The concept of a drug delivery system refers to the process of administering pharmaceutical compounds at a predetermined rate to achieve a therapeutic effect in humans or animals at the site of disease while simultaneously reducing the concentration of the drug in surrounding tissues. The localized action of the drug increases the effectiveness of the drug and reduces systemic toxic effects on tissues.

Keywords: Niosomes, Structure, Compositions, Method of preparation, Factors affecting, Application



DOI: 10.48175/IJARSCT-24535

