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Polymeric micelle embedded chitosan nano particles as hydrophobic drug carrier

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When formulated in a nano-particulate form, chitosan (CS) has proved to be a very effective agent for drug delivery owing to its extremely attractive properties such as its pH sensitive character and its solubility in aqueous medium. Therefore, the synthesis of micelle embedded chitosan nano particles that are suitable for oil soluble drugs was the purpose of this study. However, even production of nano-sized chitosan particles with well-defined morphology and stability is difficult by using the classical gelation route. Therefore, a new production method that combines ionic gelation and three phase emulsion (o/w/o) techniques in an interesting way was used and micelle embedded chitosan nano particles were able to manufacture successfully. These nano-particles were then characterized using TEM, FTIR and DLS-LDV.

Biography

She was born in 11 May 1990, Izmir. She graduated from Bergama Anatolian High School and completed Chemistry at Pamukkale University. Graduated from Pamukkale University in 2012. After graduation she works for a year as a teacher. In 2013 she starts to study Chemistry as a master student at İzmir Institute of Technology. She is still studying her thessis project . She is interested in particle scienes, colloid chemistry and interfacial phenomenon. She also tend to biomaterials and bio-designed systems.

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