

Accepted Manuscript

Title: Comprehensive spectroscopic studies on the interaction of biomolecules with surfactant detached Multi-walled carbon nanotubes

Author: Gajalakshmi Sekar Amitava Mukherjee Natarajan Chandrasekaran



PII: S0927-7765(15)00082-X
DOI: <http://dx.doi.org/doi:10.1016/j.colsurfb.2015.02.006>
Reference: COLSUB 6897

To appear in: *Colloids and Surfaces B: Biointerfaces*

Received date: 15-9-2014
Revised date: 29-1-2015
Accepted date: 3-2-2015

Please cite this article as: G. Sekar, A. Mukherjee, N. Chandrasekaran, Comprehensive spectroscopic studies on the interaction of biomolecules with surfactant detached Multi-walled carbon nanotubes, *Colloids and Surfaces B: Biointerfaces* (2015), <http://dx.doi.org/10.1016/j.colsurfb.2015.02.006>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

- 1 • MWCNTs quenched the fluorescence potential of biomolecules
- 2 • Quenching mechanism remains static and non-fluorescent
- 3 • 3D spectra of biomolecules confirmed MWCNTs effect towards the local environment of
- 4 tryptophan and tyrosine residues
- 5 • Hyper- chromic effect of biomolecules evidenced their increased hydrophobicity
- 6 • FTIR and FT-Raman data showed the changes in amide and amino acid residues
- 7 positions
- 8 • Far and near UV-CD spectra confirmed the loss of secondary structural elements
- 9

Download English Version:

<https://daneshyari.com/en/article/6981792>

Download Persian Version:

<https://daneshyari.com/article/6981792>

[Daneshyari.com](https://daneshyari.com)