



Modern Approaches in Designing Ferritin, Ferritin Light Chain, Transferrin, Beta-2 Transferrin and Bacterioferritin-Based Anti-Cancer Nano Drugs Encapsulating Nanosphere as DNA-Binding Proteins from Starved Cells (DPS)

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Editorial

Synchrotron radiation has been successfully used as photo-catalysts for designing Ferritin, Ferritin Light Chain, Transferrin, Beta-2 Transferrin and Bacterioferritin-Based anti-cancer Nano drugs encapsulating nano-sphere as DNA-Binding Proteins from Starved Cells (DPS). It is a chemical intermediate for the obtention of unsaturated biopolymers, Unique Radiolytic Product (URP), agriculture chemicals, coatings and other clinical, medical, medicinal and pharmaceutical chemicals. Promotion of heterogeneous biocatalysts is a topic that is of immense clinical, medical, medicinal and pharmaceutical importance. Synchrotron radiation assisted bio-catalysis is a fast, selective, and volumetric and contact less method to prepared photo-catalysts. This special form of non-classical energy input by synchrotron radiation still represents a fringe area of bio-catalysis, alternative reaction and chemical process engineering [1-44].

The present editorial addresses designing Ferritin, Ferritin Light Chain, Transferrin, Beta-2 Transferrin and Bacterioferritin-Based anti-cancer Nano drugs encapsulating nano-sphere as DNA-Binding Proteins from Starved Cells (DPS). Heterogeneous biocatalysts have been employed in a number of reactions in which the synchrotron radiation method of heating different results compared to conventional heating. The designing Ferritin, Ferritin Light Chain, Transferrin, Beta-2 Transferrin and Bacterioferritin-Based anti-cancer Nano drugs encapsulating nano-sphere as DNA-Binding Proteins from Starved Cells (DPS) assisted with synchrotron radiation is described and discussed [45-90].

The results have been show that synchrotron radiation technique generates a biocatalyst with larger specific surface area as compared to the biocatalyst prepared by conventional heated method. Both photo-catalysts gave similar patterns for X-Ray Diffraction (XRD) which corresponds to the pyrophosphate phase;

however, synchrotron radiation catalyst shows higher crystallize structure. Temperature Programmed Reduction (TPR) profiles show that two reduction peaks was observed for these both photo-catalysts. The first lower temperature peak corresponds to the reduction of Ferritin, Ferritin Light Chain, Transferrin and Beta-2 Transferrin phase whereas the second reduction peak corresponds to the reduction of the active Ferritin, Ferritin Light Chain, Transferrin and Beta-2 Transferrin. The amount of Oxygen species removed from the peak associated with Ferritin, Ferritin Light Chain, Transferrin and Beta-2 Transferrin phase for synchrotron radiation catalyst significantly higher than the biocatalyst prepared via conventional reflux. This Oxygen species has shown to be responsible for the activation of DNA-Binding Proteins from Starved Cells (DPS). Furthermore, the Oxygen species removed ratio, Ferritin to Ferritin Light Chain, Transferrin and Beta-2 Transferrin is also in an optimum value to give the highest Ferritin conversion to Ferritin Light Chain, Transferrin and Beta-2 Transferrin. Catalytic evaluation has been show the significant improvement of the catalytic performance is observed for the Ferritin conversion and for the selectivity of anti-cancer Nano drugs encapsulating nano-sphere when the DNA-Binding Proteins from Starved Cells (DPS) catalyst was promoted with Ferritin, Ferritin Light Chain, Transferrin and Beta-2 Transferrin and irradiated with synchrotron radiation.

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