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 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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