

## **Analytical Modeling of Globular Protein-Ferritin in $\alpha$ -Helical Conformation: A White Noise Functional Approach**

**Authors :** Vernie C. Convicto, Henry P. Aringa, Wilson I. Barredo

**Abstract :** This study presents a conformational model of the helical structures of globular protein particularly ferritin in the framework of white noise path integral formulation by using Associated Legendre functions, Bessel and convolution of Bessel and trigonometric functions as modulating functions. The model incorporates chirality features of proteins and their helix-turn-helix sequence structural motif.

**Keywords :** globular protein, modulating function, white noise, winding probability

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