



Our Readers Write ...

“Mechanochemistry – The Amazing Viral DNA Packaging Molecular Motor” by Prof. K L Sebastian, Vol.12, No.5, 2007.

The article was really interesting. It was a beautiful demonstration of the effect of a mechanical force on a biological reaction, using the viral DNA Packaging motor as an example. The article could clearly explain how the activation energy of a reaction could be changed by mechanical forces – the key aspect of mechanochemistry.

It throws light on the exciting area of biological chemistry where we have a large number of molecular machines doing fascinating work, (for eg., it is the enzyme ATP – as which is responsible for the energy production in cells, thereby maintaining life on earth). It is really an exciting area of research to understand the mechanism of such molecular machinery, which I hope will be of great help to the entire human race (for eg., the complete knowledge of the mechanism of action of AIDS virus can lead to the discovery of drugs for killing the virus).

The article also stresses the importance of interdisciplinary research. Moreover, the author’s way of connecting thermodynamics, principles of symmetry, quantum mechanics, biology and chemistry is to be honoured. This will be a real boost to students who are interested in doing research. We realized the fact that the requirement of the knowledge of chemistry fundamentals is of paramount importance to do good research in such exciting areas. As a lover of quantum mechanics, what I personally felt after reading this article was that quantum mechanics offers more challenges to chemistry and it would be nice to do research connecting quantum mechanics & chemistry.

I thank Prof Sebastian for writing such a beautiful article, which I think would have influenced many students of science. My sincere thanks to the editor for publishing this wonderful article.

Thanking you,

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