International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2019): 7.583

How Quantum Mechanics Explains Change of Status in Yoga-Practice-from Ordinary Normal State to Samādhi State of a Man?

Dr. Md. Shibli Rahmani[1], Dr. Sapna Patel[2]

[1]Associate Professor, Department of Physics, R.B.S College, Andour, Mohiuddin Nagar(R.S), Samastipur, Bihar, Pin-846502

[2]D/O – Prof. Raj Kishor Prasad, Adarsh Nagar, Road No.- 3A,Samastipur, Bihar, Pin- 848101

1. Introduction

Let, ordinary state of a man is represented by ψ (a starting state) and ending up state of Samādhi by ϕ (as final state). Here base states will be Dhārana(concentration) & Dhyān(Meditation) **obviously** in quantum mechanics it will be represented by $< i|or|i >$.

When we start from a state ψ and go into one of the base states $i\,(i.e.)$ Dhārana and then to the other base state $i(i.e. Dhyān)$ and finally achieve. The state of Samādhi ϕ. then this may be written as,

$$< \phi|\psi >= \sum_{all\ i} < \phi|i >< i|\psi > \ldots\ldots\ldots\ldots(1)$$

The dot product of two ordinary vectors $\vec{A}$ & $\vec{B}$ *in three dimensions is given by,*

$$\sum_{ijk} (\vec{B}.\vec{\imath})(\vec{\imath}.\vec{A}) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where , $\vec{\imath},\vec{\jmath}\&\vec{k}$ are unit vectors in x, y & z directions.

Equation (2) is equal to

$$\overrightarrow{B_x}\ \overrightarrow{A_x} + \overrightarrow{B_y}\ \overrightarrow{A_y} + \overrightarrow{B_z}\ \overrightarrow{A_z}$$

Here, will known quantum relation is,

$$< i|j >= \delta_{ij} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

Where, i & j base status are all "orthogonal we also know that

$$< \phi|\psi >=< \psi|\phi > \ldots\ldots\ldots (4)$$

If we remove $< \phi|$ from both the sides in equation (1) we have,

$$|\psi >= \sum_{all\ i} |i >< i|\psi >$$
$$or\ |\psi >= \sum_{i} |i >< i|\psi > \quad \ldots\ldots\ldots\ldots\ldots (5)$$

The above equation is true for any ψ so, taking out the $|\psi >$ from both of the sides of the equation (5) we get,

$$|= \sum_{i} |i >< i| \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (6)$$

It is very important relation of quantum mechanics. Let us interpret it in terms of Yoga-language i.e. conversion of base status or going through all the base status I, i:e Dhārana (concentration) & Dhyān(meditation) is unity or the transition is complete and we are in the state of samādhi.

2. Conclusion

So, if you want to represent a state-it can be written as liner combinations having suitable coefficients of the base states.

Here different physical condition is determined by the different coefficients. so, for describing the nature we have to find out a suitable representation.

So, the relation,

$$|= \sum_{i} |i >< i|$$

Shows that base status i should be chosen judiously and wisely.

References

[1] Cao, Tim Yu (1997). conceptual development, of 20th century field Theories, Cambridge University press
[2] C.D. Yang, Arm. Phy. 319 (2005) 444.
[3] C.D. Yang, Int. J. quantum Chem. 106 (2006) 1620.
[4] Dirac, P.A.M (1964), Lectures on quantum mechanics, New York : Academy press.
[5] De Broglie, Nonlinear Wave Mechanics, (Elsevier, Sarnsterdam, 1960)