

# Analogy of Some Concepts of Quantum Mechanics with Indian Spiritual Writing-Shrimad Bhagwat Geeta)-II

Kishor Arora

Department of Chemistry, Government Postgraduate College, Morena (M. P.) -476001 (India)

Email: kishoraroda[at]gmail.com

**Abstract:** *Shreemad Bhagwat Geeta is one of the great spiritual writings which we can locate among the Indian spiritual writings. This may be considered as a director in many fields. Quantum mechanics, though is the development of last century and has approximately 100-125 years of its development. This mechanics may be considered as a backbone of the studies of physical sciences precisely in the studies of structure and properties of the matter. The aim of the presentation is to establish analogy between some concept of physical sciences especially from quantum mechanics with that of Shreemad Bhagwat Geeta.*

**Keywords:** Concepts of Quantum Mechanics/ Spiritual writings/ Shreemad Bhagwat Geeta

## 1. Introduction

Shreemad Bhagwat Geeta is a Great writings which one can find among the Indian Spiritual writings [1-2]. This may be considered as a path director in many fields. This is one of the most pious and holistic spiritual writing.

Quantum mechanics though is a development of last century and has almost 100 – 125 years of its development, serves as a backbone of the studies of physical science whether Physics or Chemistry, carried out in the direction of establishment of structure of material / matter and the studies of its properties now-a-days.

Any physico-chemical studies viz. Spectroscopic studies such as IR, NMR, ESR and MASS spectroscopy which are carried out today in order to get the solutions of or one can say to solve the mysteries in the studies of matter have their base lies in this quantum mechanics.

In the beginning of last century, i. e. during the period of 1900-1925, galaxy of physical scientists who had contributed in the establishment of this mechanics. It is note-worthy to mention the names of some of those here in this presentation. They were Max Planck, W. Hiesenberg, N. Bohr, A. Eienstien, DeBroglie and E. Schrodinger etc.

It is their contribution which we may consider as a basis of modern quantum mechanics as they have framed and gave the basic laws on which the studies of this mechanics of today's world are based.

## 2. Literature Survey

Some of the references are there in the literature [3-16], which indicates / shows that the observations/ contributions made by these scientists may have somehow inspiration taken by the Indian spiritual writings such as Shrimad Bhagwat Geeta, Upnishads, Shrimad Bhaagwat Mahapuraan etc. and there is some analogy of the concepts of quantum mechanics with spiritual writings

Names mentioned above in the text i. e. in the previous section:-Introduction may be considered as those persons who are the thinkers and whose thinking might be inspired by the spiritual writings of Indian origin. There may be some analogy in the laws given by these great scientists / thinkers with the philosophy mentioned in the Indian spiritual writings which needs to be explored.

Keeping this in mind, the investigator has carried out some studies i. e. "A Study of Relationship between Quantum Mechanics and Indian Spiritual Writings (With special Reference to Shrimad Bhagwat Geeta) ". Understanding the depth and vastness of the subject, investigator wishes to restrict his studies with special reference to Shrimad Bhagwat Geeta only.

This presentation is a small trial of the author and contains inputs in this field in which some of the concepts are presented which author has tried to corelate with the shloka/s of Shreemad Bhagwat Geeta to show the analogy of these concepts. This study is in continuation to the previous paper by the author viz. "Study of Relationship between some concepts of Quantum Mechanics and Indian Spiritual Writings (With special Reference to Shrimad Bhagwat Geeta) -I"

## 3. Methodology

Keeping in mind the vast nature of the subject, investigator made a questionnaire after studying the concepts and shreemad Bahgwat Geeta and after having discussions with the persons who have their knowledge in the related field.

It was tried to get responses from intellectuals' peoples of the society viz. teachers with scientific background, thinkers, philosophers, saints and other related persons. These inputs have been collected on an appreciable sample size of population keeping in the mind the basic principle of statistics.

#### 4. Results and Discussion

This present paper is in continuation with the previous paper of the author [16]. The questions were prepared after studying the concepts of physical sciences especially quantum mechanics and Shreemad Bhagwat Geeta. Some of the concepts in the form of questions were discussed and included in the previous paper by the same author [16]. Therefore, the author has included some of these questions which were not discussed and included in the previous paper [16] but are in the questionnaire framed. So, these are mentioned in this presentation and are written below: -

- 1) According to Hiesenberg's Uncertainty Principle, it is not possible to ascertain the position and momentum of moving electron simultaneously at a moment. This may have analogy to the shloks (chapter 6) of Shreemad Bhagwat Geeta which explains that it is not possible to locate the **sthiti** of **mann** with certainty at any moment.

योऽयं योगस्त्वया प्रोक्तः साम्येन मधुसूदन।  
एतस्याहं न पश्यामि चंचलत्वास्थितिं स्थिराम्॥३३॥

चंचलं हि मनः कृष्ण प्रमाथि बलवद् दृढम्।  
तस्याहं निग्रहं मन्ये वायोरिव सुदुष्करम्॥३४॥

- 2) In order to explain the behavior of particle, its motion in different modes viz. translational, rotational, vibrational modes, different operators are employed on the wave function of the particle which yields different formulae explaining different modes of the energies and different parts of the wave function i. e. state of the particle. This may have analogy or similarity with the shloka/s (mentioned in chapter 3, 6 and 12) of Shrimad Bhagwat Geeta according to which it is explained that there are different yogas viz. karmayog, bhakti yog, sanyaasyog etc. (may be operators) which are adopted (may be operated on) by jeevatma and results in different modes or states of jeevatma (has similarity with different parts of state of wave functions and energies of particle viz. translational, rotational, vibrational etc.).

प्रकृतेः क्रियमाणानि गुणैः कर्माणि सर्वशः।  
अहंकारविमूढात्मा कर्ताहमिति मन्यते॥२७॥

अनाश्रितः कर्मफलं कार्यं कर्म करोति यः।  
स संन्यासी च योगी च न निरग्रिर्न चाक्रियः॥११॥

यं संन्यासमिति प्राहुर्योगं तं विद्धि पाण्डव।  
न ह्यसंन्यस्तसंकल्पो योगी भवति कश्चन॥१२॥

ये तु सर्वाणि कर्माणि मयि संन्यस्य मत्पराः।  
अनन्येनैव योगेन मां ध्यायन्त उपासते॥१६॥

तेषामहं समुद्धर्ता मृत्युसंसारसागरात्।  
भवामि नचिरात्पार्थ मय्यावेशितचेतसाम्॥१७॥

- 3) Energy of a moving particle like electron has different modes viz. Translational, rotational, vibrational and ultimately electronic energy and Quantum mechanics provides precise solution for all these modes of energy after their estimation. This concept may be similar to /

has analogy to the shloka/s of Shrimad Bhagwat Geeta (chapter 14) according to which different guns viz. tamogun, rajogun and satogun are explained for any jeevatma.

रजो रागात्मकं विद्धि तृष्णासंगसमुद्भवम्।  
तन्निबध्नाति कौन्तेय कर्मसंगेन देहिनाम्॥१७॥

तमस्त्वज्ञानजं विद्धि मोहनं सर्वदेहिनाम्।  
प्रमादालस्यनिद्राभिस्तन्निबध्नाति भारत॥१८॥

सत्त्वं सुखे संजयति रजः कर्मणि भारत।  
ज्ञानमावृत्य तु तमः प्रमादे संजयत्युत॥१९॥

रजस्तमस्चाभिभूय सत्त्वं भवति भारत।  
रजः सत्त्वं तमश्चैव तमः सत्त्वं रजस्तथा॥१०॥

- 4) Quantization of translational energy can be explained by the concept of particle moving in a one dimensional / three-dimensional box in which the particle is in continuous motion with zero potential energy.

This concept is in accordance with the shloks (chapter 3) of shreemad bhagwat Geeta which says we can compare particle with jeevatma, who is in continuous karma in the box (this body), throughout the life period of jeevatma.

न हि कश्चित्क्षणमपि जातु तिष्ठत्यकर्मकृत्।  
कार्यते ह्यवशः कर्म सर्वः प्रकृतिजैर्गुणैः॥१५॥

कर्मेन्द्रियाणि संयम्य य आस्ते मनसा स्मरन्।  
इन्द्रियार्थान्विमूढात्मा मिथ्याचारः स उच्यते॥१६॥

- 5) Probability of finding a particle is estimated by integrating square of its wave function which defines the state of any particle. Where ever probability is zero that point is termed as node. Particle may cross this node i. e. the zone of zero probability and come in the next lobe where probability is there and has non-zero value. This concept in quantum mechanics is termed as tunneling. Particle requires ample amount of energy to cross this tunnel. This may have analogy with the following shloka/s (chapter 15) of Geeta according to which a jeevatma whose probability is there in this physical world, may have to energize himself / herself in the direction of bhakti / saadhna of paramatma in order to cross the tunnel, the shunya, and to reach to next level i. e. samvillian of jeevatma in paramatma.

निर्मानमोहा जितसङ्गदोषा अध्यात्मनित्या विनिवृत्तकामाः।  
द्वन्द्वैर्विमुक्ताः सुखदुःखसंज्ञैर्गच्छन्त्यमूढाः पदमव्ययं तत्॥१५॥

न तद् भासयते सूर्यो न शशांको न पावकः।  
यद्गत्वा न निवर्तन्ते तद्धाम परमं मम॥१६॥

ममैवांशो जीवलोके जीवभूतः सनातनः।  
मनःषष्ठानीन्द्रियाणि प्रकृतिस्थानि कर्षति॥१७॥

शरीरं यदवाप्नोति यच्चाप्युत्क्रामतीश्वरः।  
गृहीत्वैतानि संयाति वायुर्गन्धानिवाशयात्॥१८॥

- 6) Electronic excitation means gain of energy and then jumping to the next electronic energy level. If this energy is sufficient enough then particle may escape from all the binding forces in any atomic / molecular system. This may be considered as similar to the concept of achieving moksh which is explained in the shlok/s (chapter 14 and 17 respectively) of Shrimad Bhagwat geeta.

गुणानेतानतीत्य त्रीन्देही देहसमुद्भवान्।  
जन्ममृत्युजरादुःखैर्विमुक्तोऽमृतमश्नुते॥20॥

यज्ञे तपसि दाने च स्थितिः सदिति चोच्यते।  
कर्म चैव तदर्थयं सदित्येवाभिधीयते॥27॥

These questions along with some other notable questions were prepared and the questionnaire so prepared was circulated and provided to the intellectual people belong to the different sections of the society to get their inputs on the questions related to these concepts. The studies are still in progress.

#### Quantitative Analysis of the inputs: -

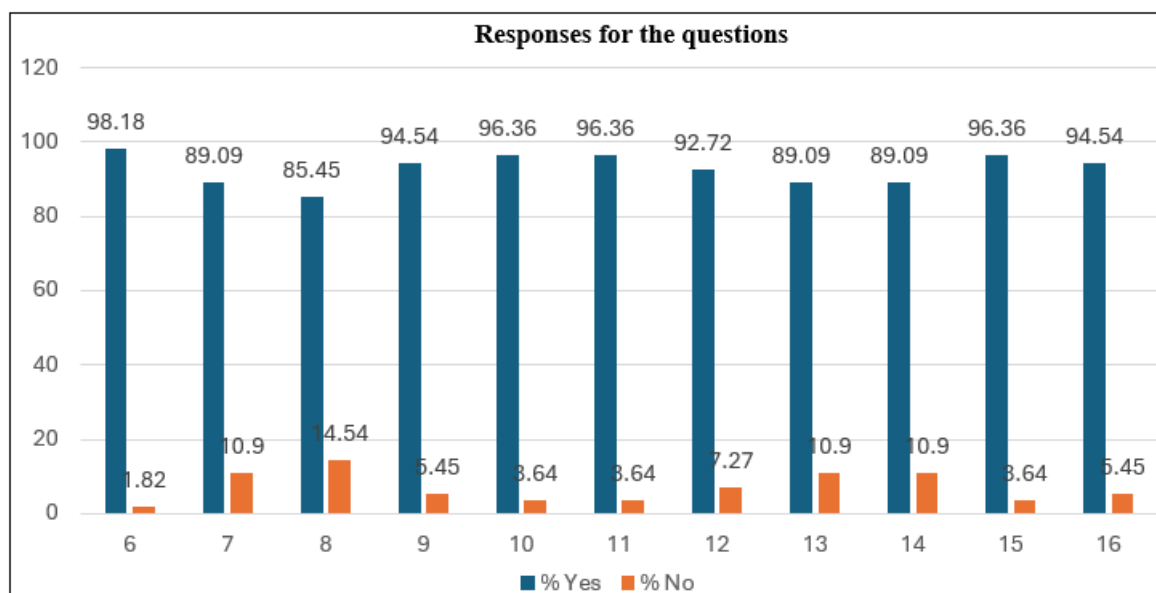
Total 16 questions were prepared for the studies and responses to the questions number 6 to question number 16, i. e. total 11 questions were there which were related to the proposed studies directly and for which inputs are recorded first in the form of **yes/ no**, quantitatively followed by the detail description by the input providers/ contributors to this study. Some of the questions were mentioned in the previous paper by the author [16] and some are mentioned here in this present paper. Quantitative responses are being counted and tabulated question wise in MS- EXCEL for all the questions

included the questions mentioned in the previous paper [16] also and are summarized and presented here in the form of bar diagram. This table and the bar diagram are given below: -

**Table:** Quantitative responses to the questions directly related to the proposed project (in % **yes** – percentage of the total population of the people who are in agreement with the statement given the question; and in % **no**- percentage of the total population of the people who are not in agreement with the statement given the question)

Question Number	% Yes	%No
1	98.18	1.82
2	89.09	10.9
3	85.45	14.54
4	94.54	5.45
5	96.36	3.64
6	96.36	3.64
7	92.72	7.27
8	89.09	10.9
9	89.09	10.9
10	96.36	3.64
11	94.54	5.45

**Figure:** Quantitative responses to the questions directly related to the proposed project (in % **yes** – percentage of the total population of the people who are in agreement with the statement given the question; and in % **no**- percentage of the total population of the people who are not in agreement with the statement given the question as mentioned in the table above)



## 5. Conclusions

Though the studies are still in progress, The conclusions both qualitatively and quantitatively will be drawn. Quantitative results obtained on the studies carried out so far are shown in the figure above.

As this is a survey type study this may be concluded on the basis of the inputs which were obtained so far from a sample

of about 70 peoples of the society belonging to different sections that an appreciable number of people from the sample chosen for study. Though studies are still in progress with a large number of population but from the inputs obtained so far this may be concluded that most of the people agreed that these concepts of quantum mechanics which are mentioned above have some analogy with the Sholka/s of Shreemad Bhagwat Geeta.

## References

- [1] “Shrimad Bhagwat Gita”, Dr Akhilesh Kumar, Publisher Prakash, Darya ganj New Delhi, August 2021.
- [2] “Padmaanuvad: Shrimad Bhagwat Geeta”, Translator Raisaheb Nanheraam singh Judev, Compiled by Dr. Somdev Bhardwaj, Feb.1999.
- [3] “Vedic Knowledge and Quantum Mechanics; Part – 1”, Neeraj Nema, An article on [www.iskcondesiretree.com](http://www.iskcondesiretree.com), 2009.
- [4] “The String Theory and the Bhagawad Gita” An article by G shah, January 10, 2012.
- [5] “Quantum Physics, Vedic Thought, and Schrodinger’s Wave Equation”, An article by Subhash Kak.
- [6] “Why quantum physics needs Asian philosophy”, An article by JAN KRIKKE AUGUST 16, 2019.
- [7] “Computing Science in Ancient India”, T. R. N. Rao & Subhash Kak, Munshiram Manoharlal Publishers Pvt. Ltd.; 2000, New Delhi.
- [8] “Uncertainty Principle and Tagore” An Article, Shounak Bhattacharya · December 2019.
- [9] “What is Life?” A book by E. Schrodinger, Cambridge press, 1944.
- [10] “Reality, Life, and Quantum Mechanics”, an article by Sadaputa Dasa, [www.krishna.com](http://www.krishna.com).
- [11] “The spirituality of Science”, M. D. Thomas, Indian Journal of Spirituality, Vol. XXXIV – No.2, 215 (2021).
- [12] “Quantum physics spirituality and universe” Balakrishna M. T., Department of Physics, Rural College, Kanakpura, Ramanagra, Karanataka, India, International Journal of creative research thoughts 11 (11), 74, (2023).
- [13] “The Quantum Consciousness model and the theology of the Urantia book”, Neuroquantology, 16 (12), 98 (2018).
- [14] “New age spirituality, quantum mysticism and self-psychology: changing ourselves from the inside out”, Amarnath Amarasingam, Mental Health Religion and Culture, 12 (3), 277 (2009).
- [15] “Quantum Consciousness & Spirit” Raul Valverde, Scientific God Journal, 10 (3), 167, (2019).
- [16] “{Study of relationship between some concepts of quantum mechanics and Indian spiritual writings (with special reference to Shreemad Bhagwat Geeta) -I”, Kishor Arora, International Journal of Science and research, 13 (4), 1358-1360, (2024).