

Exploration

Is Meditation the Source of these Micron-sized Particles?

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Abstract

In a paper not long ago, we presented the analysis of a tiny particle found at the meditation site of a medical doctor turned yogi in Goa, India, reporting that the micron-sized particle was made of pure Gold [2]. We presented a theory of resonance to explain how these particles might be forming if in fact they were the result of meditation and therefore an instance of materialization of energy/intentions. The yogi's group subsequently provided us with additional micron-sized particles, this time of different colors, which have now been analyzed and the results are summarized in this paper. To synthesize these particles by routine chemical means would require a sophisticated R & D facility operating under the command of a complex advanced control and optimization system neither of which exists the reported sites. This allows us to strengthen the hypothesis that meditation may well be the source of these particles.

Keywords: Meditation, micron-sized particle, resonance, materialization, energy, intention.

1. Introduction

On a recent visit to Pune India in November 2013, the first author was provided several micron-sized particles that were found at the meditation sites of a physician turned yogi based in Goa, India. A team of the followers of the yogi requested the first author if he could have these particles analyzed upon return to Louisville in December. In the initial batch there were six shiny micron-sized particles. With the cooperation of the researchers at the Conn Center for renewable Energy Research, University of Louisville, one of these particles selected at random was analyzed with a scanning electron microscope and it was found to be pure Gold. An image of the particle on the SEM computer monitor and the EDX spectrum of the particle are shown in Figures 1(a) and 1(b). In a paper not long ago we presented the evidence together with a theory of stochastic resonance to explain how the particles might be forming if in fact they were the

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result of meditation, i. e., transformation of some form of energy into matter [2]. We suggested that additional experimentation would be necessary to strengthen the hypothesis. This paper, provides additional evidence that appears to strengthen the hypothesis.



Figure 1(a). Image of Particle on SEM Monitor

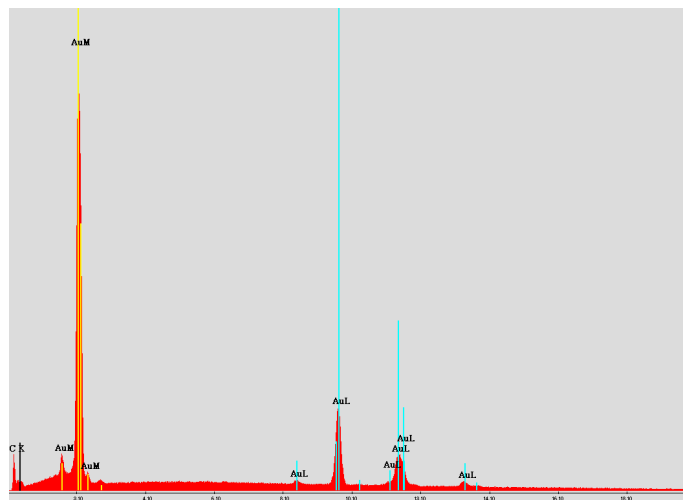
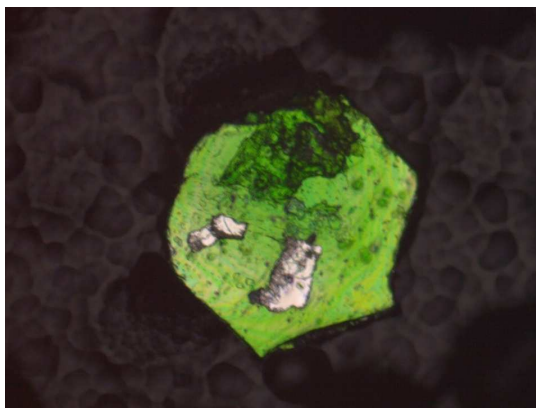


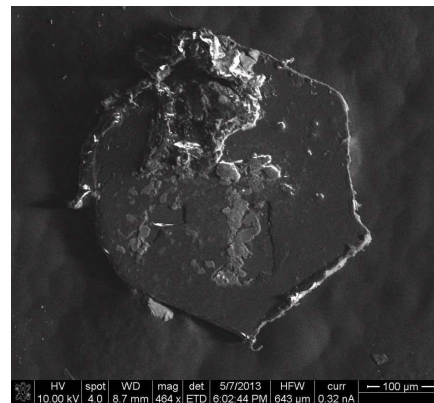
Figure 1(b). The EDX Spectrum of the Particle with Au Lines Marked

2. New Evidence

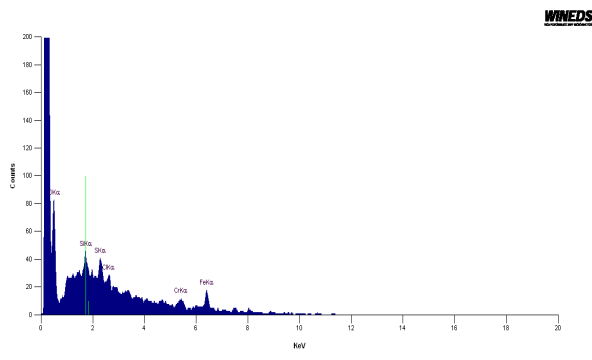
We were provided for analysis several micron-sized particles of different color: green, coral, red, pink, blue, and silver. We randomly selected three colors: green, coral, and red for scrutiny. The following pieces of equipment were used in the investigation: (1) The SEM FEI Nova 600 NanoLab scanning electron microscope, (2) Carl Zeiss Axio Imager.A2M Optical Microscope, and (3) Raman Spectrophotometer is a Renishaw Invia Micro Raman system with a 633 nm HeNe laser. The scanning electron microscope was used to carry out elemental analysis while the optical microscope obtained a visual image of the particles and also confirmed that we were in fact looking at the correct particle under the SEM given that the particles are so tiny relative to the sample holder. The Raman spectrophotometer was used to confirm the elemental analysis and also by reference to the Raman database what the specific compound the particles were made of if they contained two or more elements. The results are shown in Figure 2.



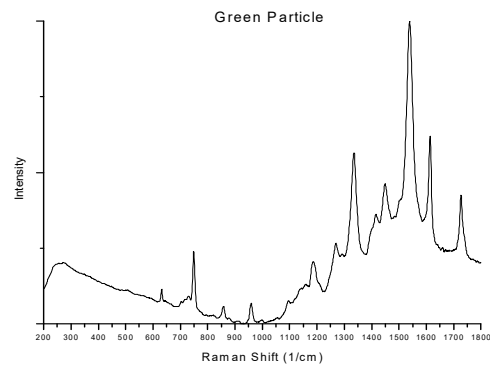
(I) Image under Optical Microscope



(II) Image on SEM Monitor

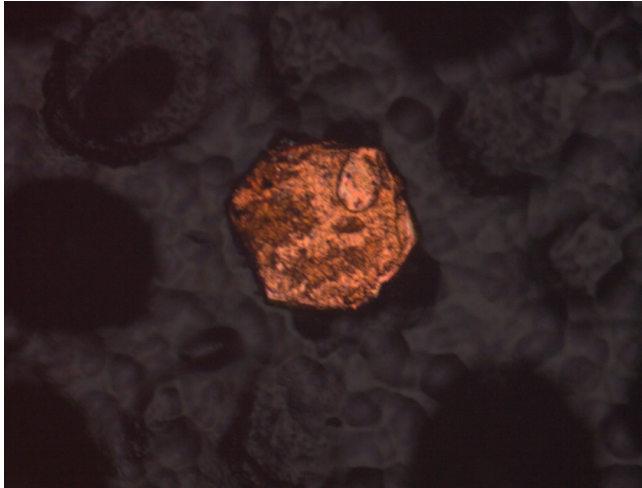


(III) EDX Spectra

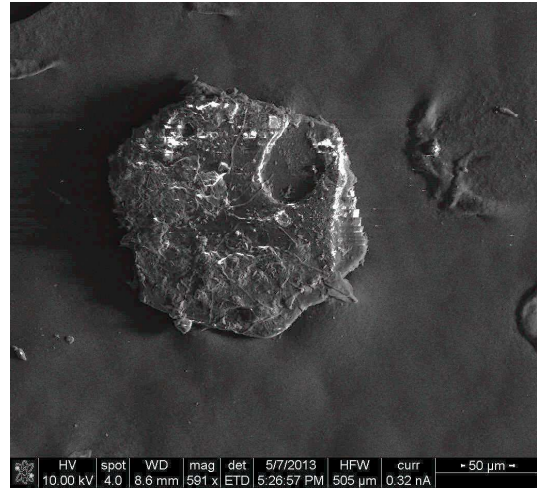


(IV) Raman Spectra

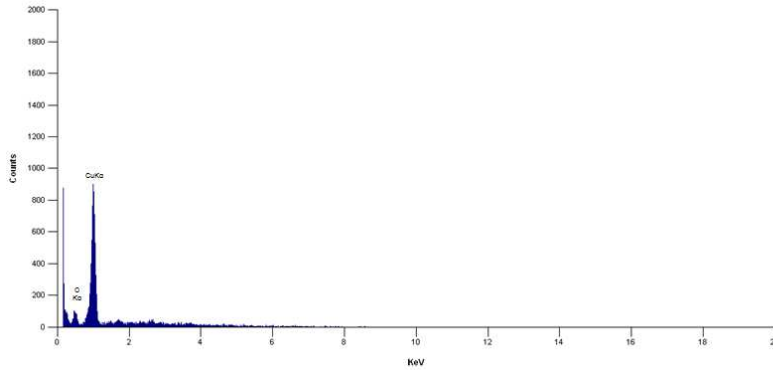
Figure 2(a). Green Particle 1



(I) Image under Optical Microscope



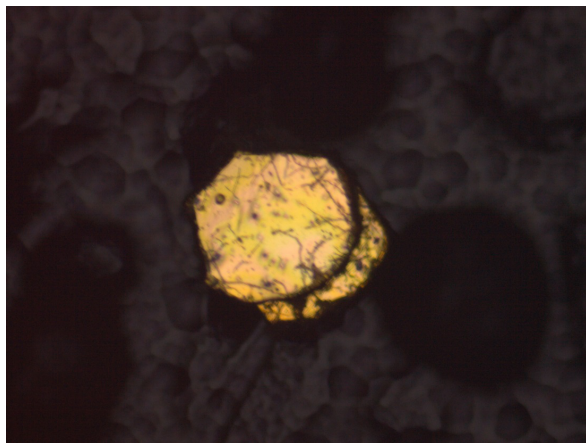
(II) Image on SEM Monitor



(III) EDX Spectra

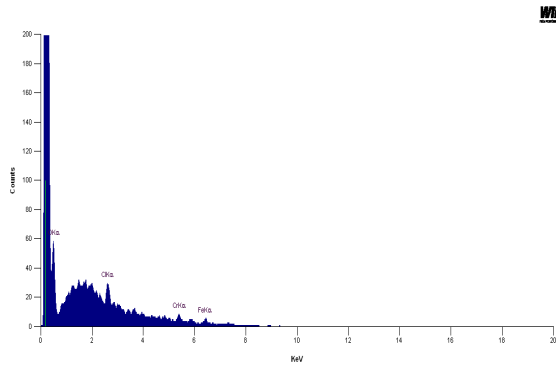
(IV) There is no Raman signal since particle is metallic.

Figure 2(b). Coral Particle 1

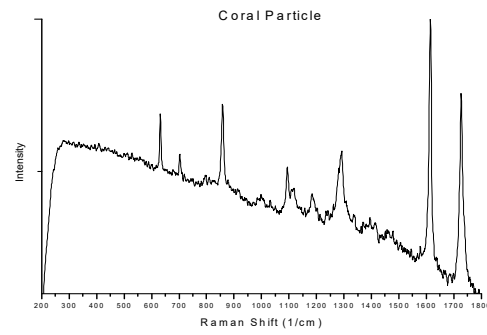


(I) Image under Optical Microscope

(IV) Could see the image on the SEM monitor for confirmation but not clearly enough to capture it on the monitor as the particle was charging.

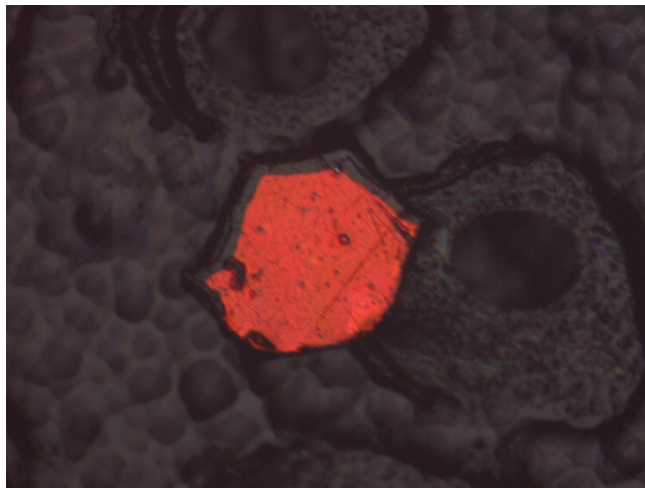


(III) EDX Spectra

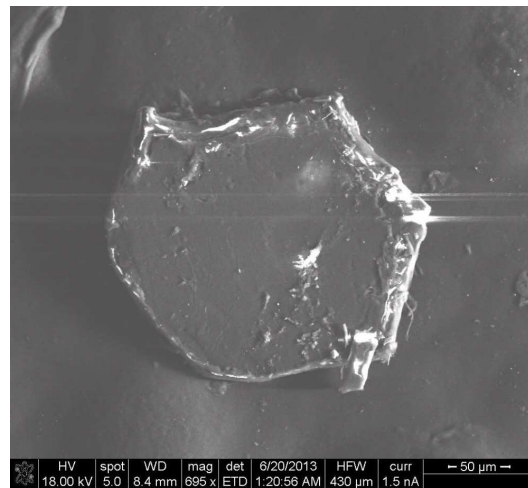


(IV) Raman Spectra

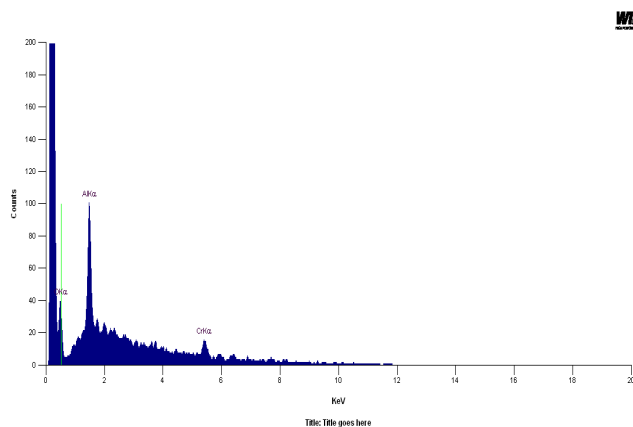
Figure 2(c) Coral Particle 2



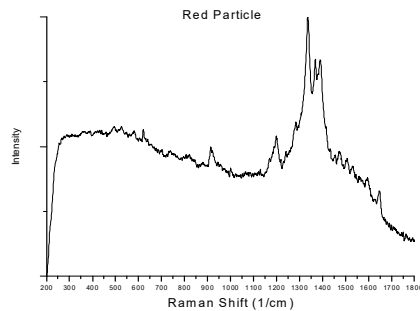
(I) Image under Optical Microscope



(II) Image on SEM Monitor



(III) EDX Spectra



(IV) Raman Spectra

Figure 2(d) Red Particle
Figure 2. Analysis of Green, Coral, and Red particles

On the basis of analysis, the four particles are: (1) Green Particle – (Cr, Fe) SiO₂, (2) Coral Particle 1 – Copper, (3) Coral Particle 2 – CRxFeCl₆, and (4) Red Particle - CrAl₂O₄. Notice the unusual elemental composition, hexagonal shape, and size of the particles.

Although unusual as they may appear, the formation of such and similar such entities occur under natural conditions in nature all the time. Take the example of a farmer who after preparing the ground, sows the seeds and nurture the growth of a plant by ensuring proper conditions such as water feed, nutrients, fertilizers, pesticides etc. (external factors). The seed already has the knowledge of the tree contained in it and the internal intelligent mechanisms (internal factors) regulates the growth in an almost automatic way. Another example, the rice plantation where the seeds grow into a plant creating the stem, the leaves, the branches and sub-branches, the flowers and the fruits (grains) in an regulated fashion. The grains have a protective cover formed in a layer-by-layer fashion which on maturation becomes the rice-husk. A typical analysis of this rice-husk composition when fully combusted is shown in Table 1A and B along with composition of a typical biomass (in this case bagasse) when fully combusted.

Table 1A. Proximate analysis of rice husk and bagasse

	Rice husk	Bagasse
Moisture	1.8%	7.30
Volatile matter	5.89%	19.14
Ash	89.87%	40.46
Fixed carbon	2.44%	33.10

Table 1B. Elemental composition of combusted rice husk and bagasse

Compound	Rice husk ash percentage	Bagasse Percentage	Compound	Rice husk ash Percentage	Bagasse Percentage
Na ₂ O	0.194	0.2	Cr ₂ O ₃	0.028	0.04
MgO	0.505	0.86	MnO	0.125	0.15
Al ₂ O ₃	4.083	1.10	Fe ₂ O ₃	1.274	1.62
SiO ₂	81.788	36.14	NiO	0.010	0.01
P ₂ O ₅	0.784	2.24	CuO	0.008	0.02
SO ₃	0.912	1.61	ZnO	0.007	0.07
K ₂ O	1.871	2.32	Rb ₂ O	0.003	0.002
CaO	1.270	3.10	SrO	0.008	0.01
TiO ₂	0.408	0.22	Y ₂ O ₃	0.001	
			ZrO ₂	0.005	

It can be seen from the table that the composition of the external coverings of the bio-species is largely inorganic in nature although their volatile matter and fixed carbon content can vary over a certain range. The four particles analyzed in this work and found at the meditation site have similar composition and can be subsumed to be a subset of the composition given in the table. The inference we wish to draw is that these particles are also formed in as simple and natural way as the coverings of the bio-species. If this is so, then every one of us must be emitting these particles and indeed this must be so.

However, the numbers are small, infrequent, easily removed in the wiping and washing of the daily routine that they go unnoticed. The practice of meditation intensifies the process of formation and secretion of these particles to a level where we begin to notice them. The process of excretion or shredding of the cover results in rejuvenation and is clearly the purpose for such occurrences. This is in line with the knowledge available from life-sciences that tell us that every cell of our body is replaced (rejuvenated) in a periodic manner and on body demand.

The above explanation for the formation of particles and the purpose of their formation while may be true in the case of an individual practicing intense meditation, it alone cannot be the case for more evolved persons – whose main objective, besides themselves, is to uplift the society around them. In their cases, the particles not only appear on their own body and neighborhood but also on several disciples located far and near and at different times. This is indeed intriguing and defy rational explanation. We put together a possible reasoning for how and why this happens in the next section.

3. Theory of Stochastic Resonance

By now, prestigious publications have carried full-length papers on meditation [1, 5, 8, 9, 10, 12]. But what the authors have proposed is broader hypothesis for the consideration of the scientific community. If in fact these particles are an instance of materialization of intentions as the referenced yogi is convinced that they are, then this must also be an instance of transformation of energy into matter. References to materialization of intentions have been made by Indian yogic circles for millennia. Scientists suggest that some 73% of the universe is composed of some form of energy, the rest being observable universe (4%) and dark matter (23%). So clearly, there is abundant energy in the universe. According to Einstein's famous equation $E = mc^2$, energy and matter are transformable from one form to the other. Examples of transformation of mass into energy are abundant but those of transformation of energy into mass are not. Nonstop long-distance flights of migratory birds and the example of the meditating yogi whom the first author personally knows for three weeks with a food intake of 2 glasses of milk (roughly equal to 400 calories) without loss of weight [2] appear to offer clues that living systems may have the capacity to harness some of this energy.

Desire and intention generally have a purpose that is often utilitarian in nature. In the case of individuals who have accomplished a higher state of consciousness, there are no desires or intentions nor any need for materialization. In such cases the desires or intentions are therefore not individual, but rather a part of a more holistic cosmic purpose. This is the plausible

explanation in the case when the particles were first discovered around the referenced yogi after his meditation practice in March 2012 (The gold particle).

It is possible that when an individual who has achieved a very high level of internal excellence delves deep into meditation, energy drawn from the five principal elements is created that flows through the body and emanates as a bio-energy field (an aura around an individual [11]) which gradually dissolves and becomes a part of the cosmic energy that exists round and around. Part of this energy condenses in the form of tiny particles. These ideas are depicted in Figure 3. Korotkov and associates have done considerable work on Gas Discharge Visualization methodology to capture the bio-energy of living subjects and nature (see, *e.g.*, [7]).

A possible qualitative explanation for why different particles are produced with different individuals can be attempted as follows. Imagine a set of concentric rings representing different levels of consciousness around a center point that represents the highest level of consciousness. Such a person occupies the center. The level of consciousness progressively diminishes as we move outwards from the center. Individuals with different levels of consciousness occupy these rings in accordance with their levels but remain connected to the center as part of the network. The coupling strength of the entities on the rings and the center is decided by the level of consciousness, process, belief, faith, compassion, willingness to surrender, etc. of the receiver and can be varying with time. Figure 3 illustrates the concept.

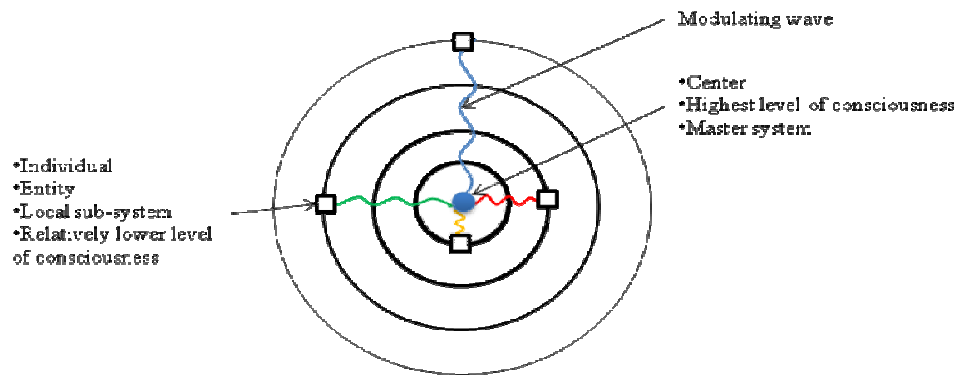


Figure 3. Concentric circles showing levels of consciousness and coupling of master and local sub-systems

We now invoke two known results in nonlinear systems dynamics to further explain the behavior of such coupled systems. One of the results refers to the phenomenon of resonance while the other is concerned with synchronization of such systems. It is known that when two systems operating at their natural frequencies are modulated (coupled) by a third (preferably, random) signal containing a consortium of several frequencies they can begin to resonate with each other. The center in this case exerts itself on the entity on the outward ring and the two together resonate. The system at highest level of consciousness thus helps the one at a lower level to achieve and march towards internal excellence. The purpose and the intention of the system at the center is thus to help achieve higher levels of consciousness for other systems in its environment for a better living.

The other result is equally important. It is known that the main system (master, in this case the center) and its local sub-system (slave, the entity on the surrounding ring) can synchronize with each other provided Lyapunov exponent (the index measuring its approach to some steady state) of the local sub-system is negative. Clearly those individuals who satisfy this constraint can synchronize with the higher level of existence or consciousness. In either of the two situations, viz., resonance or synchronization, the entity at lower levels of consciousness is promoted to achieve higher levels of consciousness and the cosmic intention of the center is served. But how does it explain the formation of different types of particles presented in this paper? We may advocate the following explanation to answer this question.

The center system when in resonance or state of synchronization with a system on the ring in the network provides a bout of energy with a view to bring up its level. The system at the lower end, however, may not be biologically adapt or tuned to receive all this energy. It therefore processes only a part of this energy rejecting or emitting the excess it cannot harness. The energy rejected varies from one ring to another. The entity on the farthest rings has lower level of consciousness and can harness relatively smaller levels of energy it receives and therefore the excess energy is higher for entities on this ring. Consequently, larger quantum of energy is thrown out. The excess energy condenses as particles. It may therefore be surmised that different particles are formed for entities on different rings in accordance with the observations reported by the yogi. They also report that these different particles are formed in higher levels of existence and can be different in accordance with the layer in which they are formed.

There are several well-known examples of stochastic resonance/synchronization. One among them is that of a group of marching soldiers and why they are instructed to march out of order when approaching a bridge. Stochastic resonance/synchronization may also explain how one twin knows the feelings of the other far away, healing in the presence of a Master, etc., and may have a bearing on the various manifestations of quantum entanglement.

These particles are sufficiently small, but it would be in error to classify them as nano- or the Higgs-Boson God particles. It is observed that these particles are often noble metal particles with stable electronic configuration. Having connected to the cosmic energy field, these particles appear anywhere (toothbrush, comb, in the hair, on or under the carpet *etc.*) at or near and even at great distances especially in and around the followers connected to this individual of a high level of consciousness.

4. Discussions & Conclusions

We have presented the analysis of several particles found at the meditation sites of a yogi and his followers. We do not believe that the source of these particle is extraterrestrial of exo-solar unlike the discovery reported by [4]. We have presented a theory of stochastic resonance as a plausible explanation of the formation of these particles. Deliberate synthesis of these particles by usual chemical means would appear to be exceedingly difficult as that will require a sophisticated manufacturing and R & D facility operating under the command of a complex six sigma and advanced control/optimization control strategy nonexistent at the referenced sites. Yogis have asserted for millennia that meditation raises our S component and makes us more

compassionate for the wellbeing ourselves and others [6], not just improve health. If meditation is this powerful as the results here appear to indicate, then raising our S components and making us more compassionate might be a trivial task and this may well be the real significance of this work. At the very least the findings are interesting and they could be paradigm shifting.

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