

# Genesis of Free Power Generation

Chapter 7 from The Physics of Free Power Generation  
also appeared in Explore Vol. 6, No. 3, 1995

By  
Paramahansa Tewari, B.Sc.Engg. \*

## Introduction

As per Lenz's law, the electromotive force (EMF) induced in a conductor has such a direction that the current produced by it opposes any flux change. More precisely, in a specific case of a conductor moving relative to magnetic field, the magnetic field produced by the current due to the induced EMF in the conductor interacts with the external magnetic field; that initially induced the EMF and, thereby, produces a net- force on the conductor opposing its movement across the magnetic-field. If the configuration of the conductor, through which the current flows, is made in such a way that the magnetic fields produced by the currents in the above two conductors cancel each other partially (if not fully), then there is a way to beat the Lenz's law, due to which the mechanical power required to move the conductor across the magnetic field to generate electrical power will get proportionally reduced.

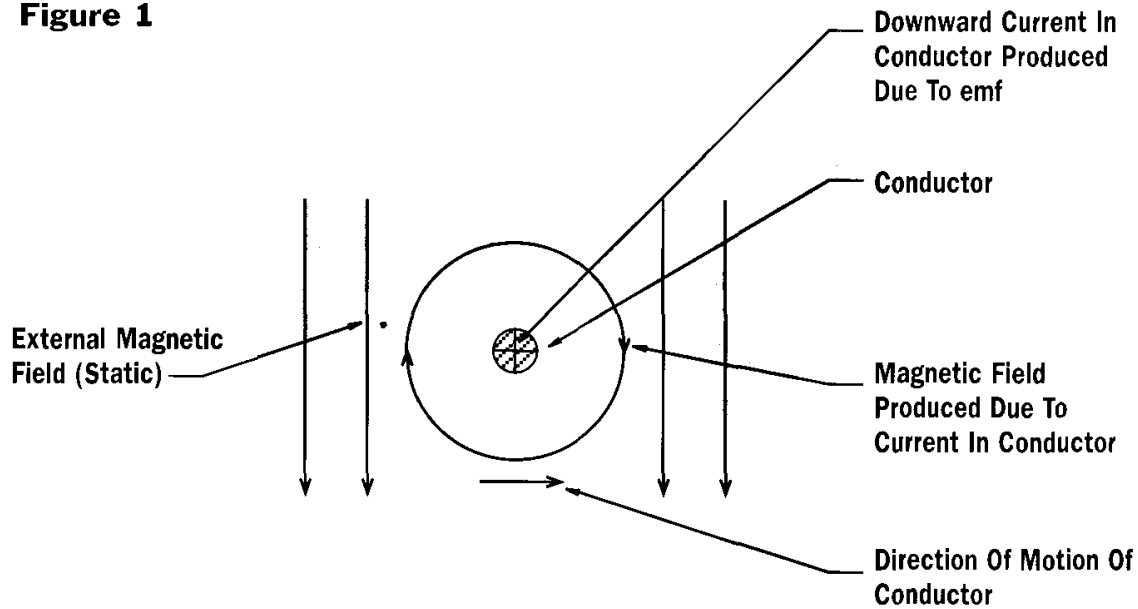
The design of the modern dc generator has difficulties in achieving the above configuration of the conductors since the generating element is the rotating conductor within the generator, whereas, the entire outer circuit is a stationary loop connected to the loads. It is shown below as to how the physical constraints in achieving the desired relative dispositions of the conductors can be overcome, and Lenz's law can be partly made ineffective. With the efficiency- increase to higher than unity in the above scheme, the question arises on the source of additional power. Through brief discussion it is shown that only with an alternate theory, which postulates generation of matter from space- medium, satisfactory explanations for over-unity machines can be had.

## Non-expenditure of External Energy in the Generation of Electromotive Force

In an electric conductor moving relative to a steady magnetic field, as shown in *Fig.I*, EMF is induced. The fundamental explanation for the EMF to produce current when the circuit is closed as currently believed is that the conductor has free electrons that account for the property of conductivity; and these electrons experience in succession a push (magnetic force) in one direction due to the induced EMF in the conductor. The EMF is defined as the tangential force per unit charge in the conductor integrated around the circuit. Thus, each electron in the conducting circuit receives energy, which is directly proportional to the product of the magnetic force on the electron and its velocity. With the above definition of the EMF, and the magnetic force on electron, it can be shown that an electric generator, with no-load induced EMF,  $E$ , and load current  $I$ , will deliver power equal to  $EI$ .

\* Former Executive Director (Nuclear Projects), Nuclear Power Corporation, India.

**Figure 1**

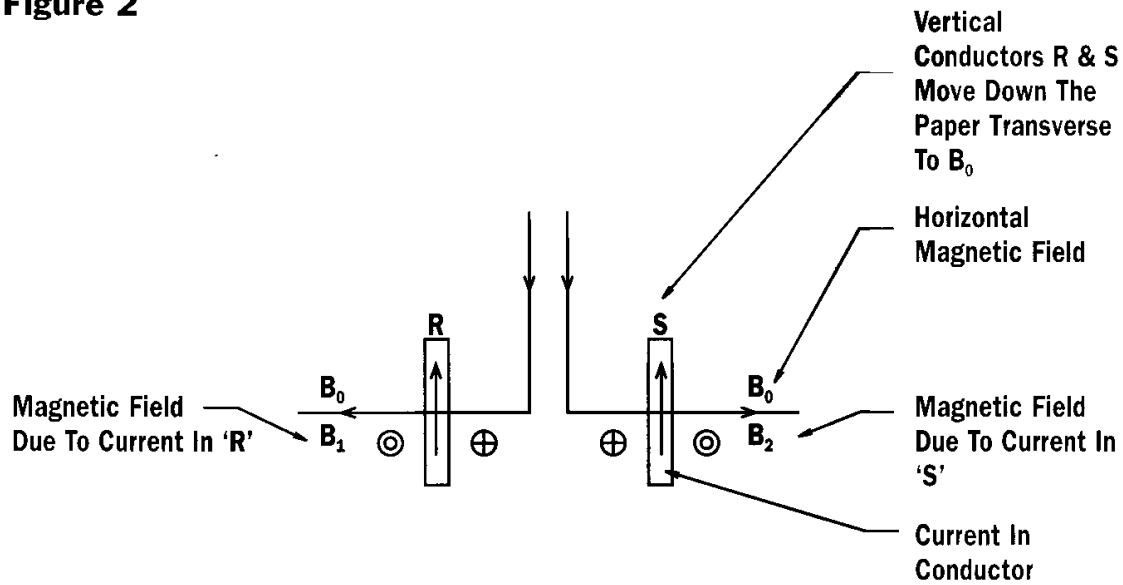


Consider the case of an ideal generator with permanent magnets for excitation which, when run on no-load, will not consume power towards windage and friction losses and, yet, EMF will be induced in its conductors. Since the induction of EMF in an ideal generator does not require power, the electrons of the circuit conductors for the flow of current when the circuit is closed can not receive energy from the EMF for the successive push on free electrons (against repulsive forces between them) as stated earlier. The agency for the flow of current in a circuit is no doubt the presence of the EMF in the circuit but, since the EMF itself has not received from the prime-mover any energy during its induction, the explanation for the origin of the force on electrons for the flow of current has to be found elsewhere.

### **Electrical Generation at Over-Unity Efficiency**

In *Fig.2* there are conductors R and S placed at right angles to the oppositely directed uniform magnetic fields. If the conductors are moved at right angles to the magnetic fields, opposite EMF induced in R and S will have opposite directions. If the circuit of the moving conductors R and S is closed through sliding contacts with stationary conductors external to the magnetic field (not shown in the figure), current will flow due to the fact that R and S are the EMF inducing elements in the circuit. The magnetic field  $B_1$  produced by the current in R, will be opposite to the field  $B_2$  as shown in *Fig.2*.

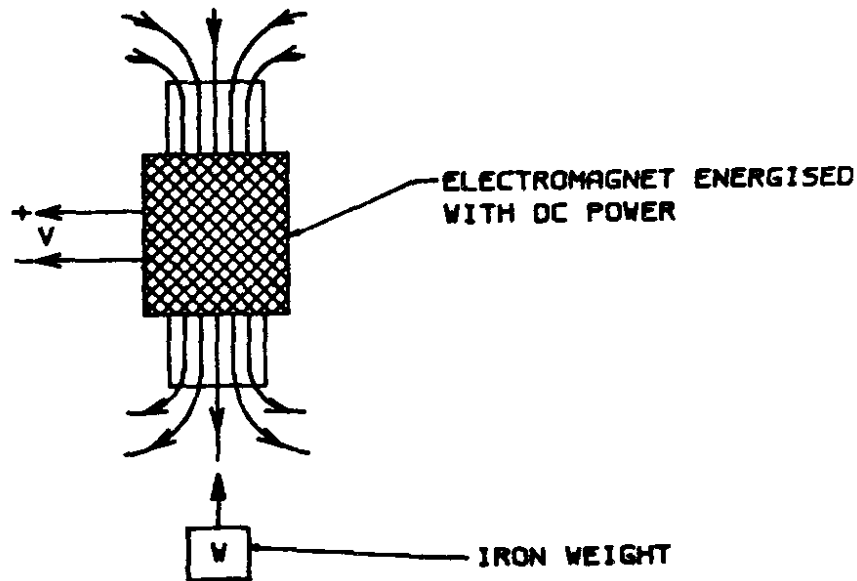
**Figure 2**



For the motion of the conductors across  $B_0$ , power is needed because the fields  $B_1$  and  $B_2$  have increased the original field strength of  $B_0$  on the one side of the conductors, and decreased the field  $B_0$  on the other side. If the conductors R and S are close to each other sufficiently,  $B_1$  and  $B_2$  will superpose and cancel each other, thereby reducing the power required by the prime mover to push the conductors against the magnetic field and thus increasing the efficiency of the generator to higher than unity. In an ideal case, if the fields  $B_1$  and  $B_2$  from R and S can be made to superpose each other to the maximum possible extent, it will lead to the phenomenon of free power generation. It is seen that the modern view, as per which a generator has to be given energy by its prime mover so that the EMF generated in it can impart energy to the free electrons of the circuit conductor for the current to flow, is a suspect and debatable point.

### **Work by Magnetic Field without Expenditure of Energy**

In Fig.3, an electromagnet that can lift magnetic iron blocks is shown. Irrespective of the fact whether the blocks are lifted or not the dc power to the magnet determined by its resistance remains constant; and this shows that work is being done by the magnetic field of the magnet without the flow of the corresponding energy (in addition to the constant power for the magnetic excitation) from any external source. Further, the strength of the magnetic field due to work being done in lifting the blocks does not deplete. The iron blocks raised to some height gain in gravitational potential but that is due to gravity field of the earth and not connected with the magnetic field system. Thus, it is possible to do work through magnetic field without any loss of energy of the magnetic field itself. It is on similar lines that the magnetic field in a generator pushes electrons to one end of the rotating conductor thus forming positive and negative polarities and inducing EMF; and in this process, though the electrons are being driven by the magnetic field, there is no depletion of the magnetic field strength of the excitation system of the generator. In view of the foregoing discussions, instead of assuming that EMF induced in a generator transfers its energy to push free electrons of the circuit conductor for the flow of current, following alter-native explanation is given.



### **Non-transfer of Energy from Electromotive Force to Electric Current**

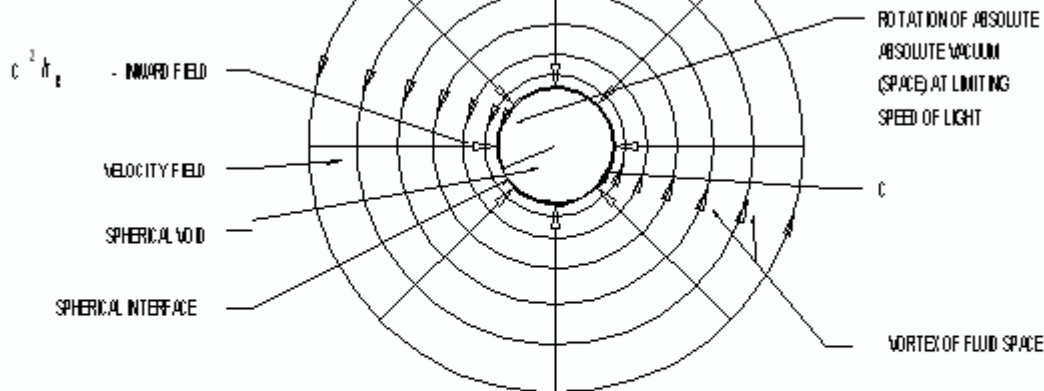
The positive polarity of a generator has atoms that have lost their orbital electrons due to induction of EMF and, therefore, being positively charged, electrically attract loosely bound outer orbit's electrons of the neighboring neutral atoms of the circuit conductor when the output switch is closed. This process of electric attraction of electrons by the positively charged neighboring atoms proceeds from one atom to the next throughout the circuit. The atoms of the circuit, due to the above transfer of the electrons, successively change from neutral to positively charged states and back to neutral and so on as the electrons flow is continuously maintained to positive terminal and further in the whole circuit. The electric attraction of the electrons by the positively charged atoms does not lead to the deficit of the electric field strength of the positively charged atoms; just as it happens in the case of attraction of the iron blocks from the electromagnet, discussed before, where the strength of the magnetic field is not depleted. Therefore, it can be concluded that the flow of electric current does not require energy from the EMF to be imparted to the free electrons.

### **Fields are Various Conditions of Velocity and Acceleration of the Medium of Space**

The reason for gravity, electric and magnetic fields to do work in certain phenomena without reduction in their field strengths can be found in a new theory of space, matter and energy <sup>1</sup> as per which the electron, which produces electric, magnetic and gravity fields, has in its structure (*Fig.4*) a non-material (non-viscous, incompressible, mass less, continuous) fluid, which itself is the absolute vacuum (space). It is the rotation of space at its limiting speed (equal to light speed,  $c$ ) that creates stable

**Figure 4**

# ELECTRON STRUCTURE



## NOTES:-

ABSOLUTE VACUUM WITH NON-MATERIAL PROPERTIES (INCOMPRESSIBILITY, ZERO-VISCOSITY, CONTINUITY & MASS-LESSNESS) OF AN IDEAL FLUID.

FIELDLESS, ENERGYLESS, SPHERICAL VOID, CREATED DUE TO ROTATION & BREAKDOWN OF ABSOLUTE VACUUM.

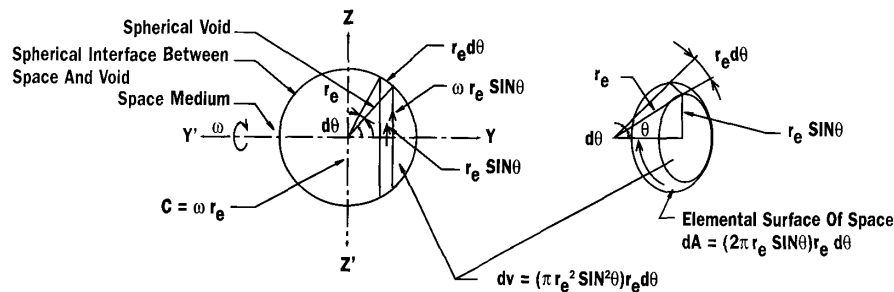
SPEED OF ROTATION OF SPACE FALLS OFF INVERSELY AS DISTANCE FROM THE CENTRE OF VOID.

RADIUS OF SPHERICAL VOID  $r_e \approx 10^{-11}$  cm.

electron. The velocity field produced due to spinning of space is the most fundamental state of cosmic energy. Since the medium of space is postulated to be non-viscous, the strength of the velocity fields in the structure of the electron does not change even when the electron is in motion and, therefore, the electron exists eternally with space spinning

**Figure 5**

## Generation Of Mass & Charge Of Electron From Absolute Vacuum



$\omega$  = Angular Velocity of Spherical Interface Around  $y - y'$   
 Void = Fieldless Spherical Hole in Space  
 Space = Non-viscous, mobile, continuous, incompressible  
 Void-Radius  $r_e \approx 10^{-11}$  cm

Charge on Elemental Ring Surface ( $dq$ ) =  
 Ring Area x Speed of Circulating Space on Ring Surface  
 $dq = dA (\omega r_e \sin \theta)$

Electronic Charge  $q_e = \int_0^\pi (2\pi r_e^2 \sin \theta r_e d\theta) (\omega r_e \sin \theta)$   
 $q_e = (\pi / 4) (4 \pi r_e^2 c)$

Dimensions Of  $q_e = \text{Length}^3 / \text{Time}$

Rest Mass Of Elemental Disc Of Void  
 $dm = dv \times \text{Speed of circulating space at the interface of the element}$   
 $dm = (\pi r_e^2 \sin \theta r_e d\theta) \omega r_e \sin \theta$

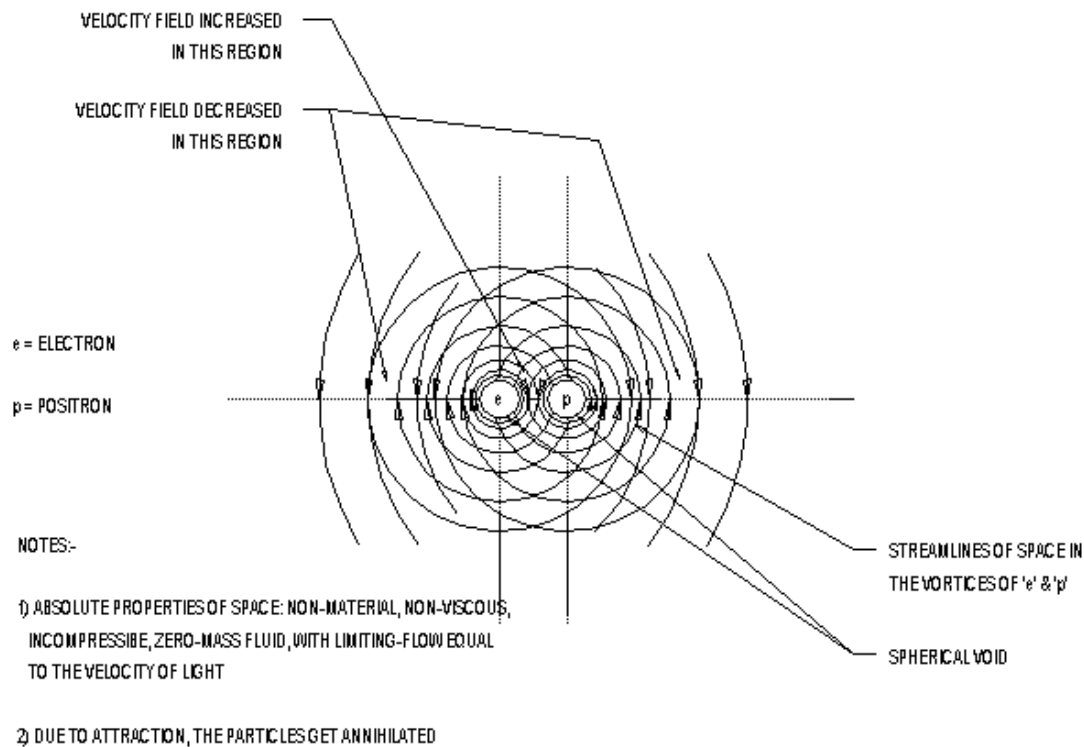
Electronic Rest Mass  $m_e = \int_0^\pi (\pi r_e^2 \sin^2 \theta d\theta) = (4 \pi / 3) r_e^2 c$

Dimensions Of  $m_e = \text{Length}^4 / \text{Time}$

at maximum speed (*Fig.5*), and without any loss of mass, charge, or energy from its structure eternally, till it gets annihilated (*Fig.6*) by its opposite particle positron. It has been shown<sup>1</sup> that from the velocity fields produced by limiting rotation of space, mass and charge of electron are created (*Fig.5*), and gravity, electric fields are produced. The magnetic field is concluded to be the conversion of the spatial velocity-field itself when electron is in motion relative to space. Therefore these fields too cannot dissipate their strengths during interaction, and are indestructible entities as long as the electron exists. During super-position of electric fields, as noticed in the creation of neutral state of matter when positive and negative charges meet; or when oppositely directed magnetic fields occupy the same region of space, the original field strengths are restored when the initial conditions prior to the superposition are re-established.

**Figure 6**

ATTRACTION BETWEEN 'E' & 'P'



### Absence of Energy- Exchange in Radiation (Light) Phenomenon

Due to motion of electron, or, if it is supposed to oscillate about its center, a space point P will have different magnitudes of the fields there (*Fig.7*) since the strength of the electron's velocity-field, which determines the field, falls inversely as the distance from the electron's center. The effect of decreasing field potentials trailing behind a moving electron, can be shown<sup>1</sup> as electromagnetic (light) effect. The process of "readjustments" of the magnitudes of the fields in space as particles move or oscillate is seen as radiation, light, or heat-effect. There is no loss in strength of the velocity field or energy from the structure of electron due to radiation that is produced when it moves or is accelerated.

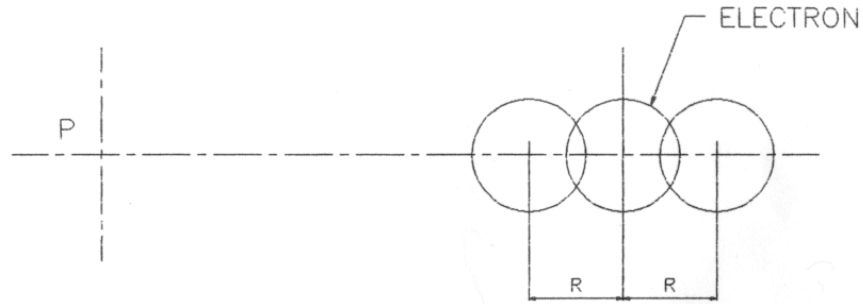


Figure 7

The flow of electric current causes several electrons to jostle around the atoms and, thereby, the kinetic energy of the moving electrons produces oscillations of the atoms within the conductor, and results in “changes in the field potentials” of the atoms in their vicinity, and also spreading out at speed  $c$  outside the conductor. As discussed before, the atoms of the conductor undergo successive changes from neutral to positive state and thus produce in their surroundings “changes in their field potentials” due to the ‘gravity potential’ in neutral state, changing into ‘electromagnetic potential’ in positively charged state. These “changes in field potentials” have the effect of ‘heat radiation’; and here again the energy in the structure of the electrons and the atoms of the circuit conductor remains a constant quantity. (*The mass-energy equation  $E=mc^2$  is valid during the process of annihilation of electron and positron, and also during the creation of these particles; but not in the process of the vibrating- atoms or acceleration of electrons due to which light is produced*).

The “photons” produced in heat radiation are not energy-entities as conventionally believed; rather, these are the effects of the “decreasing field potentials” of the vibrating atoms. Since, a neutral atom, say A, during oscillations produces radiation pulses due to the changes in its gravity potentials, its neighboring atom, say B, also undergoes changes in its gravity potentials due to the radiation pulses from A; and in turn, B produces radiation pulses of its own such that the pulses from B are opposite in phase to those from A, thereby, helping in restoring the stability of A. *Kinetic heat due to vibrations of atoms is a process that, without exchange of energy from the structure of the atoms, restores stability or ‘thermal equilibrium’ in the surrounding matter; and it is therefore that within a thermally closed system, all bodies come to the same temperature.* The present concept of ‘exchange of energy’ between bodies due to heat radiation fails when rigorously analyzed taking note of the process of creation of matter <sup>1</sup> from spatial reality.

## **Conclusion**

If heat, produced in electric circuit due to resistance to current flow, is not 'energy' in a true sense, and the EMF does not require energy for the current to flow; then a generator, designed with new configurations of the magnetic field and conductor, will take much less input than the output power, in addition to the constant magnetic excitation to produce EMF. The experimental results from various models of space power generator (SPG), in which the configurations of the magnetic field and conductor are different from the conventional generators, have shown that in a Motor-SPG set, over and above the windage and frictional heat, for each kW of mechanical power, about 2.5 kW of electrical power can be generated, thus providing support to the above theoretical considerations. It also gets evident that there exists the possibility for a highly efficient free power machine that will make 'perpetual system' possible.

## References

1. Tewari, P. (1984) "Beyond Matter".

## Biographical Data

Pramahansa Tewari, born in January 1937, graduated in Electrical Engineering in 1958 from Banaras Engineering College (BHU), India and held responsible positions in large engineering construction organizations, mostly in Nuclear Projects of the Department of Atomic Energy, India. He was also for a year deputed abroad at Douglas Point Nuclear Project, Canada. He was Project Director, Kaiga Atomic Power Project, and retired from the post of Executive Director (Nuclear Projects), Nuclear Power Corporation, Department of Atomic Energy, India.

Fundamental of Physics attracted Tewari's imaginations right from the school and college days. Over the last few decades, his new ideas on the basic nature of space, energy, and matter have concretized into definite shape from which a new theory, Space Vortex Theory, has emerged. The theory reveals the most basic issue of relationships between the medium of space and the universal matter, precisely pinpointing that space is the more fundamental entity than matter. The physical significance of mass, inertia, gravitation, charge, magnetism and light are revealed by extending the analysis of the theory beyond the material properties, and into the substratum of space, which a physical theory can possibly ever reach. The real universe is shown to be the opposite to the currently held concepts of concrete-matter and empty- space. In addition to many published papers, the books that he has authored are:

1. The Substantial Space and Void Nature of Elementary Material Particles (1977)
2. Space Vortices of Energy and Matter (1978).
3. The origin of Electron's Mass, Charge Gravitational and Electromagnetic Fields from 'Empty Space' (1982)
4. Beyond Matter (1984)
5. Physics of Free Power Generation (1996)
6. Beyond Matter (1995), edited by Dr. Wolfram Bahmann.
7. Spiritual Foundation (1996)

He has lectured as invited speaker in International Conferences in Germany, USA, Italy and Japan on the newly discovered phenomenon for which he coined the name 'Space Power Generation'. For the practical demonstration of the generation of electrical



power at over-unity efficiency, he has built models of Space Power Generators that defy explanations through conventional physics.

