

New Energy News

Monthly Newsletter of the Institute for New Energy

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SEVEN MONTHS OF GROWTH - PUBLISHING POLICY

The following is reprinted from the first issue of *NEN*: "*NEN* publishes **facts**, theory, experimental data, patents, reports on conferences, short letters to the editor, and short editorials. The primary purpose is to communicate the <u>facts</u> about alternative energy systems that will be environmentally benign."

The same staff that produces *Fusion Facts* has been producing *New Energy News*. *Fusion Facts* (now in its fifth publishing year) is credited with changing world-wide judgement about the reality of cold nuclear fusion. It is heartening to learn that *NEN* is succeeding to change the world's perception about **space energy**.

We owe a debt of gratitude to the organizers of the first International Symposium on New Energy and the preceding retreat. We especially want to recognize the financial sponsorship of Bill and Lynda Beierwaltes for the April, 1993 Estes Park retreat which was probably the single most important event that has occurred in the history of alternative energy. The idea to provide a forum where over 20 of the world's leading new energy investigators could meet and exchange information was a brilliant conception and now an historic reality.

That there was a need for a publication to rapidly disseminate news of new energy developments is attested by the rapid growth of *New Energy News*. However, after seven months, our editorial policy needs to be reviewed. To get information out rapidly requires that we do not use a peer-review system (which could delay publication of information by two to six months). That decision places a great deal of responsibility on the editor because the editor becomes a one-man decision maker. Therefore, it is important that the readers of *NEN* understand our publishing policy. The following concepts guide our selection of what gets published:

- 1. We review and summarize the literature (trade, technical, and journal publications) on new energy and related technologies.
- 2. We use correspondents in various parts of the world to send us news items.
- 3. We publish short letters to the editor, especially where new data or new information about working devices is provided.
- 4. We publish short articles about existing technology, new developments, or new ideas that appear to be practical.
- 5. We avoid the publication of emotional complaints.
- 6. We are not a history newsletter. We are interested in past technology only if it is replicated, updated, and appears to be practical.
- 7. We evaluate articles based on our understanding of new science (old science but admitting new discoveries.) We accept the evidence that space is energetic and we promote the idea that space energy can be coupled into devices to provide useful power. We accept the voluminous evidence that nuclear reactions can take place on the surface or in metal lattices.
- 8. We do not evoke the supernatural in any form to explain new energy.
- 9. New Energy News is not a journal and we cannot accommodate lengthy articles. However, we will summarize some articles and include the name and address of the author for further information.

The editor takes full responsibility for making publishing decisions and recognizes that mistakes will be made. Our editorial policy is to use our best efforts, contacts, etc., so that we publish facts and not fraud. We welcome your criticism and suggestions.

The small staff at *NEN* depend on you, the reader, to provide us with information, to expand our circulation, and to improve our newsletter. We strongly desire to improve the world by changing the way the world makes and uses energy. We can only succeed with your help.

Hal Fox, Editor

Fusion Briefings

SUMMARY OF THE RCCF

By Hal Fox September 29 through October 1, 1993

The Russian Conference on Cold Fusion (RCCF) was held in the Black Sea resort of Abrau Durso. Five attendees were from outside the Commonwealth of Independent States, and an additional 30 CIS scientists attended, including some from Russia, Ukraine, and Belarus.

The conference was opened by welcoming addresses from Drs. Bazhutov and Koretskiy. The publication in Russian of Hal Fox's book on cold fusion was welcomed. The publication of a book on cold fusion by a non-Russian author was deemed to be important for the convincing of important members of the CIS scientific community that cold fusion is a new science.

Hal Fox presented his review paper on cold fusion and other enhanced energy systems. This paper shows that the discovery of cold fusion has turned out to be rich in new phenomena. At least five methods of creating nuclear reactions in table-top experiments have now been reported and replicated.

A paper by Professor Steven E. Jones was presented by Victor Shifrin and Hal Fox. Professor Jones declares himself to be a member of the scientific community who accepts the concept of cold fusion. but not the production of excess power from cold fusion devices. He describes the latest work at BYU in his search for neutrons. Neutrons are considered to be the definitive byproduct to be expected from cold nuclear fusion. Prof. Jones stated, "... my rationale in discussing our recent work at this conference is to seek advice of what can be done in our search for compelling evidence" [for cold fusion]. One of the suggestions was not to look for duck eggs in a hen house. [The preponderance of evidence from hundreds of experiments is that the nuclear by-products of cold nuclear fusion are heat, tritium, gammas, soft X-rays, and neutrons with the neutrons being the least likely byproduct of whatever reactions are producing excess power.]

Dr. V.A. Romodanov presented three papers on various aspects of plasma devices used in cold nuclear fusion including the generation of tritium from a variety of metals. He and his associates are from Scientific Research Institute of SPA LUTCH at Podolsk, Moscow Region. Their study of nuclear reactions in condensed media (NRCM) using powerful glow discharge is reported to be 100% reproducible in tritium generation at levels of one to ten million atoms per second.

Dr. Y.N. Bazhutov and his associates presented seven papers exploring various aspects of the Erzion massive particle theory. The Erzion particle theory proposes two charged and one neutral particle which promotes cold nuclear fusion by providing appropriate screening to reduce the effectiveness of the Coulomb barrier. The theory is extended beyond cold nuclear fusion to show that some aspects of solar and planetary physics can be explained by Erzion particle catalysis.

Dr. J.-P. Vigier presented his review of cold nuclear fusion as being a two-stage process with a low-level one that may be a new type of chemical process whereby the hydrogen isotope is reduced below its normal ground state with the production of excess energy. The second stage of the process, which experimental evidence shows to be nuclear, is more energetic, produces more excess power, and is likely associated with the original Ampère Law.

Metyolkin Feodorovich presented two papers on the dominant role that is provided by the increased

vibration in a metal lattice during or near phase changes. His analysis of data and knowledge of increased vibrations in the fracture or reconstruction of certain crystals has led to his characterization of cold nuclear fusion as being strongly dependent on the level of vibration in the crystal lattice.

Drs. Irina Savvatimova and Alexander Karabut presented a review of their work with glow-discharge cold nuclear fusion using a low-pressure deuterium atmosphere. The emphasis of their presentations was on the impurities found in the cathode materials before and after use in their cold nuclear fusion glow-discharge apparatus. Their conclusions are that when properly done, the glow-discharge device produces both fission and fusion by-products accompanied by bursts of neutrons, tritium, X-rays, gamma spectrum, transmuted elements, and some degree of lingering radioactivity.

Akito Takahashi presented a review of his extensive work in both experiments and theory of cold fusion. Dr. Takahashi boldly proclaimed, some years ago, that there was evidence for multi-body nuclear reactions in cold fusion devices. In this latest presentation, he shows how a palladium lattice can provide for such 3- and 4- body nuclear events. He pointed out that several plasmas are required, a Pd metal plasma, an electron plasma, and a deuteron plasma. Under these conditions and subsequent to a high deuterium/palladium loading ratio (at least locally), he shows that multi-body reactions can be observed.

A new aspect on cold fusion was the subject of a paper by Yu.A. Kornienko, V.I. Visotskii, and R.N. Kuzmin on rheology (the science of deformation and flow in matter) of metals. In their experimental work these scientists have found that certain rheological changes can be produced in 25 different metals including Pd, Pt, Ti, Al, Cu, etc. These changes, when in the presence of deuteron concentration, can result in the formation of micro-cavities; the automatic sizing of these cavities for optimal cold nuclear fusion; the creation of stress and collapse of the micro-cavities; and the atomic "welding" of two surfaces when properly held together in the correct environment.

Dr. Rybalko from Kalkov belongs to a group of scientists that have been working on cold nuclear fusion since 1989. The report discussed ion implantation on Ti and Pd targets. Their work has been published in a Russian journal.

Dr. Melvin Miles (U.S. Navy, China Lake) presented the results of his elegant experiment in which the gaseous by-products of cold fusion were captured and tested for helium-4. Dr. Miles described the elaborate precautions taken to ensure that the helium-4 being measured did not come from atmospheric contamination. Miles described his latest experimental arrangement that has been improved to greatly reduce any transfer of helium in or out of the experimental apparatus and connections.

Dr. A.G. Lipson presented a paper on "Cold Nuclear Fusion Induced in K_2DPO_4 Single Crystals." During thermal cycling of the crystals, neutrons are most likely to be observed at temperatures near the Curie point. Tritium was also measured as a by-product of the cold nuclear fusion.

Dr. V.A. Filimonov (Belorussian State University) presented a theoretical paper. The basic idea is that cold fusion can be promoted by strong non-equilibrium conditions such as in the presence of shock waves. Shock waves may be internally generated by the fracturing of Pd during phase changes.

Dr. Michael McKubre presented a report on the flow-calorimetry work at SRI, International that is sponsored by funds from the U.S. Electric Power Research Institute. The essence of Dr. McKubre's presentation was: "If the palladium can be loaded with deuterium to a D/Pd ratio of 0.85 or more, then cold fusion excess heat is almost 100% reproducible." His presentation won for him an award as the best paper presented at the conference.

Dr. Skuratnik presented an excellent paper on the heat balance at a nickel cathode using light water. A nickel plate of 1 x 4 cm and 4 mm thick was used. The electrolyte was Cesium Carbonate. Measurements made of excess power as compared with cell current were observed. The following pairs of numbers represent mA of current followed by percent of excess power observed: 100 - 7; 200 - 3; 300 - 30; 400 - 34; 500 - 20; 920 - 29.5. When the polarity of the current was reversed the excess heat output went to zero.

Dr. Lyakhov reported on experiments using Pd and PdO structures. With the use of deuterium a production of neutrons is observed plus a burst of heat. The measurements showed that the neutron burst preceded the heat emission. Neutrons bursts

were 300 to 500 neutrons per second for 1 micro second intervals.

One of the presentations had great historic interest and was made by Alikin Victor Pavlovich of Perm. Pavlovich had discovered, about 20 years ago, that an electrochemical cell using stainless steel electrodes and sulfuric acid as the electrolyte would produce excess heat. His work was not scientifically accepted at the time. However, after Pons and Fleischmann made their announcement, his work became more believable.

CONCLUSIONS

The RCCF was an important conference. More cold fusion researchers have again met and exchanged experimental results and theories. No one had a negative paper. All experimental papers reported on the achievement of nuclear reactions or at least on some strong evidence for anomalous excess power obtained from a variety of different types of devices or systems. The co-chairmen (one of which is Hal Fox) of the International Conference to be held in Minsk, Belarus in May, 1994, have dedicated their time and talents to have representatives from a broad international group including the groups represented at the RCCF and other groups from the CIS.

Hydrogen Energy

HYDROGEN ENERGY FROM POLLUTED WATERWAYS

by David L. Spines

In the past 25 or so years there has been periodic interest shown in changing our present day non-renewable fossil and carbon fueled energy systems to one using hydrogen. And, though this may be possible, most realistic proponents realize that this change must be a gradual one.

...Electrolyzing waste waters would immediately result in the production of pure oxygen and pure hydrogen. And the first environmental benefit would come from the release of the proper amounts of pure oxygen back into the atmosphere [until the

hydrogen is burned]. The second, and most obvious benefit would be the hydrogen for energy.

Though it is true that wind, solar and even geothermal powers, as "free energy" sources cannot handle the entire burden of our energy requirements either independently or in unison, they are all individually coming on line as contributors.

This newsletter addresses many new theoretical sources of energy, and this writer would appreciate any suggestions as to further decreasing the so-called efficiency losses involved [in the production of hydrogen].

In conclusion: Though our current pessimists can see no immediate future for electrolyzing water, Mitsubushi of Japan is currently about to explore doing the same to sea water, indubitably more difficult and expensive than doing so to polluted waterways whose electrolytes are at least much less corroding and gentler on the electrodes of any electrolytic converter. Therefore, though it's plain that hydrogen as an panacea to our future energy needs is out of the question, as per the catching up it would have to do, and as per the many new and more efficient developments coming onto the scene, it is just as plain to see that using it to some limited degree soon will be required for our very existence. But, we need your help.

[Abbreviated by Editor]

Rotating Space-Energy Machines

SWITCHED RELUCTANCE MOTORS II: THE ADAMS MACHINE

By Dr. Harold Aspden

Readers of my contribution on pp. 7-8 of the September 1993 issue of *New Energy News* may like to have some clarification as to why the subject of my U.S. Patent No. 4,975,608 differs from the Adams machine.

Essentially, the distinction depends upon whether or not the rotor poles include permanent magnets.

The underlying principle of both machines is the use of the very powerful mutual magnetic attraction of rotor and stator poles in a machine having salient poles on both rotor and stator. If permanent magnets are built into the pole structure of the machine to strengthen the force action so as to pull the poles into register, that means that there must be a way of weakening that action as the poles separate. Alternatively, if the poles are not 'pre-polarized' in this way and the magnetic flux is activated by putting power on an electromagnet, that power must be switched on during the pole approach phase and switched off as the poles recede. The former version is the essential feature in the Adams machine and the latter version is the chief function in the machine I propose, though my design does include permanent magnets in a stator circuit to provide magnetic bias in a way that has been the case in early designs of magnetic amplifiers. That bias is essential if one is to tap the zero-point energy.

The Adams machine offers a very special advantage. By building a machine which uses permanent magnets to provide the flux bridging the pole gap, which is where the real mechanical work is done, and by controlling the force by weakening and, indeed, actually reversing the flux in the stator poles, Adams achieves a very economic effect. Note that the active region of the stator pole is precisely the region embraced by the stator winding. The power supplied to that winding really only needs to be sufficient to cancel the field action of the permanent magnet that penetrates across the gap to be in that stator region and so the current drawn by the winding need not be excessive because the magneto-motive force (MMF) drawn from the magnet and reaching into the stator is negligible compared with the MMF absorbed in the gap. The stator windings are wrapped only around the pole region that governs the action and so there is no field leakage that needs to be overcome by feeding input power.

Of course, the machine has to be switched and the usual inductance problems arise, but given that that is a routine circuit design problem there seems no reason why the Adams motor cannot be developed rapidly for general use.

When I made my proposals in my patent I thought it best to avoid designs in which a permanent magnet could be part of a flux path subjected to alternating flux variations. My suspicion was that the magnet would eventually demagnetize or be the seat of losses generated by the a.c. Accordingly, my proposal followed the alternative route and my invention was directed to the current switching problem for minimal loss and optimum commutation.

This concern may prove unwarranted as we see the Adams motor running over a long time span and readers may, in this connection, see support for this and welcome having their attention drawn to the Jones motor, the subject of a 'non-orthodox' proposal presented at the 1988 Symposium on New Energy Technology held in Hull, Quebec under the auspices of the Planetary Association for Clean Energy.

The paper of record at pp. 167-182 in the proceedings of that meeting, which, incidentally, appears just ahead of a paper by Don Kelly entitled "Permanent Magnet Motors", discloses a technique for converting a standard automobile alternator, which is a three-phase generator having salient permanent magnet rotor pole pieces, into a rather special form of motor. Jones found that by rewiring the machine and using a switching technique for supplying power in a way which developed pole repulsion as the poles separated, he obtained exceptional torque properties and extremely high efficiency as a motor.

Note that the automobile alternator did not have a salient pole stator, such as we see in the Adams machine. The winding was formed in the usual slot distribution. However, if it had had that feature, then I believe that Jones would have implemented the Adams machine directly. As it was, and here I must be careful as I do not want to imply that Gareth Jones was really claiming 'free energy' and 'over-unity' operation, I distinctly recall my own discussions with him about his belief in the aether as a source of energy. The efficiency of that Jones motor was abnormal and Jones knew it! Indeed, after explaining why his machine functions differently from a conventional motor, he wrote in his paper:

"The result of this phenomenon is that, when the field current is increased, the input power decreases because of the increased back EMF, but the output power increases because of the additional force produced between the two fields, and therefore, the efficiency of the Jones motor is proportional to the field current.

"This characteristic, as far as is known, is unique to motors operating on this principle, known as the Jones principle, and it was to demonstrate this phenomenon that the motor was originally designed. The efficiency of a motor can be increased by increasing the field current, and this phenomenon can be demonstrated until the back EMF exceeds the applied EMF over a portion of the cycle, and the machine acts as a generator. When this occurs, the speed decreases, reducing the back EMF and the machine reverts to motor action again. This cycle occurs in a very short time interval, and to all intents and purposes, the machine speed is constant."

Bearing in mind that Gareth Jones would hardly be projecting aether theory in explaining the operation of his motor if his experience of its operation was in line with orthodox principles, I really think the Jones machine is worth the reader's consideration.

Jones' paper explains how an automobile alternator can be converted to become such a motor and includes the control circuit for the switching operation. The way forward in building a version the Adams machine may, therefore, be to dismantle an automobile alternator following the Jones guidance. This provides the permanent magnet rotor and Jones describes the circuit control. Before rewiring the stator the stator laminations should have slotted portions cut away to form the salient poles and one should then have a viable Adams machine.

H. Aspden, Sabberton Research. P.O. Box 35, Southampton S09 7BU, England. 6 September 1993.

LARGE ROTATING MASS WANTED!

A Plea for Experimental Help By Hal Fox

Bruce dePalma [1] instructs us that a mechanical vibrating tuning fork (such as used in an Accutron timepiece) will run slower in the vicinity of a rotating mass. He also suggests the use of an electronic frequency counter to plot the isolines (lines of equal frequency) in the vicinity of such a rotating mass.

It is not difficult to get an electronic frequency counter (we have one in our laboratory). It seems reasonable to speculate that the larger the rotating mass and the faster it is rotating the greater the change in frequency. DePalma reports that, "The effect is roughly proportional to the radius and mass

of the rotating object and to the square of the rotational speed."

This is an important experiment that should be performed as soon as possible under carefully established conditions. New Energy News will publish the results. The following experiment procedure is suggested:

Experimental hypothesis to be verified:

- 1. Space energy is everywhere.
- 2. A rotating mass affects space energy in the vicinity of the mass. One of the measurable evidences of this effect is a change in frequency of a vibrating mass.
- 3. The direction of rotation has a negligible influence on the proposed measurements.
- 4. The change in vibration is stronger in the axial direction than in the plane of the rotating mass.
- 5. The rotating mass produces measurable differences in a volume of space around the rotating mass.
- 6. The effect is such that a lowering of the frequency of a vibrating mass is expected.
- 7. The effect would not be sensed by a timepiece remote from the rotating mass.

Experimental procedure:

- 1. Use the 60 Hz electrical power from the local power company as the timing source.
- 2. Use a digital counter to provide a START and STOP signal to a monitoring PC. Select a suitable count such as 1024 cycles.
- 3. Use the START and STOP signals to provide a counting time window for the electronic frequency counter.
- 4. Instrument the rotating mass to measure rpm and connect to the PC.
- 5. Use each pair of START and STOP signals to instruct the PC to record the frequency count from the counter, the time of the measurement, and the measured rpm.
- 6. Manually record the position of the vibrating mass with respect to the rotating mass for each series of experiments. Keep the vibrating mass in the plane of the axis of the rotating mass.
- 7. Make at least 25 recordings for each position while maintaining a constant rpm.
- 8. Repeat for about four levels of rpm. (Remember that it is hypothesized that the higher the rpm the greater the effect.)
- 8. Plot the results separately for each rotational speed.

9. Analyze the data to determine the nature of the equation that will explain the data recorded. The hypothesis is that the equation will have the following form: Change in frequency is a direct function of rpm squared x radius x mass and an inverse function of the square of the distance from the rotating mass.

Depending on the choice of units there will be a constant that will have some relation to the strength of space energy. (If one could partially shield space energy, the constant would vary.)

Among our collective readers, we have all of the intellectual, data acquisition, and computer programming capability to set up and perform this experiment. Unfortunately, such experiments require the use of scarce resources (time, money, and equipment). If any of you are sufficiently interested to either perform the experiment or to make a monetary contribution toward this important experiment, please contact me at (801) 583-6232 or FAX (801) 583-6245.

REFERENCES

[1] Bruce dePalma, "On the Nature of Electrical Induction," *New Energy News*, Oct 1993, vol 1, no 6, pp 1-8, 14 refs, 5 figs.

LETTER FROM SHIUJI INOMATA

Thank you for sending us the *New Energy News*, September issue. As there have been strong voices, both domestic and overseas, that we should develop a practical N-machine, we have been doing the basic design of JPI-II, based on the experimental data obtained from the JPI-I.

The JPI-II should be self-sustaining, and at the same time, should feed [output] substantial electrical energy outside. And for that purpose, full utilization of super-conducting magnets and technology is planned. In the N-machine-Faraday motor combination, such a situation is realized, if the electrical energy created from the vacuum is bigger than the energy needed for no-load rotation of the N-machine plus the loss in the Faraday motor (see my 26th IECEC paper).

Vacuum electrical power vs. rotational velocity is estimated for two cases (30cm and 50cm diameter, 4 Tesla magnet) in the enclosed table. I feel that the self-sustaining condition will be met in 5,000 - 6,000

rpm in both cases, as you also suggested in our phone conversation.

With very best regards, Shiuji Inomata, Ph.D.

PS. Energy needed for re-liquidization of vaporized coolant might be negligible, if sufficient heat insulation is provided.

[Dr. Inomata presented the design for the JPI-II motor at the JPI meeting in Tokyo, Japan, on Oct. 30, 1993.]

Specifications for JPI-II: Single rotor type N-machine, 30 cm dia., copper rotor, magnetic field generated by super-conducting coil. Average magnetic flux density in copper disk is 4 Tesla. Max. rotational velocity is 8000 rpm. Maximum power output EMF: 40 V; current: 7000 A. Copper-carbon brushes are used (30 x 55 mm) on the periphery of disks (6 pieces) and on periphery of axis (two pieces). A DC power supply of low voltage and high current is used to energize the super-conducting coils and for starting the machine.

New N-machine (JPI-II) Basic Design

(using MKSA unit system)

 $V (emf) = \frac{1}{2} \omega B (r_2^2 r_1^2)$

B (magnetic flux density) = 4.0 Tesla

R (load resistance) = 1 milliohm

 ω = radian per sec.

Rotation Disk Diameter: 30 cm $(r_1 = 3 \text{ cm} : r_2 = 15 \text{ cm})$

| rotation velocity (rpm) | V (V) (open EMF)* | (load current) | W (KW) (output power) | |
|-------------------------------|-------------------|----------------|-----------------------|--|
| 3000 | 13.57 | 365.1 | 4.95 | |
| 4000 | 18.10 | 649.6 | 11.76 | |
| 5000 | 22.62 | 1559.6 | 35.28 | |
| 6000 | 27.14 | 3269.9 | 88.72 | |

[* Experience with JPI-I shows little voltage drop from open circuit to full load current flow, therefore output power calculations are based on open circuit voltage. -Ed.]

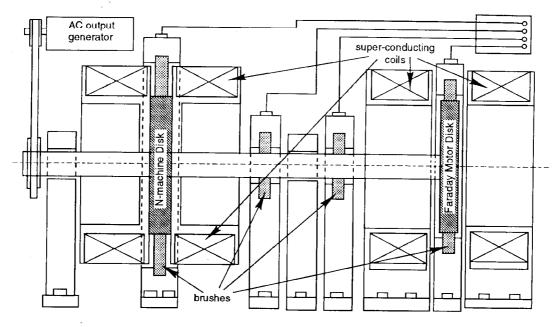
Rotation Disk Diameter: 50 cm $(r_1 = 3 \text{ cm} : r_2 = 25 \text{ cm})$

| rotation velocity (rpm) | V (V) | I (A) | W (KW) (output power) |
|-------------------------------|-------|--------|--------------------------|
| 3000 | 20.42 | 549.4 | 11.22 |
| 4000 | 27.23 | 977.2 | 26.61 |
| 5000 | 34.03 | 2346.2 | 79.84 |
| 6000 | 40.84 | 4919.4 | 200.91 |

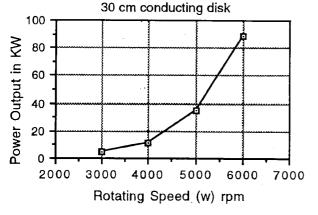
Expected torque of Faraday motor Conditions: magnetic flux density: B = 4.0 Tesla inner radius: r, = 0.03 m outer radius: r₂ = 0.15 m

| rotational velocity (rpm) | supply current (A) | expected torque (N·m) |
|------------------------------|-----------------------|-----------------------|
| 3000 | . 365.1 | 15.8 |
| 4000 | 649.6 | 28.1 |
| 5000 | 1559.6 | 67.4 |
| 6000 | 3269.9 | 141.3 |

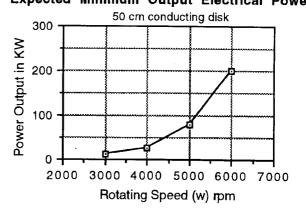
Conceptual Figure of JPI-II Test Machine



Expected Minimum Output Electrical Power



Expected Minimum Output Electrical Power



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Space-Energy Miscellaneous

ETHER RESEARCH: FRONTIER PERSPECTIVE IN AN AGE OF REVELATION

By Rolf Schaffranke

"Science has no eternal theories."

Albert Einstein

As the result of space research, fundamental theories in science, with their associated dogma, are showing a tendency towards change -- at least abroad. Ever since Swedish Nobel Laureate Hannes Alfven (physics, 1979) stated, "Dramatic changes have occurred in physics as the result of space exploration. They have shown that interstellar space is not empty as previously claimed, that 99% of the universe is plasma filled, and all indications point to the fact that the universe is an open and not a closed system."

The implications of these findings are dramatic. They confirm the intuition of another scientist of international fame, Prof. P.A.M. Dirac, who proclaimed, as early as 1954, "The aetherless basis of physical theory may have reached the end of its capabilities and we see in the aether a new hope for the future."

Thus continued a long tradition of British scientists, from James Clerk Maxwell to Sir Oliver Lodge, who delighted in quoting from Einstein's paper **Sidelights on Relativity**, "To deny the ether is ultimately to assume that empty space has no physical qualities whatever. The fundamental facts of mechanics do not harmonize with this view... According to the general theory of relativity, space is endowed with physical qualities: in this sense, therefore, there exists an ether. According to the general theory of relativity space without ether is unthinkable..."

A Polish University in Gdansk, the Institute of Experimental Physics, deserves the credit of having assembled all available Einstein's quotes on the subject of the ETHER. The work has been translated into English, and submitted to the US journal Raum & Zeit, vol 2, no 5, 1991, by this reporter. The introduction of the paper is as follows, "Einstein's conception of the ether is almost unknown by physicists and philosophers. Most of them are even convinced that Einstein has removed the notion of the ether from physics forever..."

Einstein said in a German paper, "The strange conclusion to which we have come is this, that now it appears that space will have to be regarded as a primary thing and that matter is derived from it, so to speak, as a secondary result." Published originally in 1930, this statement sounds as if it was initiated by a modern "creatinist." (sic)

Max Planck, the famous scientist from Germany, made a truly remarkable statement, "As a man who has devoted his whole life to the most clear-headed science, the study of matter, I can tell you as the result of my research about the atoms this much: There is no matter as such! All matter originates and exists only by virtue of a force which brings the particles of an atom to vibration and holds this most minute solar system of the atom together. Since there is no other eternal force in the universe, we must assume behind this force the existence of a conscious and intelligent MIND. This is the basic matrix of all matter."

The practical application of ether research in many countries is the development of so-called cosmic space energy converters, as for instance the legendary M/L converter of the religious community Methernitha in Linden, Switzerland, which results in an output of 3-4 KW, with an input of essential ZERO. (The machine is started by hand, via the hundred year old Poggendorff-effect with a modified electrostatic Wimhurst generator.) The community has never released all details of the converter, but a video in English shows practical demonstrations.

Paramahamsa Tewari, an Indian scientist, has built a machine that he says generates electricity from empty space, or vacuum. His machine near Bombay has confirmed his long standing theory that space is not empty, but filled with energy that can be extracted. The original prototype of the SPG or Space Power Generator delivered 2.5 more power than the input energy required to run it.

As can be expected, Japan is very active in this field of research, and a letter from Dr. Masayoshi Ihara of the Free Energy Device Section, Cosmic Energy Association, Japan, stated in a memo to a U.S. researcher dated Kyoto, May 30, 1991, "This year, 1991, at least four free-energy groups have started here, as far as I know. Two of them are backed up by industrial enterprises, although these are not big companies."

Finally, France has offered a haven for some of the American and British researchers who were involved in the well-published Pons-Fleischmann cold fusion experiments in Utah. The experiments are continuing there, financed by Japanese interests.

While the above information is only sketchy because of space limitations, it is rather strongly urged to heed the warning given by the editor of Frontier Perspectives, Journal of the Center for Frontier Sciences, Temple University, Philadelphia, Beverly Rubik, Ph.D., in vol 1, no 2, p 3 (From the Editor's Desk), "The aim of science is NOT to satisfy the needs of vested interests, but to reveal more and more of the secrets and subtleties of nature. Frontier scientists worldwide need GLASNOST, meaning literally to have voice."

Miscellaneous

SUMMARY OF MOEBIUS COIL TESTING

By N.A. Reiter -- up to 14 August 1993 Courtesy of Samuel P. Faile

Received coil unit 09 June 93 from Sam Faile. Initial examination of the unit indicated the following physical and electrical characteristics: Weight - 1.2834 Kg; Capacitance of unit (read with an HP 4332-a LCR meter) - .0015 mfd.; Inductance of unit (output shorted, read with same meter) - 14 uH.

Initial testing was done with a 60 watt lamp as load. This provided a current through the coil of approx. 400mA.

First test - 11 June 93, 20:45. Performed at kitchen table. I turned the unit on, and after about 10 minutes, felt a noticeable headache on left side. My father, who was present, said that he could feel a warm tingling sensation in his palms placed about 1/2 inch above side of coil. At about T + 15 minutes, my wife came through the kitchen, and left quickly saying that something was making her dizzy. At T + 25 minutes, she still felt dizzy and nauseous. After turning the unit off, my wife said the sensations went away.

13 June 93, 14:00. With 60 watt lamp as a load, and the coil plugged into 110vac, I examined the current through the device with my Sencore oscilloscope. Saw no unusual waveforms or phenomena other than the 60 Hz sine wave.

20 June 93, 18:30. Connected coil unit to an inductive load (old electric fan). After approximately 10 minutes, I noticed a slight headache on my right side. At T + 15 minutes, I put my head about 6 inches away from the side of the coil. Stronger sensation -- nausea, sweats, stronger headache. At T + 20 minutes, more nausea, less headache. I turned off the unit at this point.

23 June 93, 21:00. I used a BK Precision Function Generator and injected .25V to 5V RMS signals into the Moebius coil (output end shorted). Tried square, sine and triangle waves, and examined the currents through the coil with

my Sencore SC 61 scope. Varied frequencies between 60 Hz and 1 MHz. NO psychotronic effects noticed, and my wife felt no sensations. However, I noticed that after about ten minutes, especially at frequencies above 10 KHz, the scope did not want to "trigger" properly. Rather unnerving. Also some very minute high frequency parasitic oscillations piggybacked onto some of the sine wave signals. Saw usual inductive distortion of square wave signals above about 100 KHz. I have so far been unable to take any scope camera photos of the curious parasitic oscillations.

6 and 7 July 93, 21:00. Used a 250 watt lamp as a load for the coil. After about 15 minutes, both times, felt strong pressure/headache behind eyes and nose. Effect stronger than with 60 watt lamp, but not sure how much.

18 July 93. Using a 250 watt lamp as load, placed coil unit onto a Mettler BB2400 scale (.01g resolution) and looked for any weight changes over the course of 4 hours or so. Saw no variation outside of the "noise" from room vibrations.

31 July and 7 August 93. Connected Moebius coil with 250 watt lamp, to an ENI 300 watt 13.56 MHZ RF power supply. Turned power up slowly to a max of 175 watts (20 watts reflected - not an awful match really...). After about 10 minutes, felt a very giddy, energetic sensation. Holding my hands an inch or so away from the lamp, I felt a tingling, but may have been diathermy from the RF. Coil gets rather warm. No negative effects noticed.

[Now one can perform experiments and feel great with positive psychotronic effects. Nick may have found excess energy effect -- heating of coil to 40-50 C°. --Sam Faile]

EDITOR'S COMMENTS

DO SCALAR WAVES AFFECT BIOLOGICAL PROCESSES?

We are pleased to report that Dr. Samuel P. Faile, one of our most prolific correspondents, is

performing experiments with sprouting/growing seeds. Sam uses specially-wound coils such that the electromagnetic fields are cancelled leaving the scalar fields. He is now treating water with the scalar fields to determine if there may be an effect that will influence plant growth. We look forward to a future report from Dr. Faile.

LETTERS

QUESTIONS ABOUT BRUCE DEPALMA'S SEPTEMBER ARTICLE

LETTER TO MR. DEPALMA FROM HAL FOX

...I have a question about your article [1]: If the toroidal model of the universe is taken as correct, what is the direction of orientation of the spatial dimension and time flow (or is the model a four dimensional model in which one could suspect there would be a pseudo-orthogonal relation between 3-D space and time as the fourth dimension)? A further question would be, "What role, if any, does the orientation of the magnet play in terms of the flow of time energy through the magnet?"

Second question: The DePalma's N-machine basic configuration and the Tewari machine are similar but with an interesting difference in that the "load current" brushes are not axial and peripheral as in your N-machine but at two levels of offset from the axis. According to Tewari's videos and paper, he is able to get about three times the load power out as compared to the motor input power. In your view, has his ten years of experimental work found a geometrical configuration that is an improvement over your basic sketch of an N-machine?

Third question: Neither Tewari's diagram nor your sketch indicate the method by which the

"Electromagnet's Coil" is energized. Does it make any difference whether one uses permanent magnets or electrical magnets? From the Inomata's pictures and his diagrams he apparently used disk-type permanent magnets on each side of his two rotating copper disks. The two disks have opposite directions of magnetic fields and his brushes are on the periphery of the two disks (not with a brush on the axle). Do you have any comments on these three difference arrangements? Is there anyone, that you know of, that has provided a mathematical description of this type of generator so that one could hope to optimize the geometry, speed, magnetic flux strength, etc.?

I have read both of your papers very carefully. [1,2] I believe that you are doing science a great service by your careful evaluation of what we do (and do not) know about magnetism.

Your description of the change in time of a tuning fork-driven watch near a rotating mass is very interesting. With today's most accurate clock's being timed by the frequency of some isotope (I've forgotten the exact configuration), I am wondering if there isn't a way of making a more complicated but very accurate sensor that could be used to trace the isolines of equal time rates near a rotating mass. For example, could the frequency of the light emanations from an LED be used to track the changes in time-rates created by a rotating mass? Any comments?

Bruce, I am delighted to be able to help distribute some of your thinking and experience in this fascinating area of learning more about the energy around us and how we can learn to use that energy. Our polluted planet is a tragic testimony to the irrationality of scientific dogma. Our modest efforts in finding and rapidly distributing factual information about cold fusion has been credited with having made a difference in the scientific acceptance of the reality of cold fusion. It is way past the time that the same fact-finding and publishing efforts should be devoted to the reality of the energetic space in which we are immersed and using that reality to encourage rather than deny the efforts to tap that source of energy.

Thanks for being a pioneer in the enhanced energy work.

Best personal regards, Hal Fox, Editor

RESPONSE FROM BRUCE DEPALMA

I am in receipt of your letter of 19 August. To answer your questions:

- 1) The toroidal model of the Universe is \underline{N} dimensional. The representation shown is only meant to suggest that. In my view the only "dimensions" are geometrical extension and time extension. Perhaps someday we can have a discussion on this subject. For the present, it is sufficient to say what a thing is not, rather than what it is, i.e., "no geometrical extension" into our 3 space.
- 2) Tewari does not have access to strong Nd-Fe-B magnets or superconductive coils. Thus he experiments using a partially closed path (Trombly-Kahn) machines. The two levels of brush offset of which you speak are basically the combination of an N machine plus a one-piece homopolar motor on the same shaft. He is trying to compensate for the high drag of the modified Trombly-Kahn machine by putting it in series with a helper motor.
- 3) The original open path N machine has the lowest drag. It is also more expensive to construct because of the magnet cost. None of Tewari's constructions have exceeded the performance of the original "Sunburst" N machine.
- 4) In the solenoid, the magnetic field concentrates on the central axis. In a permanent magnet the field concentrates at the outer radius. Otherwise no difference.
- 5) Each designer has his own ideas. The important thing is to minimize drag by extracting the current in such a way as to have minimum interaction with the magnetic field of the machine.

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6) As you know, just because a physicist has a Ph.D. does not mean he can follow simple directions and replicate the experiment. The Tuning Fork Experiment must be done with a tuning fork. Why do we assume the vibrations of a quartz crystal in the megahertz range are affected as strongly as the 360 cycle vibration of a real mechanical object? The tuning fork is an antenna at least 10⁵ larger in mass. Try growing some grass in an aluminum pie plate over a rotating flywheel. The two week integration time for the grass to reach maturity is sufficient for the measurement.

The mistake in cold fusion was to bring in the nuclear physicists; it should have been presented as a new class of anomalous exothermal chemical reactions. Few physicists ever do any laboratory experiments and when they do, they impose their prejudices on the experiment.

- [1] Bruce DePalma, "Where Electrical Science Went Wrong," *New Energy News*, Sept. 1993, p 1.
- [2] Bruce DePalma, "On the Nature of Electrical Induction," *New Energy News*, Oct. 1993, p 2.

IMPORTANT HISTORICAL PAPERS

Dear New Energy News,

Enclosed are the two Nipher articles [1,2] you asked for. Nipher's work was the basis for the more well known electrogravitic demonstrations of T.T. Brown.

Included, also, is an article on Tesla, "Forgotten Genius," [3] that gives a good background on the inventor and on other "free energy" researchers in the first half of the century. Also, there is a copy of the letter, "Tesla 'Free Energy' Documents." [4], showing that the man who invented the electrical technology we use today, developed a generating method that would consume no fuel.

I look forward to your publication.

Sincerely, /s/ Oliver Nichelson (333 North 760 East, American Fork, Utah 84003.)

REFERENCES

- [1] Francis E. Nipher, "Gravitational Repulsion," *Transactions, Academy of Science of St. Louis*, November 8, 1917.
- [2] Francis E. Nipher, "New Evidence of a Relation Between Gravitation and Electrical Action, and of Local Changes in the Electrical Potential of the Earth," *Transactions, Academy of Science of St. Louis*, March 2, 1920.
- [3] Christopher Bird and Oliver Nichelson, "Great Scientist, Forgotten Genius Nikola Tesla," *New Age*, Feb, 1977, page 36 ff, 18 refs (including two of T. Henry Moray).
- [4] Oliver Nichelson, "Nikola Tesla's 'Free Energy' Documents," *Extraordinary Science*, Jan-Feb-Mar, 1993, pp 11-13, 5 refs. (Manuscript rec'd is more complete than the excerpts published.)

EDITOR'S COMMENTS

We are indebted to Oliver Nichelson for teaching us about the work of Francis E. Nipher, who was a predecessor of T. Townsend Brown. Having written an article about Nikola Tesla about 20 years ago, I am certainly a believer that Nikola Tesla was a genius, as was Steinmetz. These two were the leading scientists in the development of electrical power generation and distribution plus many other inventions. It is interesting to note that Tesla's methods of generating energy, transmitting the energy, and picking it up at remote distances would not be allowed in our present electromagnetic age. Tesla's method would swamp all of our radio, television, communications systems with intolerable noise.

At my grandfatherly age, I have learned that every age has its geniuses, a few of whom get the credit they deserve. There have been marvelous develop-ments in almost every aspect

of science since the days of Tesla, Steinmetz, Moray, et al. They were geniuses, they are dead. We now have living geniuses who are solving (or resolving) the problems of free energy. Some of these are Kenneth Shoulders; Hal Puthoff; Harold Aspden; Stanley Pons & Martin Fleischmann; Mills, Bush, and Eagleton; Karabut, Kucherov, and Savvatimova; Liaw & Liebert; Vigier; Peter & Neal Graneau; Hagelstein; Bockris; dePalma; Inomata; Tewari; Marinov; and many others. The purpose of New Energy News, with the help of Oliver Nichelson and many others is to provide its readers with information about the developments of today's geniuses. They are solving the problems of the commercialization of new energy systems including cold fusion, N-machines, and utilizing space energy. Don't miss an issue. Collectively, we are receiving and sharing information on a rapidly changing energy world.

Excerpt of a letter from George Overton to Don Kelly

Courtesy of Don Kelly, Space Energy Assoc. Newsletter

...Finally, despite the success of Relativity I still believe that an aether exists. If I did not then any research into free energy could not be justified. Einstein did not prove that an aether does not exist, it was just that his theories did not require it. Abolishing the aether because it could not be found does not deny its existence. There was an interesting article in New Scientist (18 April 1992, no 1817) regarding "The Origin of Mass." The main subject of this article is the Higgs mechanism which is being used by physicists to explain why matter in the universe has mass. Basically, it is theorized that there is a physical field permeating all of space (even the so-called vacuum) which resembles electromagnetic or gravitational field, but is different in as much as it possesses no direction, only magnitude, i.e. the Higgs field is a 'scalar' field, whereas electromagnetism and gravity fields are 'vector' fields. (Sounding familiar?) It is claimed that the VTA engineers and structures local spacetime (vacuum), which could also be viewed as a manipulation of the

hypothetical Higgs field. Or is this really yet another new name for the aether?

/s/ George Overton

Meetings

4TH INTERNATIONAL CONFERENCE ON COLD FUSION

December 6-9, 1993 Hayatt Regency Maui Lahaina, Hawaii

Four years of intense investigation have uncovered a wide variety of unexpected phenomena occurring in condensed matter under ambient conditions. Promoted largely by the possibility of a nuclear origin, the reality, mechanism, interdependence, and ulitmately, the significance of these processes is a subject of continued debate. The phenomena in question and their associated disciplines include excess power generation, nuclear product formation, electrochemical studies of deuterated metal systems, solid-state physics of metal matrices, coherent processes, behavior of gas-metal systems, and improved precision calorimetric techniques.

The purpose of this conference is to promote the broadest discussion of the scientific aspects of these condensed matter phenomena. Participation is open to all interested scientists and technologists. Registration is \$300, and the address for registration or information is Electric Power Research Institute, Attn. Linda Nelson, Conference Coordinator, P.O. Box 10412, Palo Alto, CA 94303-9743; or fax to (415) 855-2041, Attn. Linda Nelson, x2127.

INTERNATIONAL SYMPOSIUM ON NEW ENERGY

May 13-15, 1994

The purpose of the International Symposium on New Energy (ISNE) is to bring together outstanding New Energy researchers who will share and discuss their latest research findings. The goal is to stimulate

new research ideas and link researchers with industry. It is hoped that the Symposium will unite New Energy researchers in a cooperative effort to share and assist in research endeavors and to help procure research and development funding. The objective is also to educate people through publications and news media about the potential of New Energy.

The ISNE is sponsored by the Institute for New Energy, a subsidiary of the International Association for New Science (IANS) whose purpose is to unite New Science organizations and people to help initiate a paradigm shift in science and health care through research, education, and networking.

The Institute for New Energy believes that the planet Earth is in need of new and far reaching measures to avoid environmental damage and to equip the nations of the world with the energy to promote the highest possible level of health and welfare for their populations. Much technology exists today that has been suppressed, or not actively developed, that could push back the borders of scientific research and be profitable for everyone. INE believes it is imperative that this technology be revealed to the public and industry to help save the planet.

New Energy or enhanced energy technology includes theory, research, construction, and testing of advanced energy conversion devices. These devices and systems operate with a higher efficiency than those used today and include advanced concepts where energy conversion exceeds unity. The source of much of this potential energy utilized is not always scientifically understood, and the theory lags behind experimental data.

New Energy topics include hydrogen fuel usage, 'over unity' and 'free energy' machines, Scalar wave theory, magnetic motors, vortex mechanics, cold fusion, electrostatic generators, nuclear isotopes, mutational magnetic fields, zero point energy, N-machines, homopolar generators, and others.

The symposium will be composed of half-day sessions of speakers, and other research presented in poster sessions and a New Energy inventions exhibit. Concurrent workshops will also be available.

CALL FOR PAPERS

Scholarly papers are invited on any topic related to New Energy as defined herein. These papers should include one or more of the following: theories, research designs, inventions, and research results. Abstracts of not more that 400 words must be sent as soon as possible to the address below. Consideration of abstracts cannot be assured if received after March 1, 1994. Authors will be notified as soon as possible if the paper is accepted for presentation.

Write for Symposium information to: Institute for New Energy 1304 South College Avenue, Fort Collins, CO 80524; (303) 482-3731.

COLD FUSION IMPACT BOOK

Four years worth of enthusiasm and scientific research are gathered into this informative book on our enhanced energy future. Hal Fox is an authority on the subject and is now sharing with the reader his far reaching vision of all the changes that low-cost, clean, abundant energy will bring to the world. Written in a simple, non-technical style, Cold Fusion Impact is a clear and concise book that everyone who plans on living in the future needs to read. The future starts tomorrow, and we all need to be ready for the changes that will come as a consequence of the commercialization of enhanced energy systems. Available in English, Russian, and soon in Spanish.

The book is sold with an updated diskette filled with over 4 years worth of scientific bibliography covering research papers, articles and books primarily on cold fusion, with some other energy research also. The bibliography sells separately for \$25. You can buy both for only \$25, through this publication. Direct inquiries to *New Energy News* Subscription office, as listed on back page.

The mind likes a strange idea as little as the body likes a strange protein and resists it with similar energy. If we watch ourselves honestly, we shall often find that we have begun to argue against a new idea even before it has been completely stated.

Wilfred Trotter

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