



New Energy News

Monthly Newsletter of the Institute for New Energy

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WHERE ELECTRICAL SCIENCE WENT WRONG

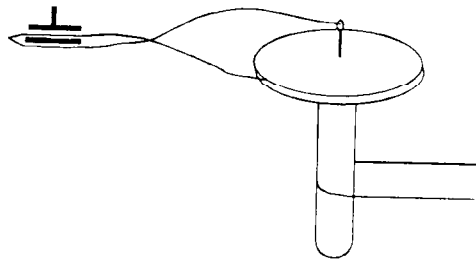
By Bruce dePalma

"It is characteristic of fundamental discoveries, of great achievements of the intellect, that they retain an undiminished power upon the imagination of the thinker. The memorable experiment of Faraday with a disc rotating between two poles of a magnet, which has borne such magnificent fruit, has long passed into every-day experience; yet there are certain features about this embryo of the present dynamos and motors which even today appear to us striking, and are worthy of the most careful study."

- Nicola Tesla, 1891, New York City, New York

Law of Equipartition of Energy: In a given thermodynamic system, the total energy will subdivide itself equally amongst the characteristic modes of the system.

After Michael Faraday performed the initial experiments resulting in the discovery of the one-piece homopolar generator of December 26, 1831, figure (1), he devoted considerable effort to reconcile the appearance of generated electrical potential in the apparatus with his conceptualization of the cutting of flux linkages by a moving conductor.



255. A copper disc was cemented on the top of a cylinder magnet, paper intervening, the top being the marked pole; the magnet supported so as to rotate by means of string, and the wires of the galvanometer connected with the edge and the axis of the copper plate. When the magnet and disc together rotated *unscrew* the marked end of the needle went west. When the magnet and disc rotated *screw* the marked end of the needle went east.

256. This direction is the same as that which would have resulted if the copper had moved and the magnet been still. Hence moving the magnet causes no difference provided the copper moves. A rotating and a stationary magnet cause the same effect.

257. The disc was then loosed from the magnet and held still whilst the magnet itself was revolved; but now no effect upon the galvanometer. Hence it appears that, of the metal circuit in which the current is to be formed, different parts must move with different angular velocities. If with the same, no current is produced, i.e. when both parts are external to the magnet.

Although Faraday never adduced an experiment to prove the cutting of flux linkages in the axially rotating magnet experiment, he was troubled to his last days about his interpretation of his experiment. It took until 1978 when DePalma, reference (1), did the critical experiment to determine if the form of electrical induction was the same as the flux cutting originally proposed by Faraday. The problem has been re-stated by other workers who would attempt to determine whether flux lines rotate with, or are spatially independent of the axially rotating magnet. **To date, no experiment has been found either to confirm or disprove the axially rotating flux line hypothesis, reference (2).**

The laudable efforts of Clerk Maxwell to express in mathematical form the results of the electrical experimentation of Faraday reflect the uncertainty which he had over the interpretation of the 1831 experiment. The result was that Maxwell did not consider the problem at all, or felt he had nothing more to offer.

For those scientists who consider mathematical expressions of physical laws as the only possible descriptions of physical reality, having no mathematical description is tantamount to no physical reality. Electrical science, which is considered to be completely known, has been ultimately reduced to a completely self-consistent set of equations which are suitably

Figure 1. Test of a Rotating Magnet by Michael Faraday, 26 December 1831.

stored in computer memories and are used to design motors, generators, transformers and other sorts of familiar electrical hardware.

The first place electrical science went wrong is when electrical phenomena which were not subject to unambiguous mathematical interpretation were simply omitted from electrical curricula.

The second place electrical science went wrong is concisely illustrated in a sequence of evolution of electrical machinery abstracted from "Exciting Electrical Machines," by E. R. Laithwaite, D.Sc., Ph.D., C.Eng., F.I.E.E., F.I.E.E.E., Professor of Heavy Electrical Engineering, Imperial Technical College, London, England. Reference (3).

"The various steps shown in figure 3.(a)-(d) do not represent an historical sequence. They represent an attempt to break down the topological difference between Faraday's disc and an early type of commercial machine into simple basic steps. Figure 2 shows a cross section through the disc machine. In theory the two brushes marked (+) would be part of a continuous annular brush at the centre; likewise the (-) brush extends all around the periphery. This arrangement is represented diagrammatically in figure 3(a). The first step consists of elongating the disc axially so that it forms a cylinder. The magnetic circuit is then re-arranged so that the flux enters the rotor through one end of the cylinder and emerges through the periphery, as shown in figure 3(b). If the rotor were of solid copper, the magnetic circuit through it would be poor. The rotor is therefore modified to consist of a hollow cylinder filled with iron, as shown in cross section in figure 3(c). For ease of mounting the rotor, i.e. with a bearing at each end, the iron core is made integral with the conducting cylinder and the two rotate as one unit."

"The dimensions of the rotor are next changed to take advantage of the fact that the useful e.m.f. is generated along AB (figure 3(c)) rather than EC, i.e. between the brushes. The diameter is reduced and the length increased. The axial direction, however, now represents a bottleneck in the magnetic circuit, even though the machine can be flux fed from both ends, as shown in figure 3(d). The solution to this situation is to send the flux right through the rotor, as shown in figure 3(e)."

In a manner so casual so as to escape attention Laithwaite alters the magnetic field direction from flux lines parallel to the axis of rotation to flux lines perpendicular to the rotational axis. This fundamental

change and the unstated ambiguity: do flux lines rotated in the manner shown, figure 3(e) ipso facto demand a two-piece machine, figure 3(f)? If the two-piece, i.e. rotor-stator construction is implicit for electrical machines where the flux lines through the rotor are perpendicular to the axis of rotation, then what has this to do with the archetypal one-piece Faraday homopolar machine which does not require a stator? Is the evolution suggested by Laithwaite an evolution or the description of two fundamentally different families of electrical machines?

We continue with Laithwaite:

"Notice that this means that two sets of brushes are now needed, since the polarity of the e.m.f. around one arc of 180 degrees is opposite that around the other. The plane of the magnetic circuit can now, with advantage, be turned through a right angle so that a cross-section of the machine is as shown in figure 3(f). This is the point where the rotor conductor is split into individual wires which can be connected in series. To do this it appears to be necessary to use a hollow iron core and to connect each wire at end X (figure 3(g)) to the next, at end Y, by means of a wire passing up the centre of the core."

In his dissertation [3], Dr. Laithwaite has made a number of assumptions which, in the light of contemporary knowledge, can be questioned. I am not singling out Dr. Laithwaite as being defective in his reasoning, but his position of authority is representative of the presently accepted level of knowledge of electrical science.

The first assumption: That there is a relationship between the Faraday disc and the two piece induction machine of commerce.

The second assumption: That there is no difference in behavior of electrical machines if the source of flux moves with the rotor or not.

The third assumption: That there is no difference in the behavior of electrical machines if the flux lines are either parallel or perpendicular to the axis of rotation of the machine.

The fourth assumption: Flux cutting is the only mechanism for the generation of electricity from magnetism.

It is left to the reader to intellectually explore the implications of the first three assumptions on the evolution suggested in figure 3(a)-(g).

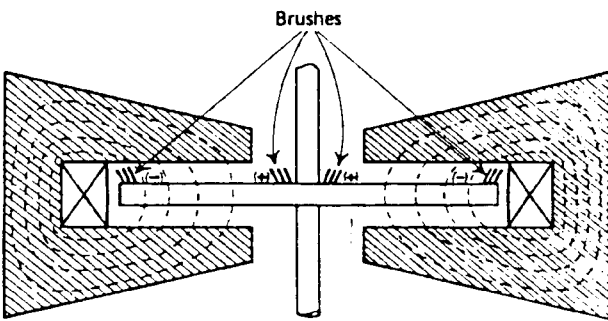


Figure 2. Cross-section through a disc machine in the plane of its axis.

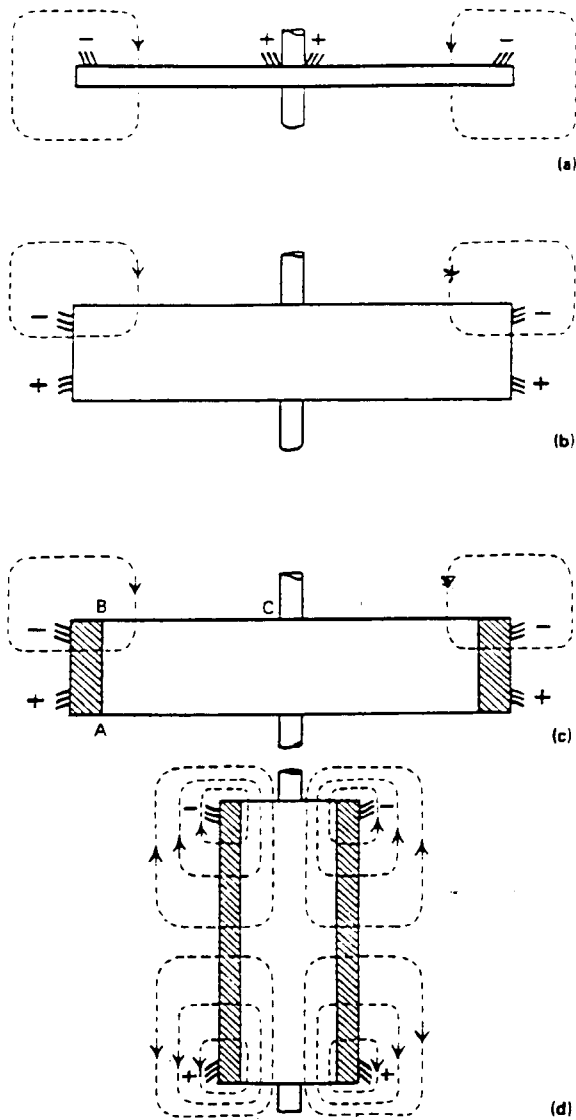


Figure 3. (a)-(d) Basic topological steps from a disc machine to a drum machine with wound rotor.

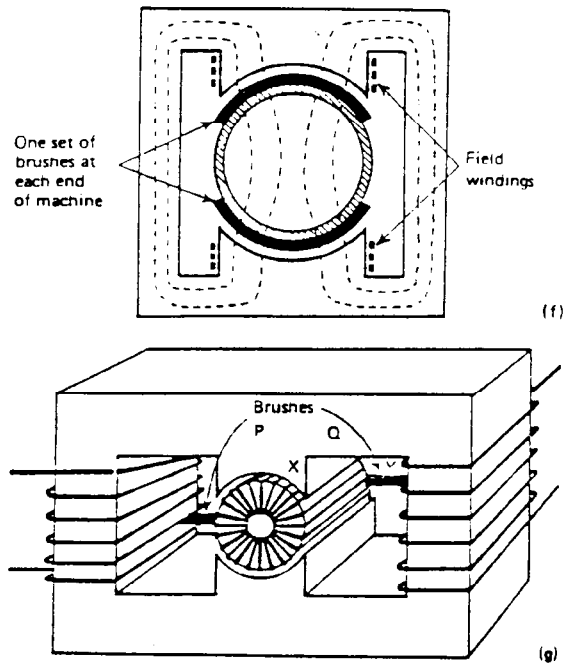
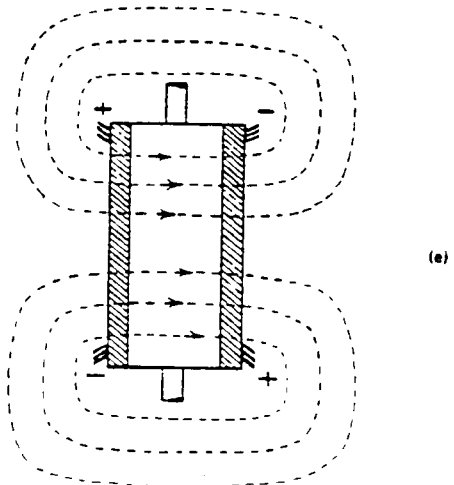


Figure 3 (e)-(g). Basic topological steps from a disc machine to a drum machine with wound rotor (continued).

That the forth assumption is suspect is ably illustrated by a second extract from Laithwaite. "Figure 4(a) shows that surface conductors demand a gap in the magnetic circuit which must increase with increase in thickness of conductors, which in turn is demanded by an increased current loading, whereas a conductor system in slots as in figure 4(b) can combine thick conductors and small airgap in one arrangement. Quite apart from magnetic considerations, conductors on the surface are liable to become displaced around the periphery, aided by the speed of rotation which tends to stretch and

loosen the conductors. If the conductors are constrained in a slot, and held in by a non-metallic slot wedge as shown in figure 5, the speed of the machine, and therefore its output, can be increased without suffering these effects of rotation.

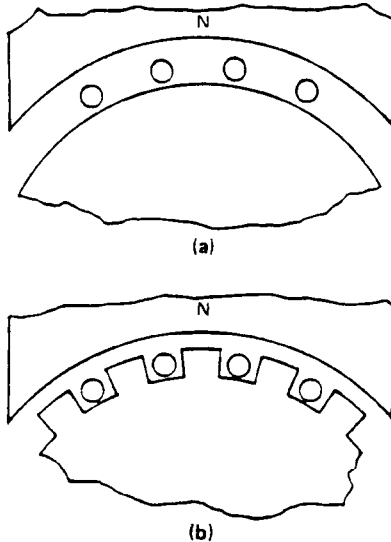


Figure 4 (a)-(b). Improvement in Magnetic Circuit Obtained by Sinking Rotor Conductors into Slots.

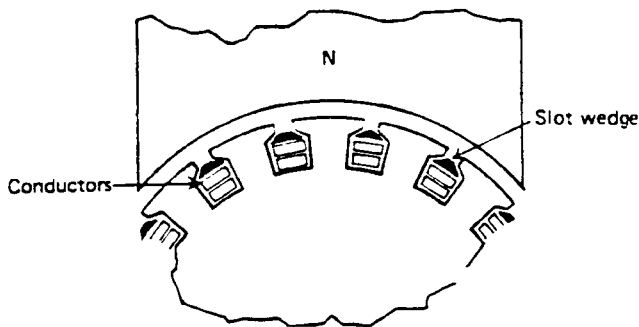


Figure 5. Rotor Conductor Arrangement in a Modern Machine.

"The big question, however, is whether the machine will still function at all. After all, the magnetic flux will now take the line of least resistance and cross the gap only opposite the rotor 'teeth'. The flux now cutting the conductors is now perhaps only 10% of that which cuts the conductors of a surface-wound motor. Will the output voltage therefore be only 10% also, as apparently dictated by the flux cutting rule? For a long time no one would try the slotted rotor, because they did not believe in the 'magic' of electromagnetism. They believed they knew all the answers. Worst of all, they did not realize that only circuits mattered and

that so long as a machine broke and remade linkages between magnetic and electric circuits, the answer would be the same whether the conductors were buried or not."

It is not all of us who conceal our ignorance by appeal to the belief in the "magic" of electromagnetism. The fact that the modern two piece wound rotor machine works at all speaks to the operation of electrical laws outside the computer controlled algorithms now representative of electrical science.

The fifth assumption: That all the laws of electrical science must be consistent with the energy conservation laws. Is this why the "magic" of electromagnetism is necessary?

To quote Laithwaite once more: "It is to be hoped that we are all not suffering from similar inhibitions when we design our modern machines."

References:

(1): "Magnetism as a Distortion of a Pre-Existent Primordial Energy Field and the Possibility of Extraction of Electrical Energy Directly from Space," Bruce DePalma, Proc. of the 26th Ann. Intersociety Energy Conversion Engineering Conference (IECEC), Boston, Massachusetts, August 4-9, 1991.

(2): "Spinning Magnetic Fields," Djurić; *J. of Appl. Physics*, vol. 46, no. 2, Feb. 1975, pp. 679-688.

(3): *Exciting Electrical Machines*, E. R. Laithwaite, pp.13-17, Pergamon Press Ltd, Oxford, Eng., 1974.

Our thanks to Patrick Bailey for transcribing and sending us this article.

EDITOR'S COMMENTS

We are pleased to provide our readers with this excellent insight into the history of the development of electrical machinery. Despite the lack of acceptance of rotating machinery to produce over-unity power, the world will soon be using rotating machinery similar to the types that have been pioneered by Bruce DePalma. *New Energy News* has the goal of increasing the scientific acceptance and the commercialization of new energy devices. We are grateful to Bruce DePalma for his great pioneering efforts. Editor.

Fusion Briefings

A HOT FUSION EXPERIMENT THAT HELPS COLD FUSION

By Dr. Harold Aspden

When a heavy ion moves in a forward direction, the quantum electrodynamic action of the field background, as excited electro-dynamically by interaction with an associated electron motion, can result in an energy transfer as between the ion and the background field. In a sense there are thermodynamic actions involved which can result in cooling or heating of that environmental field.

The governing condition is the physical requirement that the action does not develop a reaction force couple on that background field. The reason for this is that the field is unable to assert coherent forces which would have reaction counterparts as eddies in what is really a structured and organized vacuum medium, inasmuch as that medium is the seat of the action we associate with Planck's constant and the photon, and photons travel in straight lines.

That fact is something that has eluded researchers investigating electrodynamic principles. Ampère, who was the first to develop a law of electro-dynamics which accounted for such reaction effects, opted for a form of law which denied the reaction couple but it also denied the possibility of a linear reaction force. The Ampère law found no use in practical electromagnetism because it is too complex. Also, it does not cater to the kind of energy transfer which allows magnetic induction energy to be stored in the vacuum field, even where all the circuit action is between electrons.

As a result, our electrical science has developed from empirical foundations, which rely on a much simpler law, the Lorentz force law, but which needs separate empirical rules to extend to magnetic induction, but yet these still do not cater to electrodynamic interaction between heavy ions and electrons.

It is in this latter heavy ion situation that we see energy and force anomalies. They have been

creeping into the science literature now for several decades.

This author was the first to draw attention to the need to revise electrodynamic law on the basis that the field reaction could not assert a turning couple but that it could assert a linear force. Early thinkers were mistaken when they regarded an out-of-balance force as unacceptable because it conflicts with Newton's law of action and reaction. In fact, the field background is a partner to the total system in which two discrete charges in motion interact electro-dynamically. That field background medium can provide the seat of the force balance and as it is the storehouse for magnetic induction energy it seems rather foolish to pretend that it cannot assert or absorb force.

This concept was explained on pages 15 and 16 of the author's first printed disclosure on this subject, entitled: "The Theory of Gravitation" and dated November 22, 1959. The author deduced the form of law applicable between two charges of equal mass and found it had a form which could give the long sought connection with gravitation. For charges of the same polarity having the same velocity regardless of their relative spacing and motion direction relative to the separation vector, one obtains an inverse square of distance law of force that was mutually attractive and directed along the line joining the charges.

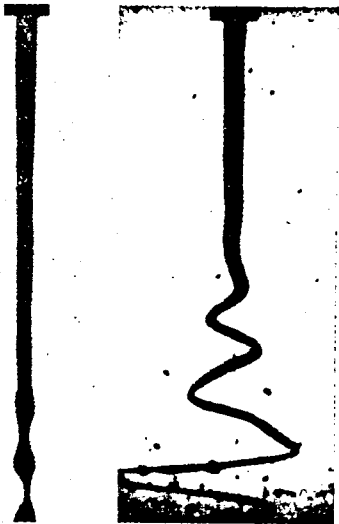
In the second theory of "The Theory of Gravitation," in 1966, the author extended the formulation of the law to include interactions between charges of different mass. **Attention was then drawn to the recognized reaction force anomalies in cold cathode discharge tubes** and the findings were formally published in the *Journal of the Franklin Institute* (vol 287, p. 179, 1969).

After referring to such anomalies, the last words of the last chapter of the author's 1966 book were: "The law of electro-dynamics presented probably has the most immediate practical implications and these are as important to mankind as our understanding of the nature of the gravitational force we know so well."

Yet, here we are 27 years later and still the world of science keeps faith with the wrong force law, even, as is now explained, when they have photographic proof that something is clearly wrong and that proof

is provided by their own experiments on hot fusion research!

The author's mass-dependent formulation of the law of electrodynamics was developed at about the time the author noticed a 'hot fusion' report in 1965 that a falling column of mercury carrying current in an axial magnetic field exhibited anomalous behavior. The photograph reproduced in *Electronics and Power* (vol 11, p 12, 1965) in an article entitled "The Quest for Controlled Thermonuclear Power" showed how helical convolutions developed over the second half of the downward fall. Their radius increased progressively until with the final convolution the helical radius diminished sharply as the mercury filamentary flow was somehow drawn back to the central axis.



The 'sausage' and 'kink' instabilities in a column of mercury carrying a current of 300 A. Because the mercury is falling, the instabilities are further developed at the bottom of each picture. (Left) no axial magnetic field; (right) the 'kink' instability is encouraged by an axial magnetic field of 300 G.

This action clearly implied that some very unusual forces effective along the lower part of the current filament were at work and that this was a compressive action directed along the current flow axis. This is contrary to the Lorentz force law and, though the author wrote a letter to the Editor of *Electronics and Power* to urge attention to this anomaly (vol 11, p 202, 1965), it attracted no comment.

One other point, which can be seen so clearly by scrutiny of that same photograph: the filament had, towards the end of its fall, also reduced to about one third of the diameter it had over its first half of the fall. This means that its cross-sectional area was

reduced by about one-ninth and so the flow velocity had increased ninefold, which means that the kinetic energy had increased by about 80 times of the value it had after falling half way.

Now, how can such a phenomenon be explained? It is not a gravitational effect and so it must be an effect induced electro-dynamically as a d.c. effect by the 300 amp current. If so, this is something beyond the realm of accepted physics.

The author eventually put the answer on record in *IEEE Transactions of Plasma Science* (vol PS-5, p 159, 1977). A further, less theoretical account, in which the author discusses also the water discharge force anomalies found by Peter Graneau, is found in *IEEE Transactions of Plasma Science* (vol PS-14, p 282, 1986).

The true law of electrodynamics with the mass ratio factor that allows for electron action on heavy ions, requires a discharge between anode and cathode to involve electrodynamic deceleration forces to the midpoint, leaving the anode-cathode voltage (or gravity in the falling mercury experiment) to keep ions moving through that midpoint. Then, over the second half of the discharge, there are electrodynamic acceleration forces. However, as these forces are proportional to ion velocity and enhanced by the ion-electron mass ratio, the action is one involving an exponentially-increasing escalation. There are, therefore, very high forces set up which draw power from the background field environment and this action taps that background in a thermodynamic sense, leaving it in a cooler state.

Here then is an unexpected source of energy, which should be heeded by 'free energy' enthusiasts, but, admittedly, it needs some astuteness and a deep insight into electrodynamics in order to perceive this as evidenced in that 1965 reproduction of the photograph of the column of falling mercury. Yet, surely those researching the stabilization of plasma discharges in hot fusion reactors are sufficiently versed in electrodynamics to see what is there to be seen from one simple photograph.

It is a curious that when those specialists in hot fusion deny the results emerging from 'cold fusion' experiments, this author can point to something as important as a 'free energy' source revealed by their own 'cold' experiments on discharge stabilization!

It would seem that the spin-off from 'hot fusion' research, which was why that falling mercury work was undertaken in the first place, has something useful to offer us in our quest to understand what Professor Peter Graneau now calls 'capillary fusion' (*Fusion Facts*, June 1993, p 19).

Those who doubt should take a close look at the photographic evidence provided by that falling mercury column. It is submitted that **it really does provide a picture of an action that defies accepted physical principles and does this by revealing that 'excess energy' appears as if from nowhere over the second half of the mercury free fall.**

It is tempting to suggest that a deuteron is a heavy ion moving through a conductor that is fed by current and, though the current is small, an exponentially increasing acceleration rate can soon cause an individual deuteron to hog most of the current and develop an enormous impact velocity, which could well be a fusion trigger. The above-referenced 1986 IEEE paper refers to evidence of arc discharges in liquid hydrocarbons involving measured arc speeds of 100 km/s and argues that the forces measured by Graneau for discharges in water correspond to a 5 km/s speed by only 1 part in 100,000 of the solution. A heavy ion colliding to rest from a speed of 100 km/s sheds the energy equivalent to it having a temperature measured in millions of degrees. Can one extend this electrodynamic escalating acceleration theme to solid host metal palladium in which deuterons have some initial mobility?

It seems more likely that 'cold fusion' is just that, a fusion reaction which involves deuterons, and at best the electrodynamic action is a catalyst which helped to trigger fusion.

Peter Graneau, in his *Fusion Facts* June 1993 letter, combined in one paragraph three statements: (a) that Fleischmann and Pons had measured "more than 1 kw/cm³," (b) that theoreticians are prone to misread experimental data when they defend dogma, and (c) a comment about Thomas Harriot carrying out 'free fall' experiments before Galileo did them in Pisa. It seems appropriate therefore, by this letter, to draw Peter Graneau's attention to the 'hot fusion' mercury 'free fall' experiments which now defy Galileo and which do have some bearing on the 'capillary fusion' theme, given that discharge currents occur through fusible material occupying the capillary channel.

Harold Aspden
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Rotating Space-Energy Machines

ERRATA

The following is a correction of a error inadvertently printed in the last *New Energy News*. Please read it, as the sense of the article was severely compromised by the mistake. The underlined area was the portion left out of this paragraph on page 6 of the August issue. Our apologies for the problem.

TECHNICAL BRIEF

By Alan Ames

The Alcon Magnetic Levitation Device

Overview

The Alcon Magnetic Levitation Device (AML) is a mechanical system which levitates and suspends a magnetic embodiment at room temperature while providing FULL LATERAL STABILITY. The magnetic embodiment, which is levitated above the conducting material, acts as a sensor and will keep itself centered over the material and resist any forces that would act to remove it from its position. Hence, for the first time, it is now possible to construct a means to create stable levitation and stationary suspension of a magnetic body strictly through mechanical means. Up unto the present there have been only two other means in which a magnetic body can be suspended in a stationary position, namely: (a) through the use of solid state electronic controllers and sensors or (b) through the use of superconducting materials. The AMLD has four major advantages over these two other forms of magnetic suspension. First, it is simpler to construct. Second, it is more cost effective. Third, it virtually has no limit as to how much weight it can suspend as far as its scale in size. Fourth, it provides for full lateral stability.

SWITCHED RELUCTANCE MOTORS

by Harold Aspden

On April 16, 1993, the first day of the New Energy Symposium in Denver on which participants heard about the 'free energy' motor of New Zealander Robert Adams, the *Financial Times* in U.K. published

an article on 'switched reluctance motors.' This article described how a U.K. company, Switched Reluctance Drives Limited, has become the world leader in that field.

This news item shows that there has been a rapid convergence on the transition point where electronics to control the reluctance motor becomes so cheap that induction motors will soon be replaced on a large scale.

Professor Lawrenson, the founder and chief executive of Switch Reluctance Drives Limited, is reported as saying: "Until the last year or two, the semi-conductors would cost three times as much as the motors,"...but..."Now, in a typical application such as a washing machine, an SR motor would cost \$24 in total - \$12 each for the motor and electronics - against \$24 for a conventional motor and \$3 for the associated electronics."

The company has successfully developed motors at sizes approaching 1 MW and has drawing board designs for motors large enough to power a railway locomotive. The fact that "the world electric motor market is worth \$30-\$40 billion per year in total," led Professor Lawrenson to say that "there are several areas where the switched reluctance motor could get 20% of the market share" and, when "totally established, the share could be as high as 50%."

Those interested in the 'free energy' theme see this as opening the door for the new energy technology based on the principles used in the Adams motor. This new kind of motor is one which relies on the magnetic pull across the pole faces to set up the drive torque. It is not one needing force interaction between magnetic field and current in a winding. Accordingly, this technology of the Adams motor allows the extra pull, powered by the 'free energy' drawn through the ferromagnetic flux-rotation of the quantum spins, to be accessed.

In the light of the report in the *Financial Times* and the recent media attention to the Adams motor in Australia, I have drawn the Adams motor to the attention of the U.K. power industry magazine *Electric Review*. As a result, their reporter on new technology published an article entitled "Reluctance motor has 100%-plus efficiency" in the July 9th issue.

The article should arouse U.K. engineering interest in the 'free energy' possibility, since I have shown the design feature by which one can understand the 'free energy' source and so calculate its input. The leading U.K. 'switched reluctance expert' consulted on this proposition has been reluctant to concede that one might go above 100% in electrical generating efficiency, but in the light of the next comment one wonders if a crack has now opened in the establishment defenses.

My own proposed machine design referred to in the article, the subject of U.S. Patent Serial No. 4,975,609, is one which aims to minimize eddy-current losses when a switched reluctance motor is operating in its 'free energy' mode. The Electrical Review article says, concerning an interview with that specialist critic, that "**He (the 'expert') believes that the Aspden machine may work in a similar way to a heat pump to obtain a greater mechanical output than the electrical input.**"

Readers will appreciate that such criticism is praise indeed, because a machine that can output more mechanical work than is fed in as electrical power, especially one that can cool in the process, which is what Adams has claimed for his motor, is precisely what we would all like to see in our New Energy world.

N-MACHINE MODEL AVAILABLE

Courtesy of Dr. Shiuji Inomata

Here is a piece of interesting news. A new science firm called "Aquapol" in Reichenau/Rax, Austria is going to import from Kazamagiken, the manufacturer of JPI-1, the equivalent models to distribute commercially among universities and research laboratories in Europe which are interested in "the incremental over-unity phenomenon." Kazama is perhaps interested in exporting to universities of North and South America. The address of Kazama is:

Mr. Katsuhiko Kazama
Kazama gikenkaihatsu
1179-Kaneko, Gunma-machi, Gunma-gun
Gunma-ken, Japan 370-35
Phone: 0273-73-8428, Fax 0273-73-7741

Space-Energy Miscellaneous

MASSACHUSETTS - AMPERIAN RECOIL

Peter Graneau (Ctr. Electromag. Research, NE Univ., Boston, Massachusetts), "Amperian Recoil and the Efficiency of Railguns," J. Appl. Phys., vol 62, no 7, Oct. 1987, pp 3006-3009, 11 refs, 3 figs.

AUTHOR'S ABSTRACT

In this paper the mechanical efficiency of the railgun is defined as the force accelerating the armature-projectile combination divided by the total electrodynamic force generated in the gun. The energy expended in a shot may then be equated to the ohmic loss plus the kinetic energy that would have been developed in the absence of mechanical losses. In this way it can be shown that the overall energy efficiency can never be greater than the square of the mechanical efficiency. Comparing calculations with experimental data makes it clear the reported disappointing performance of railguns is due to some ill-understood mechanical deficiency. **A simple experiment is described which reveals buckling and distortion of the rails by recoil action.** This explains the mechanical inefficiency. In relativistic electromagnetism, the recoil force should act "on the magnetic field" and absorb field-energy momentum. **The Ampère-Neumann electrodynamics, on the other hand, requires the recoil forces to reside in the railheads and push the rails back toward the gun breech.** Experiment confirmed the latter mechanism.

NEW YORK - ANTIGRAVITY REALITY?

Courtesy of John A. Thomas, Jr.

John A. Thomas, Jr., "Antigravity: The Dream Made Reality. The Story of John R.R. Searl," published by the Author, 373 Rock Beach Rd., Rochester, New York, 14617-1316, 140 pages, 4 figs, 28 photos, \$25.

EDITOR'S REVIEW

This booklet reports on the life and work of John R.R. Searl who, according to the book, is the successful inventor and developer of a powerful Searl Effect Generator (SEG) which could also be called a Space Energy Generator. When he discovered that the operation of the SEG caused levitation, Searl then spent years in developing and controlling various models of levitating disks. The booklet relates that **about 1970 Searl demonstrated his "levitating disk" to scientists at the Edward's Air Force Base in California.** The objection to the device, as reported, was that the speed and turns were so sharp that they doubted anyone could survive. In addition, one of the scientists viewing the demonstration was concerned that there appeared to be no inertia. The end result was that the inventor and project were dismissed with comments about the technology being outside their accepted technology.

This report also discusses the theoretical work of Karl Schappeller of Castle Auroldmunster in Inviertel, Austria (died 1947). Schappeller describes "**glowing magnetism, or ether precipitation**" and is reported to have designed a device that exhibits the effect and also produces some material substance that causes the atmosphere to glow [ionize] when the device is properly operated. **Searl's levitating disks are reported to exhibit a similar visual effect when operating.**

After building and flying some 40 levitating disks of various sizes, many of which were lost due to the lack of suitable controls, Searl was nearing completion of a large man-carrying disk when his work was abruptly stopped and Searl was jailed. He has now recovered some of his early experimental equipment (dating back as far as 1946) and is writing books and lecturing to obtain funds to again produce a three-man space-worthy levitating disk.

A video is available that has many pictures (although of poor quality) of the construction of some of his flying disks. The video and other books by Searl are available from John Thomas, Jr.

[Editor's note: In a recent report a student of science spent his summer vacation tracking down rumors that the U.S. Air Force is flying **vehicles that glow when in operation** and that also exhibit the capacity to make abrupt turns when in flight. He observed these vehicles flying at night in a remote

Nevada site and also from a hill overlooking an advanced aircraft testing facility near Edward's Air Force Base in California. In a trip to Romania early in 1993, I picked up a Romanian newspaper that cited this secret work of the U.S. Air Force. **Could there be a connection to Searl's demonstration?** Hal Fox.]

LETTERS

LETTER FROM STEFAN MARINOV

...Concerning Tom Bearden and "Sparky" Sweet, I can say no more than in the letter to Prof. Bockris. My English friends around Peter Bruce (D. Cumberland, Mike Watson, J. Overturn, etc.) have formed a group for studying Sweet's machine and for establishing personal contacts with him. Then I hope to know more about the machine (P. Bruce was in Denver).

Thank you for Tedenstig's article. I receive regularly *Galilean Electrodynamics* and I have already seen this article (I know Beckmann personally). I have exchanged in the last years many letters with Tedenstig. His model may be good (I am also a supporter of the "aether," called by me "absolute space,") but he does not report new results (new formulas, effects, etc.) I am not interested too much in "models," I am interested in physical results, effects, machines.

The problem about the fundamental formula in electromagnetism is of high importance. After returning from Denver, I realized that even Whittaker's formula needs a correction. I introduced this correction and the new formula will be presented in my book "Divine Electromagnetism" (to be reviewed in *October 93 issue of NEM*) which will appear at the end of July. (Aspden is near to the right formula but he does not know it, Graneau is very far from it.)

I said in Estes Park and in Denver that I shall have a self-running machine in June. As I had to be in the hospital for 15 days for an operation of the Achilles tendon and for a further 30 days I must be in a cast,

the machine will be ready for demonstration at about the end of this month.

Yours Sincerely,
/s/ S. Marinov

[The letter to Prof. Bockris to which Marinov refers contains the following excerpt: "... Bearden has undoubtedly a big experience but he is to a certain extent extravagant. Concerning Bearden's physics... he is unable to explain clearly what he does mean. It is lost time to try to decipher his concepts... he makes many 'apocalyptic' exaggerations (for example that the Russians have scalar waves and that Challenger was destroyed by the Russians using these waves, etc.)... his brochure The Final Secret of Free Energy, his letter to Pat, etc., teach me NOTHING. His insistent concept that all electromagnetic effects are to be explained by the potentials and not by the intensities is ABSOLUTELY RIGHT. He has only to show WHY this assertion is true. I did this in my books and papers. His insistence for the BIG importance of the Aharonov-Bohm effect is ridiculous. This effect, indeed, demonstrates (as myriad of other experiments in phenomenological electromagnetism) that the electromagnetic potentials determine the motion of the electric charges and NOT the intensities, but it has no practical application. Bearden has NO experiments. He has done and commented on the video on Floyd Sweet's invention which I have seen. **In the video one sees a miracle:** an energy converter with efficiency of about 2,000,000. After having such a machine it is absolutely senseless to organize conferences, to write brochures and to run here and there -- **one need only to present the device at a press conference and in 24 hours the whole world speaks about it...**"]

LETTER FROM DON KELLY

Editor of *Space Energy Newsletter*

...Bruce dePalma has made an excellent case for showing that Faraday's induction is Apples to the Homopolar Generator's Oranges, in my view, and leads to the question as to what else have our present establishment missed? [See lead article on page 1.]

My own tests have shown that the three magnetic field increments of an 'N' machine do not rotate with the magnetic rotor, and I'll be passing this data along to Bruce directly.

We expect to print [in S.E.A. newsletter] another excellent bit of physics theory (Magnetic Field Theory) by Gil Erickson, of Corona, CA. There has never been a satisfactory theory as to why like magnetic poles repel, opposites attract, and yet why ferrous and other metals are attracted to both poles! The Erickson magnetic field theory states that each magnetic field/flux line or cable has a helical spin 'hand' to it, i.e. North Pole spins-right hand, and left for South pole flux lines. This will readily explain why like poles repel (both same spin hands repel) and opposite poles attract (opposite spin hands mesh or attract). Both spin hands will attract ferrous and other metals, and it all seems to explain it all!

Also enclosed is a late extension of the Gravity Field Tests here, with three drop plates placed on an analog scale to record (if any) weight change from the unenergized and energized plates, as described. These results do not surprise me, and it brings out the point that dynamics / drop motion has everything to do with the differential drop times of these gravity drop tests. Hope that this information will be of some help to you and *NEN*.

/s/ Don Kelly

Don Kelly's Gravity Drop Tests

Static Weight / Scale Weights

Test Units: 1. First E/M Drop Plate
 2. Second E/M Drop Plate
 3. First, All-Electric Drop Plate

Scale Description: Hanson Analog type, 0-25 pounds

Input Power Source: 12 V d.c. NiCad Battery Pack

Results: These consecutive tests were run with the three above test plates, placed on the Hanson scale, first without electrical input, and then with the electrical input.

The base weights of the three drop test plates were:

1. First E/M Drop Plate; 3#
2. Second E/M Drop Plate; 3#
3. First, All-electric plate; 1 1/4 #

When the 12 volt d.c. power supply leads were connected to the test plates, there was no weight change, whatsoever, recorded.

Conclusions: The above results of this static weight experiment are believed to indicate that the first series of gravity drop tests are not automatically invalidated by these above findings.

It is now believed that the differential drop times recorded in the first drop tests are the result of a dynamic action of the E/M Force and electrical field with gravity, and will only occur when these test plates are in a falling mode.

INSIGHTS INTO THE PROPRIETARY SYNDROME

By Ken MacNeill

Cadake Industries, Winter Haven, Florida

PART I

To give you some background on myself, I have been interested in the energy situation since I can remember. I have built all kinds of devices, solar energy panels, windmills, photovoltaic arrays, flywheel devices, and also carburetors ... I am an accomplished tool and diemaker, moldmaker, been involved in design engineering for the past 12 years, primarily in the automation area.

My first real involvement with other people in this alternate energy area was at the Toronto Symposium in 1981 where I met George Hathaway as well as over 100 other people that believe in the impossible according to orthodox science. Since that time I have made myself aware of just about everything that is happening in this field, and believe me there are some really fantastic things going on. The rediscovery of some of the technology that was lost in the past is finally coming to realization, for instance the Tesla technology, the Hubbard device, the Moray approach to tapping into the free energy supply that we're sitting in without even knowing it. A friend of mine gave me a real insight possibly without even knowing it. He said the problem could only be solved by just **considering the problem of weighing a glass of water at 500 feet under water. Here you are under water with a glass of water: how do you weigh it?** The analogy is the same for us. Here we sit in the vastness of one of the biggest magnets known to us and we are like the glass of water. We are in the vast ocean of energy. Look around us and watch just the weather for instance, the next thunderstorm, think of all the electrical potential being wasted. That energy is there; it is very real. Tom Bearden... may have illustrated it quite well by the bird sitting on top of the wire with 13,000 volts going through it. We all know that it could kill him but it doesn't. I am positive that within this group [Institute of New Energy] will be the ways and means for making the energy situation of the future change.

Now to the other side of this coin. Why has not this technology been allowed to become established? ...It is my feeling that the technology may be already here and may have been shown to the government. It even may have been introduced to our patent office and turned down.

There are surely some devices or parts thereof that have been introduced to the government or to big business in the past which have been shelved. Tesla's transmission device is a classic illustration. What happened is that they removed the money from him to do his research and effectively stifled this remarkable man. How many other times has this happened to someone not so well known?

[Ken includes a copy of the government's Secrecy Order (Title 35, United States Code (1952), sections 181-188)]

NEW ENERGY RESEARCH IN SWITZERLAND Courtesy of H. Aspden, Don Kelly

We heard that a new energy system was being offered by a Swiss company. Here is a translation of a letter written to *Electrical Review*, an English publication:

RESEARCH PROPOSAL

From Raum-Quanten-Forschung, Schmiedgasse 48,
CH-8640 Rapperswil, Switzerland

Dear Sir:

Professor Dr. Klaus Oberneir has accepted the responsibility as a consultant for RQF (Raum-Quanten-Forschung - Space Quantum Research) beginning in August 2, 1993.

The Institute was formed as a non-profit organization to conduct research in the new technology of space energy research (literally space-quantum-flow). This work will be undertaken in a manner such that the work is acceptable to scientific authorities. The laboratory work will perform research and development work for applications of RQM technology to air and space travel (Biefeld-Brown-experiment, etc.)

We have been soliciting members for the RQF Institute who will provide funds and who will then be invited to demonstrations of the Institute's work.

We have had massive response to our membership solicitation since January 9, 1993. You may still become a preferred member of the Institute if you sign up before August 31, 1993.

For further information, I shall be pleased to respond to your requests,

Institute for Raum-Quanten-Forschung
/s/ Jean-M Lehner, President

LETTER FROM ROLF SCHAFFRANKE (Senior Research Consultant) to Don Kelly concerning RQM.

This is in reply to yours of July 24, with the letter by Aspden. Here is the situation in a nutshell: Oliver Crane is a pseudonym of a Swiss citizen with a Swiss (German) name, who just died very recently, I believe this year.

Unfortunately, the present PR manager has a bad reputation in the Swiss press and not a very good one among the members of SAFE there. The book he is selling is more overpriced than Seike's book from Japan. However, Crane's theory is perfectly sound if we can substitute his terminology Raum-Quanten = space quante medium = vacuum energy = aether energy. RQM stands for "Raum Quanten Manipulator" or "Raum Quanten Motor."

Nucleus of the theory is the very high density of space, caused by SW = standing waves. The existence of the vacuum energy has been proven by relatively simple experiments, presumably contained in the high priced book offered for sale now. Output is 24 V d.c., to be transformed to 220 V a.c. It is claimed to be solid state, no mechanical motion involved. Applications are very numerous, practically unlimited, including cell-regeneration, stabilizing of nuclear waste, all types of propulsion methods for all types of vehicles...

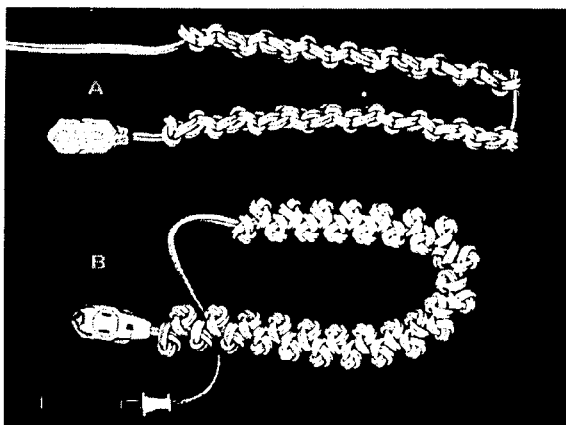
The only tough remaining question is: Is the present promoter on a high enough ethical level to succeed? Or will he eventually be bought out by vested interests, as one of my contacts in Zurich suspects?...

Best, \s\ Rolf

LETTER FROM SAM FAILE**An Open Letter:**

I have found something extremely simple that produces a field effect that can be felt by most people and can not be shielded against like ordinary EM fields. The device will alter the biological effects of water or carbonated beverage in a week's time without using external power or direct contact of the sealed containers of liquid with the electrical conductors. The device is nothing more than a two dollar extension cord configured in a knotted array where adjacent knots are mirror images of each other.

Included is a picture of part of models A and B. Device A involves only two knots but each knot has about 43 turns. Device B involves about 36 knots where each knot has three loops.



The initial test would involve an active circuit rather than a passive one by plugging it into a house current and connecting a 150 watt incandescent lamp for half an hour. People should experience effects such as lethargy, tingling and alteration of perception of colors. Please indicate your interest and I will be glad to send you, free of charge, one of the models with the understanding I will not be held liable for death or injury resulting from use of the device or be billed for any expenses you incur to run the tests. Feel free to publish the results of your studies or send the results to me. This work represents a new embodiment of the earlier research involving coils, "Twisted Coil Produces Strange Effects," by S.P. Faile, published in *New Energy*

News, vol 1, no 2, June 1993. Please indicate which model you prefer.

I believe a phenomenon is being produced of fundamental importance that needs to be understood to revise theory and produce engineering applications in the various fields such as new energy. Any questions? Feel free to write or call. I am a technical correspondent for *Fusion Facts*, and have a degreed background in Chemical Engineering and Solid State Science, having worked for many physicists during my career.

Best Regards, Samuel P. Faile

If interested, you can contact Dr. Faile at :
4002 Sharon Park Lane, #13
Cincinnati, Ohio 45241
Phone (513) 563-4953

LETTER FROM DR. INOMATA

Dear Editor,

Thank you for sending us the *New Energy News*, August 1993. I enclose our *JPI News*, June 1993, with the photos of *New Energy Symposium* in Denver. Incidentally, our *JPI* was founded in 1977 to study such an anomalous phenomenon of metal-bending by the function of the consciousness.

Now, our *JPI* is perhaps the world-first academic gathering which operates on the basis of the new-paradigm of science. The activities are monthly meetings and the publicity by the friendly mass-medias, TV and journals.

With kindest regards,
/s/ S. Inomata
President, *JPI*
Sr. Scientist, ETL

[Dr. Inomata's work on an over-unity N-machine was reported in August *New Energy News*. We will report on Inomata's further developments of the N-machine. -Ed.]

ANOTHER LETTER FROM STEFAN MARINOV

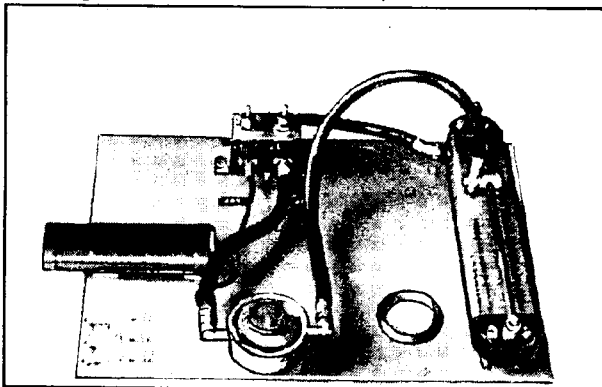
Dear friend and colleague,

On my return trip from the free energy conference in Denver (April 1993), I passed through Rome to see the proofs of my new book *Divine Electromagnetism*.

However, the editor told me that after having consulted some of his distributors, he became afraid that the book will not be sold. First, the title "Divine" will shock the buyers and then the many mathematical formulas. Thus there was no other alternative than to publish the book in my Editorial House "East-West," composing it on my IBM typewriter. Now the book is on sale. It is a DIVINE masterpiece, indeed.

One of the most important aspects of this book is the discovery of the scalar magnetic field which acts with **longitudinal forces**, on the current elements and the establishment that the right formula in magnetism is neither Whittaker's formula (Ampère's and Grassmann's formulas are definitely wrong), but the formula proposed by me which I called Nicolaev's Formula in honor of the Russian Physicist Genadi Nicolaev from Tomsk, Siberia, without whose experiments (see *Deutsche Physik*, No. 2) I could not come to this formula.

Nicolaev's formula rightly predicts the effects in all known current wires interaction experiments. It predicts the rotation in the machine which I constructed and called SIBERIAN COLIU (see photo) once more in honor of Genadi Nicolaev. With the cylindrical magnet cut in two pieces across one of its diametral planes and turning one of its halves down-up, I set the copper ring (shown at right of center in photo) in continuous rotation when putting the ring of mercury trough encircling the magnet and when sending current from the battery.



This machine is an S-machine, i.e., an electromagnetic machine driven by the scalar magnetic field $S = -\text{div}A$, where A is the magnetic potential generated by the magnet. As I already showed in *Deutsch Physik* No. 8, and as I explained at my lectures in Denver, in an S-motor not back but FORTH electric tension is induced, i.e., an electric tension which does not oppose the driving tension but supports it. Also the magnetic action of the

current induced in an S-generator does not brake the rotation (Lenz effect) but supports it (anti-Lenz effect). Thus, if the ohmic resistance of the machine shown in the photograph will be diminished some 1000 times, it will run as a perpetuum mobile, as in this case the driving torque of the induced current will overwhelm the friction torque.

The larger distribution of Divine Electromagnetism will help people with better experimental possibilities than mine to very quickly construct the eternally running SIBERIAN COLIU machine, about which abundant theoretical and experimental information is given in the book.

Stefan Marinov

MEETINGS

INTERNATIONAL FORUM ON NEW SCIENCE October 13-17, 1993 CALL FOR PAPERS

The International Association for New Science, the sponsors of the conference, purpose to bring together scientists, professionals and lay people to promote research in the areas of New Science as well as education. New Science includes topics and phenomena which cannot be explained by traditional science and yet may have the potential for significant benefit to the health and conditions for humanity and the planet Earth.

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

Please send for registration information to the International Forum on New Science, 1304 S. College Avenue, Fort Collins, CO 80524.

INTERNATIONAL SYMPOSIUM ON NEW ENERGY PROCEEDINGS

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The purpose of the Institute for New Energy (INE) is to promote the exchange of information among inventors, scientists, and concerned individuals about the various methods by which clean, inexpensive energy systems can be improved and developed. Initially there will be one class of members, each of whom will receive the *New Energy News* newsletter. Later it is planned to have Professional Members who will also receive the planned *New Energy Journal*. INE membership is \$30 per year.

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