



New Energy News

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ARTICLES

HYDROSONIC POWER GENERATION By Dr. Harold Aspden

In view of the recent flurry of interest in sonoluminescence, thanks to C. Eberlein, *Physical Review Letters*, **76**, pp 3842-45, (1996), we find that not only the journal *Nature* **381**, pp 736-7, (27 June 1996), but other news media are referring to **Casimir forces** and **zero-point energy** and are now even suggesting that there really is a mysterious vacuum energy source which deserves our attention. It appears that a bubble of water expanding and contracting at about 25 kHz will emit light in time with the sound pulses.

Now I am not at all convinced that pointing the finger at **Casimir forces** is a sufficient solution to the mystery. As I see it, **Casimir forces** evidence the existence of an underlying energy activity in the microcosmic field environment, but I cannot relate that to the prospect of generating power. To me, that activity is a kind of aether noise that exists just as tidal motion ripples in the sea. Yet we do not sit by the sea shore with buckets to tap its energy activity by collecting water lifted to a higher energy potential by the surging motion of the sea.

The sonoluminescent light pulses last less than 50 picoseconds and they imply the sudden release of energy concentrated at pinpoint sources of high temperature. This has to be an electrical effect and, given that I have explained several anomalous energy phenomena by my vacuum spin theory, it is logical to interpret sonoluminescence in the same way. My theory explains why aether energy is shed

by the setting up of an electric field radially directed from a point center or from an axis of spin, optimally aligned with the preferred spin direction of local space. Incidentally, space magnetic anisotropy, meaning a preferred spin direction in the aether, has been discovered experimentally by Yu A. Baurov, et al., *Physics Letters*, **A162**, pp 32-34, (1992) and **A181**, pp 283-88, (1993) and Baurov now claims to have built a power generator which runs on **physical vacuum energy** with an excess power gain of 0.5 kW.

Note that Stan Meyer uses concentric metal tubes immersed in water and applies a pulsating voltage between the tubes. He therefore induces radial field effects which **presumably** enhance the ionic dissociation of water molecules and so can generate hydrogen and oxygen with power tapped from the aether.

In the case of sonoluminescence in water each air bubble provides a focal point for radial compression as water under pulsating pressure converges on that point. Water is partially dissociated into positive hydronium ions and negative hydroxyl ions, the latter having the lower mass. Therefore, the pressure pulse will displace the negative ions towards the center of the air bubble at a faster rate than the more sluggish positive ions. Here is the process setting up the radial electric field. What then happens is that the aether responds by spinning to set up its own compensating electrical displacement but, owing to a phase-lock condition prevailing in its energy system, it asserts forces which augment the energy stored by that displacement of ionic charge. In effect, for every unit of energy put in by the sonic pressure another unit of energy is provided by the reacting aether spin state.

In physics as applied to linear harmonic systems there is equipartition of energy as between dynamic motion and static potential. In the sonoluminescent activity the sonic pulsations input energy stored by the electrostatic displacement and the aether adds the dynamic vacuum spin energy. This action hold the displaced charge in a quasi-stable state so that when the sonic pressure relaxes the hydronium and hydroxyl ions are driven again towards the focal point in that air bubble and separate further to increase the radial electric field. The cycle then repeats as field and the compensating aether charge displacement increase whilst the vacuum spin builds. This is a pumping action that occurs at the 25,000 Hz sonic frequency as more and more energy is tapped from the aether.

However, there is a limit because the aether sphere in spin builds up in radius with the increase of energy. **Periodically, at moments when the inward pressure pulses are occurring, the aether spins of two adjacent bubbles will crash as their surfaces come into contact.** This initiates what is, effectively, the discharge of a charged capacitor and I see that as the feature that may well account for the luminescence.

The practical implication is that ionized water containing small air bubbles subjected to sonic frequency pressure pulsations will exhibit anomalous energy properties, and deliver up to twice as much heat as the energy consumed. Another such implication is that the radial electric field pulsations can cause more of the water to dissociate naturally, perhaps even cooling the water if set up with electric power input rather than by pressure pulsation. **That effect gives scope for separating hydrogen and oxygen from water to provide a combustible product of higher energy potential than the electric input consumed.**

In these circumstances I suggest that the physics of the several known phenomena we can relate to the above is a lot easier to understand than the theory of **Casimir forces**. My new book, [Aether Science Papers](#), gives the full account of the physics scientists will need to study if they are to make sense of this new-energy source.

[A review of Dr. Aspden's new book is presented in this issue of the newsletter. Cost and ordering information is also provided. See page 18. Ed.]

PIONS AND THE NEW ENERGY SCENE By Dr. Harold Aspden

Having read Mark Goldes' story about the research of Robert L. Carroll (*New Energy News*, July 1996, pp 13-15), and having seen an advance copy of my new book [Aether Science Papers](#), a colleague sought my reaction. He could see there is a parallel connection. I too, have had "a lifelong argument with relativity theory" and that "is one reason why my work has been largely ignored". That is what my new book is all about, plus predicting why antigravitation is on the horizon as an aftermath to the exploitation of the new energy resource. I even point to the connection with the neutral pion and very much more.

My book is aimed at presenting the physics underlying the **free energy resource** as a preliminary to my next work, with will present the technological details of my research aimed at tapping that resource. I explain in my book how protons are created in space as if from nowhere, but I do not mention Robert A. Millikan's account of cosmic radiation, as exploited by Carroll. Rather than imagining proton-antiproton annihilation to create neutral pions and so shed energy in empty space, I see the aether as alive with muon pairs which combine to fuse into neutral pions as well as creating protons and electrons.

However, on the Millikan theme there are four items listed below that *NEN* readers will find of interest if I quote them from my copy of a 1935 book in the University of Chicago Science Series, [Millikan's Electrons \(+ and -\), Protons, Photons, Neutrons and Cosmic rays](#). I note that these were early days to be writing about neutrons, days before our modern scientists carved their interpretation of nuclear structure in tablets of stone!

1. On page 207, after explaining on page 206 that a proton **is charged with one positive electron**: "In uranium, for example, since its atomic weight is 238, we know that there must be 238 positive electrons in its nucleus. But since its atomic number is but 92 it is obvious that $(238 - 92 = 146)$. Therefore, 146 of the 238 positive electrons in the nucleus must be neutralized by 146 negative electrons which are also within that nucleus. That these negative electrons are actually there within the nucleus is independently demonstrated by the facts of radioactivity, for in the radioactive process we find negative electrons, so called β -rays, actually being ejected from the nucleus."

On this basis, Millikan would not have denied heat generation from cold fusion of deuterium owing to there being no neutron emission!

2. On page 376, in **The Neutron** chapter: "By such an artifice one might be able to retain the conception of the electromagnetic origin of mass and with it Chadwick's conception of the neutron as a mere combination of a proton and a negative electron."

The artifice was the assumption that under suitable conditions the proton could blow itself up into a free positive electron with the attendant release of energy accounting to the $E = Mc^2$ formula.

3. On page 377 this theme was developed to account for cosmic rays, which if confirmed as having the 500 MeV photon levels of energy "would merely be evidence in favor of the annihilation of hydrogen atoms throughout the heavens, and would decisively differentiate between the relative claims of the neutrons and the proton as primordial entities."

4. Millikan ends his book on pages 455-456 by reciting "the correct position of science" on the subject of whether the universe has regenerative energy properties as that of G.W. Lewis: "Thermodynamics gives no support to the assumption that the universe is running down. Gain in entropy always means loss of information and nothing more."

I conclude by noting that on the last page of my own book Modern Aether Science, I referred to a 1970 report of the problem of understanding the **kink or break** in the cosmic X-ray spectrum occurring at 20-40 keV which was said to correspond to the break at 2-5 GeV in the parent electron spectrum. These two energy ranges correspond to the muon and graviton energies that feature in my aether theory, but cosmic rays are not something we can harness to propel us into space. By extracting aether energy by the other methods now known to us we can exert force on the aether itself and take off from there. We can either develop a spin reaction or a linear thrust depending upon the methods we use. Mark Goldes account is an early chapter in this story.

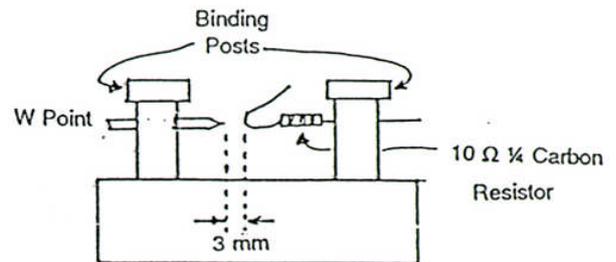
EXPLODING RESISTOR EXPERIMENT

By Nicholis Reiter,

The 8-centimeter-diameter **Fireball**.

In light of Dr. Faile's recent carbon resistor experiments, I attempted a duplication using the 15 KV DC supply; a tungsten air gap electrode; and a 0.5 uF capacitor circuit arrangement.

A 10 Ω , 1/4-Watt carbon resistor was mounted in the spark gap holder as shown below:



A three millimeter arc gap was set between the tungsten point and the resistor bent lead.

When the circuit was energized, the high voltage held off for perhaps 3 seconds, and then arced. The arc was in the form of a horrendous bang (0.38 cal or louder!) and an orange flaming fireball about 8 cm across was formed. The effect was unnerving, to say the least.

The forward pointing wire lead of the resistor, and the body of the carbon resistor itself, were utterly disintegrated. Only a portion of the rear-ward wire remained. The dramatic effect was repeated three times [consuming three resistors] with identical results each time.

It seems as though the light, sound, and flame produced are (at a glance) anomalous in these tests. Would calorimetric analysis confirm this hypothesis? Can the effect be enhanced even further by adding H_2O or NH_3 to the resistor region?

Editor's comments: See "An Educational Exchange" in the LETTERS section of this issue beginning on page 13. I believe that Reiter and Faile has discovered a clever (and inexpensive) method by which the experimenting readers of this newsletter can create and learn more about Ken Shoulders' **high density charge clusters or EVs**. According to some papers presented at the recent XXVIIth International Symposium on Discharges and Electrical Insulation in Vacuum, some types of arc-produced phenomena can also produce nuclear reactions or local transmutation of elements. **Are nuclear reactions being produced in these resistors?**

Space Energy

FROM *BORDERLANDS*, A Quarterly Journal of Borderland Research:

A Review of papers in Vol LII, No 2, Second Quarter,
1996 issue of *Borderlands* by Hal Fox.

Michael Theroux, the editor of *Borderlands*, starts out this issue with a comment on Trevor James Constable's article, "Whither Weather Engineering":

"Trevor's outstanding work in the field of weather engineering has proven without a doubt that the ether does exist and **is** directly accessible with simple geometric instruments." Trevor's article is about aetheric weather engineering. The author makes the following statements: "Practical airborne tests in Hawaii using the new **Bull** etheric translators, have shown that a light aircraft so equipped and appropriately used, can produce more etheric response, faster, than any other development thus far of this engineering art." In discussing applications for weather control: "Influencing wind direction and humidity levels to bring forest fires under control is a case in point. **This is a here-now capability ready for practical trial and further development, at nominal cost.**"

Near the end of the article, Trevor reports the following: "First, the ancient Aeronca [type of aircraft flown] transited the target area on a standard rain engineering pass. A sailplane with unrestricted forward visibility was later used to record from 2,000 feet, that part of the stunning results accessible to this remarkable aircraft. The combination of TV weather forecast clips, contra-forecast deluges, and aircraft and sailplane documentation made a compelling case. All this can and will be improved into an evidential bolus that will silence any skeptic living."

"Some Observations on the Relationship Between Light & Electricity", by Thomas J. Brown informs us that Johann Wolfgang von Goethe, the well-remembered German poet, was most impressed with his experimental work on light. Goethe is quoted as saying: "But in my century I am the only person who knows the truth in the difficult science of colors--of that, I say, I am not a little proud, and here I have a **consciousness** of a superiority to many." Try this

experiment yourself: Let light through a slot and onto a prism and note the prismatic colors. Now introduce an opaque band (the reverse of a slot) and observe the change of colors produced. You will want to read the article for more information.

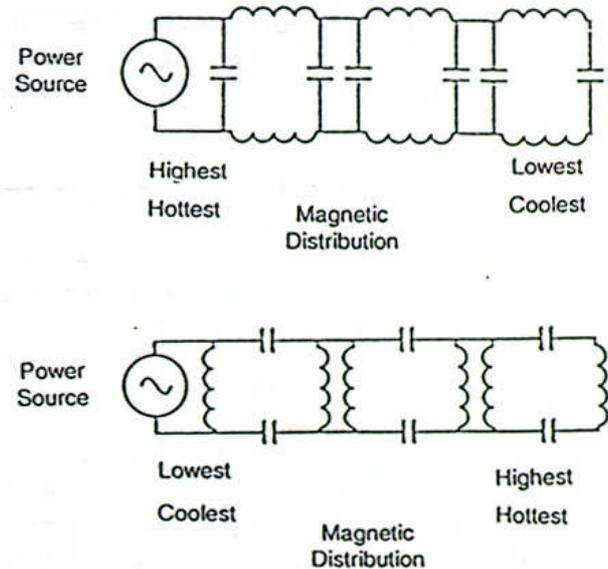


Figure 2. TEM and LMD Circuits

Brown further describes two types of circuits: The first is series inductors with parallel capacitors. The second is series capacitors with parallel inductors. See Fig. 2. The author states that the heat generated in these circuits is different. These two circuits can be used to study the characteristics of TEM (transverse electromagnetic) and LMD (longitudinal magneto-dielectric) waves. The upper "highest" & "lowest" refer to measurable distribution of magnetic intensity. The lower "hottest" & "Coolest" refer to sensible temperatures developed in the circuits.

FLORIDA - SPACE ENERGY JOURNAL

The following articles are abstracted from vol. 7, issue 2, June, 1996 of the *Space Energy Journal*:

Jim Kettner, Editor, "Editorial," *Space Energy Journal*, vol 7, no 2, pg 1.

EDITOR'S COMMENTS

Kettner discusses the problems of receiving hundreds of pages of information with very few pages that meet his journal's desire for good experimental information. We can sympathize with Kettner, especially when he writes, "We receive letters from aliens (supposedly translated by people who communicate with them) on

new energy solutions for planet earth." [The editor of this newsletter also ignores unsolicited papers on aliens, UFOs, etc. This is an energy newsletter.] Kettner also declares that he receives many stories "about the suppression, ideas being bought up, exploded, or inventors disappearing." Kettner counters with the concept that he has met some **free energy inventors** who have used these stories to cover up the fact that they can't produce a product.

Ralph Hovnanian, "On the Matter of Energy," *Space Energy Journal*, vol 7, no 2, pp 2-4, 2 figs.

EDITOR'S COMMENTS

Hovnanian writes about gravity being a **push** rather than a **pull**. However, he is apparently unaware of the many others before him that have discovered the same idea. The latest published article proposing gravity as a "push" was presented at the Third International Symposium on New Energy (Denver, Colorado, April 25-28, 1996) by A. Zielinski. Many years ago, a Holland scientist proposed the same idea (I know because I presented the same concept while employed as a missile system engineer for the Sperry Utah Co.) However, the idea has been best described by Harold Aspden and later in a long mathematical exercise by Harold E. Puthoff.

Following Hovnanian's paper, several pages are devoted to a review of data and correspondence relating to the gravity drop-test experiments.

Edward Lewis, "Plasmoid Phenomena," and "Plasmoid Phenomena and **Cold Fusion** Phenomena," and "Gorgons, Tornadoes, and Plasmoid Phenomena," *Space Energy Journal*, vol 7, no 2, pp 16-26, 46 refs.

EDITOR'S COMMENTS

Lewis has been writing articles about plasmoid phenomena for some time. These three articles provide a good overview of Lewis' ideas. He does a good job of citing the literature.

Roger Hastings, "Joseph Newman's Theory," *Space Energy Journal*, vol 7, no 2, pp 28-34.

EDITOR'S COMMENTS

This article has some interesting data about the May 1985 demonstration of the Newman motor in Washington, D.C. The motor was operated at 60 and 120 rpm. The 55 miles of wire made a coil weighing 9,000 pounds, used a 700 pound magnet, and the device was operated using six-volt Ray-O-Vac lantern batteries connected in series. The article suggests that the motor charged the batteries. We look forward to the further development of the Neumann motor into a practical source of power.

End of Review of *Space Energy Journal*

MARYLAND - MAGNETIC ANTENNA

Wm.M. Farrell, M.D. Desch, & J.G. Houser (Goddard Space Flight Center), inventors, "Magnetic Antennas Using Metallic Glass," *NASA Tech Briefs*, July 1996, vol 20, no 7, pp 50-51, 2 figs.

Search coils for detecting magnetic fields can be improved by the use of metallic glass. The standard many-turn coil is mounted on a hollow dielectric rod wound with flexible metallic glass. The resulting coil will detect magnetic fields better than the standard coil installed with a ferrite material, especially for frequencies of 30 Hz and higher. This new device is lighter in weight and can be made rugged. **Three such coils can be used to measure the three orthogonal components of the magnetic field.** With the increasing interest in magnetic devices, especially the new super magnets, this coil construction may have considerable application.

Miscellaneous

ABSTRACTS FROM JOURNAL OF NEW ENERGY

The following are the abstracts of the papers published in the second issue of the Journal of New Energy.

E.E. Antonov, V.G. Dresvyannikov, V.I. Popovich (Scientific-Technical Centre for Coal Energy Technologies, Kiev, Ukraine), "Some Features of H₂O Low-pressure Discharge in Pulse Mode."

AUTHORS' ABSTRACT

Our previous report has been devoted to detailed investigation of plasma-chemical reactions between water molecules and charged particles in stationary, low-pressure, H₂O, discharge plasmas. Now we discuss some properties of above plasma in pulse mode. The aim of our research is to investigate the peculiarities of (H, OH, H₂) generation in this regime that is necessary for applied research on water conversion at atmospheric pressure.

J. O'M. Bockris and G.H. Lin (Dept. Chem., Texas A&M Univ., College Station, Texas), and R. Bush (Phys. Dept., Cal. St. Polytech. Inst., Pomona, CA), "The Rediscovery of Cold Nuclear Reactions."

AUTHORS' ABSTRACT

The word transmutation is often associated with medieval alchemy. Nevertheless, the change of one metal into another is a common event of modern nuclear chemistry carried out in nuclear reactors or in high energy cyclotrons. In the last few years a number of pieces of information have arisen which suggest that there is a low-temperature way of provoking nuclear changes. There are several titles at present being used to describe the reported phenomena. They are: chemically-stimulated nuclear change; lattice-assisted nuclear change; low-temperature nuclear change; cold nuclear reactions. This latter term will be used in this article. Such reactions embrace also the D + D reactions discussed since 1989, in the so-called cold fusion literature, but include a wider swath of systems, characterized by observation of changes in solid systems, not far (e.g., up to 1000°K) from room temperature which seem only explicable on the assumption that a nuclear change has occurred although none such would be expected based on the current theories of nuclear chemistry.

V.I. Kichigin, A.V. Klyuev, S.A. Kurapov, V.F. Panov, G.V. Khaldeev, T.F. Borisova (Perm Univ., Perm, Russia), "Torsional Fields and Electrochemical Processes at Metal-Electrolyte Interface."

AUTHORS' ABSTRACT

A concept about the effect of torsional field on electrochemical (involving charge transfer) reactions of spin-polarized particles is advanced. Effects are found when examining hydrogen permeability of palladium membranes in the system Pd/0.5 M H₂SO₄, Pd/0.1 M NaOH and also in the investigation of the electrode

potential changes in the system Cu/x M CuSO₄ + 0.5 M H₂SO₄ (x = 0.01 and 1.0). A hypothesis is put forward that torsional fields alter the potential of interaction in the electrochemical systems in question, and can affect both the crystal's phonon spectrum and spin orientation of reacting particles.

M.H. Miles and K.B. Johnson (Chem. & Matls. Branch, Res. & Technol. Div., Naval Air Warfare Ctr. Weapons Div., China Lake, CA), "Electrochemical Insertion of Hydrogen into Metals and Alloys."

AUTHORS' ABSTRACT

Hydrogen in metals has possible applications in various energy storage devices. For the palladium-deuterium system, excess power production and other anomalous effects have been reported. This study focused on hydrogen and deuterium insertion into palladium and deuterium insertion into various palladium-boron alloys. The condition of the metal surface is a major factor in the insertion of hydrogen or deuterium into palladium or palladium-boron alloys. Cracks or other surface defects prevent high loading levels of hydrogen in metals. The addition of boron to palladium does not affect the initial loading rate but slows further loading to higher levels. **The presence of boron in the palladium significantly slows the rate of the deloading process.**

T. Mizuno, T. Ohmori (Hokkaido Univ., Sapporo, Japan), and M. Enyo (Hakodate Nat. Col. of Technol., Hakodate, Japan), "Anomalous Isotopic Distribution in Palladium Cathode After Electrolysis."

AUTHORS' ABSTRACT

It was confirmed by several analytic methods that reaction products with mass number ranging from 20 to 28, 46 to 54, and 72 to 82 are produced in palladium cathodes subjected to electrolysis in a heavy water solution at high pressure, high temperature, and high current density for one month. Isotopic distributions were radically different from the natural ones.

Phillip Ozdemir (Smyrna, New York), "The Energy Release Mechanism of Newly-Formed Alpha Bosons in a Quantum Crystal Lattice, (or "Why There are No 23.8 MeV Gamma Rays from D + D = ⁴He Spin-Coherent Cold Fusion Reactions.")"

AUTHOR'S ABSTRACT

This paper provides a description of the physical process by which newly-formed alpha bosons lose the energy of fusion to the metal hydride lattice in a typical stimulated anharmonic fusion. Contrary to popular belief, there is no 23.8 MeV gamma ray. The paper also stands as a correction to the phonon release mechanism of Schwinger. The actual energy release mechanism is more complicated than a single gamma ray. Initially two circularly polarized gammas are emitted from the quark bag collapse of two 4.38 fermi radii deuterons to a single 2.5 fermi radius alpha boson. The intensity of these gamma rays is immediately strong enough, in the Coulomb field of the resultant alpha boson, for intense micro-episodic pair production. The 23.8 MeV energy of fusion allows for 2 electron-positron pairs to be produced in a Dirac-like process out of the vacuum near the charge density of the resultant alpha boson. These electron positron pairs speed out from the point of creation in momentum and energy conserving directions. They are quickly scattered by the lattice and contribute to the enthalpy of the lattice in several distinct ways. The electrons and positrons scattered by the palladium nuclei and the deuterons emit Bremsstrahlung photons. When scattered against the electronic charge distribution of the lattice they emit Cerenkov photons. They may also engage in ionizing and Compton collisions with other electrons. The electrons engage in classical scattering and contribute to Joule heat in the conduction band. The positrons travel a short distance while contributing themselves to Joule heat, being scattered by the Coulomb field of the lattice, and then establish a briefly-lived atom of positronium. They are then annihilated in a matter-antimatter collision with a lattice electron (conduction or valence band). The annihilation radiation of the matter-antimatter leptonic collision (positron annihilation) then is a contributor to the lattice enthalpy. The annihilation radiation results in two oppositely-directed X-rays with an energy of 511,000 electron-volts each. These X-rays are Compton scattered by electrons and ions inside the lattice and are reduced in energy after each Compton collision.

Mitchell R. Swartz (JET Technology, Weston, MA), "Four Definitions of Power Ratio used to Describe Excess Enthalpy in Solid-state Loading Systems."

AUTHOR'S ABSTRACT

The exact definition for the amount of putative "excess heat" or "excess enthalpy" in some possible

experiments remains unresolved. This paper describes four of the possible definitions for the power amplification factor (Π) -- which relates the input power to the excess enthalpy actually generated. Issues including the Poynting vector, the thermoneutral potential, and the two types of power amplification factor corrections for gas flow are compared (Π_{Den} , Π_{Num}). Because of the distinctly different possible "definitions" of the power amplification factor and the recombination issue and the reasonable skepticism towards the possible existence of solid state fusion systems, and both for uniformity and simplicity, it is recommended that the absolute (minimum) power amplification factor (Π_{ABS}) should be used to describe the quality of such putative fusion experiments.

T.E. Bearden, "Use of Asymmetrical Regauging and Multivalued Potentials to Achieve Over-Unity Electromagnetic Engines."

AUTHOR'S ABSTRACT

Asymmetrical regauging and multivalued potentials (MVPs) occur widely in nature and may involve fields that are nonconservative, i.e., the free production of excess force fields. Yet conventional electric and magnetic engines are designed with gauge frozen and utilizing conservative fields and single-valued potentials. Self-induced change of potential, as by an MVP, can be utilized to accomplish *asymmetrical self-regauging* (ASR) (A-regauging) of the engine's stored energy at a certain point or sector. This is equivalent to free **refueling** of the engine, at each regauging position in its cycle, with excess energy furnished from the vacuum. During asymmetrical regauging, the system is an open system receiving excess energy from a known external source, so it can exhibit a COP > 1.0 without violating the laws of physics. One or more additional force fields will appear, and they may be used to assist the operation of the system, by deliberate design.

When Maxwell's equations are expressed in (A, ϕ) form, two equations result in which A and ϕ are coupled and the variables are not separated. Electrodynamicists then *arbitrarily* alter these equations by making two simultaneous asymmetrical regaugings, designed so that the net regauging is symmetrical -- i.e., the net force fields are unchanged. The variables are separated by this *net symmetrical* transformation. These regauged Maxwell equations are then widely utilized in the literature, without further regauging. The *net symmetry* of the overall regauging *curtails and closes Maxwell's EM model and the operation of any*

designed Maxwellian system to further regauging, particularly asymmetrical self-regauging. In short, it eliminates the system's permissible *free collection and use* of potential energy from the external environment (i.e., the vacuum), by asymmetrical self-regauging.

P. Anastasovski, H. Fox, K. Shoulders, "A New Approach to the Cosmic Red-Shift and to the Cosmic Microwave Sources."

AUTHORS' ABSTRACT

Here is presented the analysis for photon-electron interaction, when the electron is free, and is under action of externally applied electric field. Equations for mass quantization and for quantization of the law of conservation of momentum, obtained by the QMT (quantum mass theory) are applied in the analysis. These equations, initially determined for the atom when its state is defined by the principal quantum number n , are applied here to the free electron when its state is determined by the magnitude of the externally applied electric field. The results of the analysis show the possibility to explain the cosmic red-shift by QMT, which can also be used to explain the origin of detected microwaves coming from the universe. The results of the analysis also suggest the possibility for their experimental verification. [Therefore, no need for the invention of the **Big Bang**. Ed]

Stefan Marinov (Inst. Fundamental Phys., Graz, Austria), "Segner-Marinov Turbine as a Perpetual Motion Machine."

AUTHOR'S ABSTRACT

I devised the historic Segner turbine as a system with a closed energetic circle. If leaving the water in Segner's turbine to have a paraboloidic surface and if pouring the squirted-out water into its centre (in such cases I call it the Segner-Marinov turbine), the system becomes self-accelerating. The energy win comes from the "tunnel transition" of water under the hydrostatic "potential barrier."

H.L. Bonilla (Phil. Aether-Magnetic Inst. Technol., Philadelphia, PA), "On the Illusion Derived from Timeless Systems."

AUTHOR'S ABSTRACT

There is a notion among contemporary physicists that time can be dilated or caused to be longer to stationary observers watching systems in motion. The Italian astronomer and physicist Galileo Galilei, pointed out that if a ship, for example, is moving in a harbor and an object is released from the mast of the ship, the object falls straight down and hits the deck near the base of the mast, as observed on the vessel. But if such observation is taken from the shore, the object will not appear to fall straight down. According to Galilei, from the shore the object will be seen following a parabolic path. He reasoned that the falling object must maintain its forward motion because the ship is carrying it along, while simultaneously it falls toward the Earth. However, it is well known that regardless of outside observation, the falling object will still hit the deck at the foot of the mast simply because the ship is moving along and keeping pace with the forward motion of the falling object. Yet, if a sailor on the shore and a sailor on the ship were to have identical clocks, the former will "see" that the falling object takes longer to fall, relative to the time measured by the sailor on the ship. This is a classical case demonstrating time dilation as accepted by mainstream physics today. But this author will show that time dilation must be an illusion occurring to a stationary observer watching moving points of interest along static and therefore timeless trajectories or paths.

Howard Hull, "Potential in Space of Compound Curvature."

AUTHOR'S ABSTRACT

In a paper titled "Potential in Space of Negative Curvature" by Lawrence Hecht (*Research Communications*, Winter 1992) the geometry and calculus for treatment of the Pseudosphere as a description of Mass-Energy transfer and nuclear particle repulsion was developed. While the paper was cleverly written and stimulating with respect to the disciplines of potential mapping and relational thinking, many things are suggested concerning which further work needed to be done.

In some speculative work regarding possible toroidal geometries, as a better solution than pseudospherical geometry for the problems at hand, **Ron Kovac** pointed out that the Meusnier Transform cited and explained in **Hecht's** paper was also applicable to toroidal geometry. **Kovac** cited several other works which effectively used toroidal configurations to depict geometrical approaches to electrodynamic applications. Further, it was noticed by the author of this paper that the toroidal geometry

has pseudospherical interior surfaces, and, as **Kovac** entreated, could be subjected to the same sort of analysis. Indeed, this analysis can be done; this paper develops **Hecht's** morphology of the pseudosphere in application to the toroid.

Vladimir N. Larin, (Geol. Inst., Russ. Acad. Sci., Moscow), "Rift Zones as an Inexhaustible Source of Hydrogen on Earth (New Perspectives of Ecologically Clean Energetics)."

AUTHOR'S ABSTRACT

A newly identified regularity in the distribution of elements in the Solar System has been used to re-evaluate the primordial composition of Earth; it is argued that it may be possible to discover, in rift zones, oxygen-free alloys and compounds at depths accessible to drilling. Pumping water there must release heat and hydrogen. The most promising are the western USA and Canada, East Siberia, Jordan-Dead Sea region, Rein Graben, and Middle Ocean Ridges of Earth.

Paul E. Rowe (Mashpee, MA), "Hydrogen Gas from Vacuum, Parts I and II."

AUTHOR'S ABSTRACT

When explosives containing aluminum powder were detonated in vacuum, much more gas was produced than was expected on a theoretical basis. A literature search revealed that other experimenters (some well known and highly respected) had produced surprising quantities of hydrogen gas in and, apparently from vacuum. Further experimentation revealed that the extra gas produced from explosions was also hydrogen.

The formation of hydrogen gas from vacuum requires energy. Similarly conversion of hydrogen into vacuum may produce energy without violating the laws of thermodynamics. A working hypothesis is that vacuum is not a void but rather a matrix of protons and electrons?

Colin Walker (Vancouver, B.C., Canada), "Is the Redshift a Quantum Effect?"

AUTHOR'S ABSTRACT

The galactic redshift may correspond to the loss from light of a constant, universal quantum of energy per cycle, independent of the wavelength. A gravitational mechanism is considered.

STUDENT PAPER

Taylor Hartley, "The Future of Rocketry."

AUTHOR'S ABSTRACT

Rocketry, as we know it, could very easily become nonexistent within the next fifty to one-hundred years. Today, most rockets are powered by strong chemical reactions. Some people have speculated about using nuclear fission instead, as the propulsion for rockets that will be sent to Mars. In this way, the rockets would get there much more rapidly as compared with the conventional processes currently in use. But if speed is of such importance, why isn't atomic fusion strongly considered over nuclear fission? It would produce hundreds, if not thousands, of times more energy than a fission reaction would, thus making it possible for greater velocities. Therefore, if the technology of hot nuclear fusion were properly developed, then this form of propulsion would be much more effective than the already intense process of splitting large nuclei. **But from recent discoveries, it is evident that future rockets may not require any form of combustion, nor any chemicals or elements as fuel.** These recent advances may even yield hundreds of thousands of times more power than even nuclear fusion. This ideal form of energy is astonishing because all that is essentially required are magnets; magnets used in such a way as to properly manipulate the zero-point-energy (ZPE) of space, that is, more so than they already do. [Or perhaps **electromagnetic devices.** Ed.]

LETTERS TO THE JNE EDITOR

Letter from Mitchell Swartz (JET Technology, MA), "The Impact of Asymmetric Stratification of the Air Surrounding Calorimeters."

Although there were several responses to the paper last issue regarding possible positional effects in flow calorimetry ("Potential for Positional Variation in Flow Calorimetric Systems"), a theoretical examination involving a quasi-one dimensional model of heat and mass flow and the Bernard instability, that from Scott

Little is perhaps the most interesting. His discussion can be resolved by addressing several questions of significant value.

Letter from Camil Alexandrescu (Romaina), "A Letter about Nicolae Vasilescu Karpen."

As I promised you many "letters" ago, I am now beginning to tell you about Nicolae Vasilescu Karpen and his strange electrical cells. My investigation on this matter is not finished yet, however, I have an important amount of information that is quite ready to be shared with you.

End of JONE Abstracts.

SRI LANKA - THE SPACE AGE BEGINS -- WHEN?

Courtesy of Hal Puthoff

Arthur C. Clarke, "When Will the Real Space Age Begin?", *Ad Astra*, May/June 1996, pp 13-15.

EDITOR'S SUMMARY

The science fiction writers of the past have predicted the coming space age for a few generations, however, Clarke notes that their estimates of costs and time scales have been wildly inaccurate. To put this comment in proper perspective, Arthur C. also notes that the Astronomer Royal, Richard Woolley, when taking up his new appointment in 1956 was quoted as saying, "Space travel was utter bilge" and the **Sputnik** was launched the following year. Clarke corrects this mis-quote with what Woolley really said, "All this writing about going to the Moon is utter bilge -- it would cost as much as a major war."

Clarke is confident that the space age can and will begin. He suggests that a good place to start is to **get some bright young men to study the mathematical work of Hal Puthoff, et al.** Clarke states, "Frankly, I think the rocket has about as much future in space as dogsleds have in serious arctic exploration." In this regard, Arthur C. Clarke will enjoy this issue's report on Harold Aspden's new book, which among other things, provides some insight into where we may discover some of the fundamentals for antigravity.

[Editor's Note: Arthur C. Clarke receives this newsletter every month at his home in Sri Lanka. His most recent fax was to humorously berate this editor for not spelling his name correctly. **He threatened to sic his lawyers, Messrs. Geldsnatch and Blubberclutch on us.** Hal Fox immediately sent the following reply: "This error

may be a Freudian slip in retaliation to what you did to **HAL.**" However, we do apologize publicly and trust that the mistakes we make in the future will not be to drop ending e's. Sorry, Arthur C. Clarke. We have corrected our database.]

FLORIDA - ELECTRIC CARS - RUNNING ON EMPTY

Courtesy of the author.

Bonne W. Posma, "Running on Empty," *AtE (Access to Energy)*, May 1996.

EDITOR'S SUMMARY

Bonne Posma has written about one of the great disadvantages of electric automobiles: the small amount of energy contained in batteries as compared to the energy contained in a gallon of gasoline. Using the **EVI**, the first production electric car announced by General Motors, Bonne analyses the power contained in the 320-volt array of batteries and compares the energy available with that of a gallon of gasoline. The following figure, reproduced by permission, gives a graphic impact of the amount of energy in one gallon of gasoline compared with the energy of the EVI's **entire battery**.

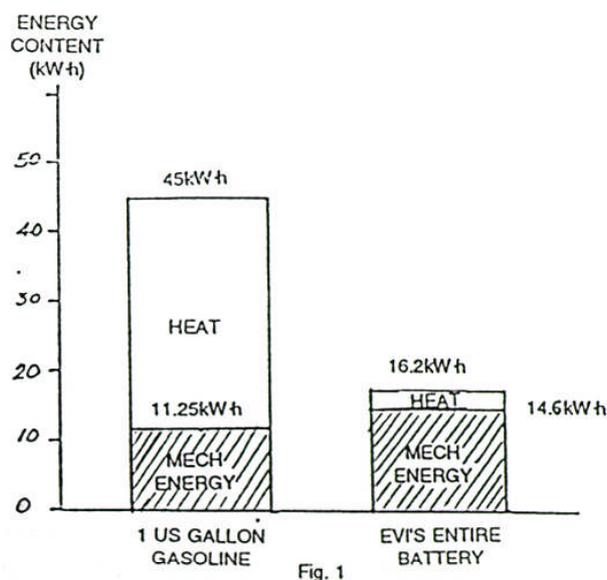


Fig. 1
Energy content of 1 gallon of gasoline compared to the energy content of the EVI's battery

When subtracting the amount of energy in **one gallon of gasoline** that is lost as heat, the energy actually converted to mechanical energy about 11.25 kiloWatt hours. This amount of energy is compared to the 14.6 kiloWatt hours in a freshly-charged total set of EVI batteries. Because the amount of gasoline left in the tank of a standard U.S. automobile when the gasoline gauge reads **Empty**, is 1.5 to 2.5 gallons, **Posma suggests that operating an electric automobile is equivalent to running on empty with your standard car.**

The message is: **To make electric cars more competitive, we must either have much better batteries or design and use a space-energy powered On-Board Battery Charger.** This editor firmly believes that there is now, under laboratory development, space-energy technology that will provide for the design of an on-board battery charger that will greatly extend the distance that an EVI can be driven. **This type of new technology will make the electric vehicle the personal vehicle of choice in the future.** In addition, the combination will meet the most stringent of the zero-emissions standards.

NORTH CAROLINA - NOTES FROM T.T. BROWN

Charles A. Yost, "T. Townsend Brown Notebooks," *Electric Spacecraft Journal*, Apr/May/June, issue 18, June 16, 1997, pp 13-16.

EDITOR'S COMMENTS

Charles Yost, the editor of the *Electric Spacecraft Journal*, provides us with an interesting insight into the works of T.T. Brown. Some excerpts from Brown's journals from 1955-1958 and from 1967-1977 are provided. For example, "April 7, 1956, In a vacuum (10^{-6} mm Hg or less) - a simple vacuum capacitor will appear to flash as the voltage increases. Concurrent with the vacuum spark, an impulse force is notable in the direction from negative to positive. ... Successively higher voltages, starting at 30-40 kV and going up to 150 kV, must be applied to allow flashing spark-over to continue. The anode takes on a reddish glow upon flashing and the cathode has bright starlike points. Impulse forces are on the order of thousands of dynes."

May 31, 1970, Palo Alto, CA. "Brown begins investigating the use of capacitors to detect gravitational waves. He starts with four 1-microfarad, 25 kV capacitors, producing loud pops and whistles. Several circuit variations are sketched."

March 10, 1975. "A volcanic rock from Waikiki, 10 cm in diameter, was washed and oven dried at 400 deg F. Copper print electrodes were painted on it

after it cooled. The rock output about 60 mV. When connected to the recorder it immediately showed regular pulsations about 1 second apart."

NORTH CAROLINA - CONFERENCE REPORT

Charles A. Yost, "Science Conferences," *Electric Spacecraft Journal*, Apr/May/June, issue 18, June 16, 1997, pp 18-20.

EDITOR'S COMMENTS

Charles Yost reports on his attendance at the International Symposium on New Energy, Denver, Colorado, April 22-28, 1996 and also at the Society for Scientific Exploration on May 22-25, 1996.

NORTH CAROLINA & VIRGINIA - ELECTROSTATIC EXPERIMENTS

R. Steven Hall and Leslee Kulba, "Electrostatic Experiments," *Electric Spacecraft Journal*, Apr/May/June, issue 18, June 16, 1997, pp 21-26.

Richard Hull, "Tesla Coils, Electric Gradients and Electrostatics," *Electric Spacecraft Journal*, Apr/May/June, issue 18, June 16, 1997, pp 27-31.

Charles Yost, "Electrostatic Force Experiments," *Electric Spacecraft Journal*, Apr/May/June, issue 18, June 16, 1997, pp 32-37.

ABSTRACTS

Hall and Kulba performed a series of experiments that would allow direct observation of electrostatic forces. These included levitations, spinning tops, inflation forces and the measurement of ion charge collection on an antenna.

Richard Hull reports the results of the latest experiments of the Tesla Coil Builders of Richmond (TCBOR). These experiments are directed toward studying the dynamic electrostatic fields generated by Tesla coils in an attempt to test Tesla's claims that most of the effects of his coils were electrostatic, not electromagnetic in nature.

Charles A. Yost presents some ideas of how electrostatics might produce propulsion. The only other forces recognized in the paper are those experienced from acceleration and gravity. In other words, this article is limited to the Newtonian forces.

EDITOR'S COMMENTS

Both Yost and Hall's articles provide some interesting experiments using Tesla coils or a Holtz/Wimshurst machine in which small units of aluminum foil are levitated and spun in an electrostatic field. In Hall's article he describes experiments with electrostatic forces provided by a Holtz/Wimshurst generator and shows how to spin a top using the electrostatic forces. Hull experiments with various antennas and measures the effectiveness on transferring power from the Tesla coil to a receiving antenna. Some very interesting discoveries were made involving both inductive and capacitive coupling. Hull also reports on a new record (for this group) of producing a 115-inch spark using their most powerful Tesla Coil.

This issue also included a short note from R.M. James about "Longitudinal Waves" and their mathematical representation. Copies of the *Electric Spacecraft Journal* can be obtained from 73 Sunlight Drive, Leicester, North Carolina, 28748, voice 704-683-0313; Fax 704-683-3511.

NORTH CAROLINA - ON ELECTROSTATICS

Leslee Kulba, "**C** = $(\epsilon_0 \mu_0)^{-1/2}$," *Electric Spacecraft Journal*, issue 18, June 16, 1996, pp 6-12, 33 refs, 3 figs, 3 tables.

AUTHOR'S ABSTRACT

As the field of electrostatics reopens in the search for a mechanism for large-scale electric propulsion, questions arise which go beyond the scope of undergraduate curricula. Sometimes phenomena are observed which appear to contradict conventional theory. It is therefore necessary to reexamine accepted interpretations and applications of fundamental notions for consistency. This paper examines two constants of proportionality, ϵ and μ , from a philosophical basis; addressing their derivation, arbitrary nature, physical properties, and coincidental interconnectedness with each other and other constants. Examination of the principles underlying elementary physics reveals that, **although the science is a great tool for accounting for physical changes, the physical essence of what is really happening is still unknown.**

EDITOR'S COMMENTS

This is a good survey article about dimensions, definitions, and especially about **permeability** and **permittivity**. Also, the author reminds us of some of the historic background of some of the conventions. For example, did you know that a unit of capacitance was originally derived from the radius of a sphere? In addition, the author reminds us that some of the mathematical expressions are precise statements of scientific laws or facts and others are derived expressions that are difficult to equate with reality. We should all be aware of what it is that we are calculating when we use the numerous equations we find in textbooks and technical papers.

PUSH-GRAVITY VIDEO TAPE

Courtesy of W.C. Wright

W.C. Wright has recently completed a video tape explaining how his Push-Gravity Tide Model demonstrates the Earth's 14 tides and operates under its own mutual repelling energies. This video has received very flattering comments, such as: Excellent, A-Plus, Outstanding, Terrific, Etc.

For several years Wright has had a physics major at Yale University receiving his Push-Gravity material. In the student's own words - "I really tried to have you as a guest speaker, but my profs were adamant." That has been the kind of negative attitude shown by the scientific community for over 25 years. If you buy his Push-Gravity Tides video you will see what, in his opinion, they have been trying to hide. View the tape, then you be the judge.

The video tape, as well as his book Gravity is a Push, sells for \$12 each, including P/H, USA. If you would like to have either one or both, send your order and applicable fee to the following address and he will promptly fill your order:

W.C. Wright, 732 Ohio Street, Fairfield, CA 94533
(707) 429-0598

PHYSICAL MODEL FOR ATOMS Courtesy of Vincent Coon

Joseph Lucas (Student, Oxon Hill High School, Temple Hills, MD), "A Physical Model for Atoms and Nuclei," *Galilean Electrodynamics*, vol 7, no 1, Jan./Feb. 1996, pp 3-12, 11 refs, 13 figs, 5 tables.

AUTHOR'S ABSTRACT

A physical, geometrical packing model for the structure of the atom is developed based on Bergman's new physical model for elementary particles. From the physical characteristics of real electrons, this work derives, using combinatorial geometry, the number of electrons that will pack into the various shells about the nucleus in agreement with the observed structure of the *Periodic Table of the Elements*. **The constraints used in the combinatorial geometry derivation are based upon my fundamental ring dipole magnet experiments and spherical symmetry.** From a magnetic basis, the model explains the physical origin of the valence electrons for chemical binding and the reason why the periodic table has only seven periods. The same geometrical packing model is extended to describe the physical geometrical packing of protons and neutrons in the shells of the nucleus. It accurately predicts the nuclear "magic numbers" indicative of nuclear shell structures as well as suggesting the physical origin of nuclide spin and the liquid drop features of nuclides.

CAN MIDDLE EAST PRODUCE FOREVER?

Courtesy of C. Warren Hunt

Robert F. Mahfoud and James N. Beck (professors of earth sciences and chemistry at McNeesh State Univ., Lake Charles, Canada. Mahfoud worked during the uranium boom in northern Saskatchewan for Hudson Bay Oil and Gas), "Why the Middle East Fields May Produce Forever," *Offshore Magazine*, April 1995 issue, pp 56-106.

The authors pose the problem:

"Inexhaustible reserves: Why are yearly oil reserves increasing steadily despite the 10-20 million barrels of oil that have been pumped daily from the Gulf area?"

The authors support the statement of oil increase with a bar diagram showing Saudi Arabian reserves rising biannually from 110 billion barrels in 1977 to 260 billion barrels in 1993.

They go on to answer their original question:

"From a scientific point of view, one can deduce that organic sources alone are not enough to explain [the rise in reserves] with satisfaction," and "...Hydrocarbons in the Middle East can originate from organic and inorganic sources, [and] should be continuously forming in the Persian/Arabian Gulf area to account for the

annual increase in oil reserves," The evidence for copious oil generation in the Ft. McMurray area makes it quite possible that Alberta has a similar regenerative capability.

[Hunt edited the Russian-to-English translation of Vladimir Larin's book Hydridic Earth, which provides a theoretical background for oil-field replenishment. Ed]

LETTERS

AN EDUCATIONAL EXCHANGE

[One of our favorite tasks is to read and respond to letters from our readers. Gerald Lindley is excited about Harold Aspden's supergraviton concept and has sent us several communications, some of which we have published. In a recent letter from Lindley in which the work of Faile and Ritter was discussed, I made a notation on his letter that my comment had to do with the resistance of an arc gap, not the capacitance of the arc gap. Here is the resulting exchange.]

Dear Editor,

This is in response to your notation of July 8, 1996, on my letter of July 1, 1996, where you state, "I said resistance not capacitance!" I have calculated the resistance of an air gap when one electrode is swabbed with deionized water.

Resistance is determined by the well-known equation $R = V/i$, where R = the resistance, V = the voltage, and i = the current.

Before the capacitance of the air gap breaks down, there is no current. Therefore, we have $R = V/0$.

When I was in high school, they taught me that you cannot divide by zero. Perhaps you went to a different school or perhaps you are proposing a revolutionary new theory. When the establishment finds out that you want to divide by zero, they will have very good laugh. **What is your problem? Are you going senile?** It makes no sense to talk about the resistance of a capacitor. Either it is a capacitor or a resistor. It can't be both. Why do you think I calculated the capacitance?

However, it is possible to calculate the resistance of a certain obstinate editor (*New Energy News*, June 1996, page 9). It is described by the equation:

**Hal Fox's resistance > three letters
of rejection sent to Gerald Lindley.**

This provides additional support that the excess energy [in an arc gap breakdown] is coming from my proposed ozone/3 H₂O supergraviton cluster.

Sincerely, /s/ Gerald Lindley

This editor's reply:

The arc gap referred to consists of pointed contacts with a few millimeters gap and with the points painted with deionized water. See Fig. 1. This configuration is quite different to a capacitive arc gap. As is well known, deionized water provides a large resistance (ont capacitance) to the flow of current.

The sharp conical points of the contacts provide an increase in the electrostatic field around such an electrode. As the charge builds up on the **capacitor that is connected to the arc gap**, the voltage is increased between the arc gap points. (The problem of calculating this increase in electrostatic potential due to the conical point is a often seen college sophomore physics manuals or texts.)

When the voltage increases to the arc-gap breakdown voltage, an arc will be formed. At the breakdown voltage, the electric field near the electrode is so high that the atoms of medium (in this case, the deionized water and air) are ionized and the ions and electrons are accelerated. The accelerated electrons ionize more atoms and the electric avalanche is produced.

For this kind of problem, Ohm's Law, which is derived from steady-state circuit parameters, is not appropriate to use for this type of calculation. It is better to use the well-known differential equation formula:

$$E = Ri + L di/dt + q/c \text{ (Kirchoff's Law),}$$

Where E is potential,

R = resistance,

i = instantaneous current at time t,

L = inductance,

di/dt = the instantaneous rate of change of i,

q = instantaneous charge at time t.

However, even this formula is inadequate to fully describe an arc.

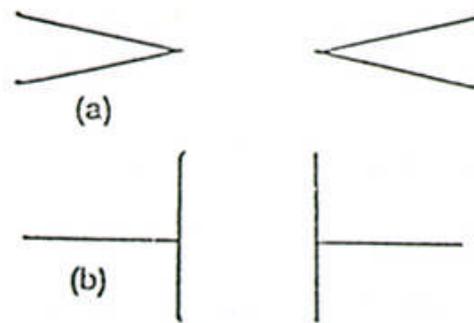


Figure 1 (a) Resistive

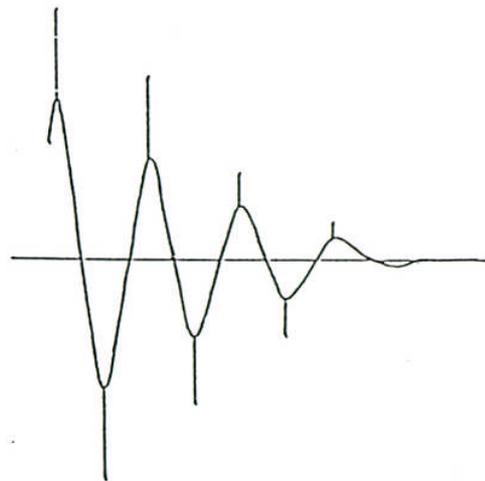


Figure 2 High-potential spikes with arc discharge

What is known is the experimental fact that the use of deionized water serves as an insulator (or high resistance, whichever you prefer) allowing the potential across the arc gap to rise to a much higher value before an arc is created. The end result is the production of a **short burst of alternating current**. As is well known a circuit containing an arc gap has a resonant frequency and the current alternates across the arc gap as shown in Fig. 2.

If you have an oscilloscope with a high-frequency response you may find that at the peak of the potentials of the oscillations there will be very high and very short-duration spikes of potential as depicted by the thin lines in Fig. 2. As taught by Kenneth Shoulders in his U.S. patent 5,018,180 and in his book, *EV A Tale of Discovery*,* the very short, **but intense potential** can produce high-density charge clusters.

As experimentally verified by Sam Faile and Nick Reiter, this type of resistance-delayed arc can produce small fireballs. **At least part of the fireball phenomena is believed to be the result of the formation of highly energetic EVs (high-density charge clusters) which consist of millions to**

trillions of electrons in a short-term stable cluster that is characterized by very high energy density.

In the recent XVIIth International Symposium on Discharges and Electrical Insulation in Vacuum, held July 21-26, 1996 at Berkeley, California, several papers discussed **the anomalous generation of energetic clusters**. This editor has a copy of the proceedings being mailed and will be reporting further on this "**arc and spark**" conference.

We are especially grateful to the excellent work of Dr. Sam Faile and Nick Reiter **and the sharing of their work with readers of *New Energy News***. Their work has provided our readers with a simple, inexpensive **experimental procedure by which our readers can be among the first in the world to experiment with and ponder over the marvels of the production of high-density charge clusters**. See article on page 3.)

Here is an important note: Some of the presenters at the recent "arc and sparks" conference **reported evidence of nuclear reactions**, possibly caused by the generation of anomalous so-called **fireballs**. *New Energy News* is one of the few publications in the world to report about low-energy nuclear reactions to its readers. We will have more information for our readers in the next issue on this fascinating topic.

This editor appreciates the good-natured attempt to help correct this editor's pending senility. However, please be informed that this editor was experimenting with arcs and sparks before the writer was in diapers. If you want to duel about arcs with the editor, choose weapons other than supergravitons.

*Note: [EV, A Tale of Discovery](#) is available from Kenneth Shoulders at 1025 Freestone Ranch Road, P. O. Box 243, Bodega, CA, 94922-0243, for \$200.

Dear Editor,

Supplementary to my fax letter from July 21, 1996, I fax you herewith a typescript which I have submitted to the Institute of Physics Publishing in Bristol, England.

My question to you is: Why are you supporting nuclear fusion research? In my opinion we don't need nukes, neither based on nuclear fission nor based on nuclear fusion, simply because we don't need steam engines!

A fluid mechanical perpetuum mobile principle is known since more than a hundred years, but a lobby of energy-selling companies is keeping it secret. I know

an 86-year-old graduate engineer who designed alternators mounted to water turbines. As an eyewitness he told me that the real power delivered by a water turbine is greater than the power consumed to pump the water back for further reuse. First I thought, this man suffers from paranoia, then I began to study books of fluid mechanics in the university library, just as hobby. Now I'm convinced that the great American inventor Mr. Pelton (died 1908) discovered a true perpetuum mobile principle in fluid mechanics.

In the history of natural science, the debate of the possibility of a perpetuum mobile has been stopped by Isaac Newton, when the question was: Is the kinetic energy mv^2 or $\frac{1}{2}mv^2$? Undoubtedly the kinetic energy of a single particle is $\frac{1}{2}mv^2$. But what do we know about the energy of a free jet?

If you are interested in enlightening on the disinformation about the perpetuum mobile, I offer you my cowork, as follows:

Christoph Bodner (Germany), "The Pelton Story."

ABSTRACT

The Pelton wheel - a well known high pressure impulse water turbine - in combination with a water pump is a true *perpetuum mobile* because the power delivered by a free jet is exactly twice the power consumed by the pump. Although a Pelton wheel may have an efficiency of 0.93 relative to the free jet and a water pump 0.80 relative to the enclosed stream, both machines, coupled together maintain an eternal [internal] circular flow. Energy experts know and practice this since more than 100 years, but they fool the rest of us through disinformation.

Kind Regards, /s/ Christoph Bodner

Dear Editor,

Needless to say, your *New Energy News* is the greatest publication in existence. Within the next year or so, I hope to be able to contribute an article and some news to your *NEN* on the subject of inertial propulsion, but I am not quite ready yet. Thank you for your diskette of authors and a few patent numbers and titles.

I have a copy of the joint Aspden/Adams motor patent GB 2282708. But do you know of another Adams patent number(s)? If so, I would appreciate the information.

Through any of your contacts, can you say with absolute certainty that some over-unity electric motor actually does exist and, for example, has truly powered a motor scooter for many miles in London without battery or obvious input power? There seems to be some uncertainty in the London Takahashi type motor scooter reports. [Any help, readers?]

Also, just a caution or opinion on my part. I know you are trying to be fair and open minded to all reasonable new concepts regarding new energy, but I think the magnetic amplifier work has a higher probability of being disappointing in relation to the amount of coverage it is getting in *NEN*. Magnetic amplifier tests are fraught with pitfalls. **In my opinion, most people working on them are not being careful enough considering that currents and voltages usually are not in phase and true power measurements are quite difficult to make.** Voltage measurements alone mean almost nothing. And many experimenters are not careful as to where they make their measurements. However, I readily admit that this is not an area of my expertise. However, I used to work on them briefly at the old Falcon missile programs at Hughes Aircraft. You may remember, I was project engineer on a Falcon missile at Hughes that used magnetic amplifiers.

Sincerely, /s/ Harvey E. Fiala

[I do remember. That was when I held my first assignment as a missile system engineer. Ed.]

Letter from Holland

June 23, 1996

MAGNETIC ENERGY

On page nine of *NEN*, vol 4, no 2, Kenneth Shoulders very correctly expresses his doubts about the existing theory of magnetism and its incapability to explain magnetic motors. Kenneth correctly assumes that magnets are INTERMEDIARY only and transmit energy from another source (space) and that the energy stored in the magnet is not the basis. In the product $B \times H_{MAX}$, the unit B is derived from a mathematical abstraction in which the north pole is isolated and surrounded by a potential field. It would be very desirable to give this B the same dimensions as H and also expressed in Amperes per meter. This may be achieved by equating magnetism and electromagnetism. All that has to be done is to determine the strength of a given magnet by comparing it with an equivalent current-carrying coil and use the coil's value (in Amperes per meter). The H is not an expression of magnetic energy either but a material property namely the stability in a

demagnetizing situation. The B^2 , but now expressed in $(A / meters)^2$ would be a good measure for the energy INSIDE a magnet and with this an equivalence with $L \times I^2$ or $R \times I^2$ is obtained. The B of a NdFeB magnet is only 1.25 times higher than that of an AlNiCo magnet. But the coercion [coercive force] is 11 times higher. The B^2 value of AlNiCo is in the same range, but the product $B \times H_{MAX}$ puts the AlNiCo magnet in a very unfavorable position. To find the amount of energy (I have proposed gravity energy) a magnet is able to absorb is an entirely new question and demands a special standard test. One of our congress visitors compared NdFeB and FDX (ceramic: iron oxide + Sr) in a Muller generator. He found the internal resistance to be equal, but the power ratio 7.3, which compares well with the B^2 ratio 7.3 and not with the $B \times H_{MAX}$ ratio which is 15.5.

Martin Holwerda

Book Reviews

REPORT ON AN IMPORTANT NEW BOOK

By Hal Fox

Peter Graneau & Neal Graneau, Newtonian Electrodynamics, c1995, illus., 132 figs, 19 tables, 146 refs, indexed, ISBN 981-02-2681-0, \$58, (paper \$36), World Scientific Publishing Co., Suite 18, 1060 Main Street, River Edge, NJ 07661, USA.

Peter Graneau, Northeastern University, Boston, and Neal Graneau, Oxford Univ., England, have documented the life's work of Peter and the not inconsiderable help and extension of this work by Neal. The book has two important messages: **First**, although the Lorentz force equations and Maxwell's equations provide excellent insight into electrodynamics, there are many cases where the abandoned Ampere equations are superior. **Second**, there are still many experimental anomalies that are not explained by any of the current scientific models and these anomalies deserve the attention of the scientific community.

Ampere's force equations are based on the model of a current element which is the electrical conductor, and on the concepts of Newtonian physics. The Lorentz and Maxwell's equations, although based strongly on Ampere's work, have, as the current element, the electrical current (now considered to be the discrete electrons) and include **field** forces which make these equations relativistic and non-Newtonian. [The reader

who is not particularly thrilled with equations will want to read Newton versus Einstein by these same authors.]

This book is divided into seven readable chapters:

1. Evolution of the Nineteenth Century Newtonian Electrodynamics.
2. Experimental Demonstration of Longitudinal Ampere Forces.
3. Theoretical Developments.
4. The Nature of Current Elements.
5. The Railgun: Testbed of the Newtonian Electrodynamics.
6. Electrodynamics of Arc Explosions.
7. Electrodynamics in the Quest for New Energy.

In reading the book there were many important and new (to me) observations that should be of equal interest to both the professional and the intelligent lay reader. Here are some of them:

"The abandonment of mutual attraction and repulsion between matter elements of electric conductors, and the violation of Newton's third law which this entailed, signalled the end of Newtonian physics. The Grassmann and Lorentz force laws required a new mechanics which was to become that of the theory of special relativity." Page 30.

"That not all electrodynamic forces in a metal are mechanical forces on the lattice must have something to do with the two types of bonds that (a) exist between positive and negative charges and (b) between charges and the solid body. This issue of bonding between charges and ponderable matter has still not been satisfactorily resolved even at the end of the twentieth century." Page 35.

The difference between equations formulated by Weber and those of Ampere were reconciled by a constant which had to have the dimensions of velocity. This constant had to have the value $c = 3 \times 10^{10}$ cm/sec. "This constant became known as the velocity of light and it always emerges when the laws of electrostatics are combined with those of electrodynamics. ... This is how the velocity of light made its first appearance in the literature and Newtonian electrodynamics." Page 36.

The authors discuss the liquid mercury fountain which is an interesting experiment. An insulated cup with a sealed-in bottom electrode and with a copper ring electrode at the top of the cup is filled with mercury until the mercury engages the top conducting ring.

When 500 to 1,000 amperes of current is made to flow through the mercury a mercury fountain is created. The results are easily explained with Ampere's law but not with the Lorentz field equations that are almost universally used today. Pages 78ff.

"... mechanical forces arising in electron-lattice collisions are negligibly small and are certainly unable to account for the longitudinal forces predicted by Ampere's law. ... **The parallel existence of both ponderomotive and electromotive forces has become the hallmark of Newtonian electromagnetism.**" Pages 145-146.

In the chapter on the railgun: "From this example it must be concluded that the magnetic force on the railgun armature cannot be produced by field-energy impact. Here we have a practical example which reveals a serious flaw of relativistic electromagnetism. ... This is the greatest inconsistency of relativistic field theory." Page 169.

While working on a railgun experiment, the authors placed a ferromagnetic rod across the rails: "and observed **that it rolled in the wrong direction toward the battery**. This surprising behavior was perfectly repeatable. ... If this is correct, then our report here is the first public mention of **a railgun armature being driven toward the current source**. While not yet understood, the importance of this discovery cannot be over-stressed." Pages 188-189.

The authors quote from a paper that suggested that **cold fusion was the first attempt to harness the energy of the sun except for systems that heat hydrogen fuel to high temperatures**. "This is not true. Non-thermal fusion research has been in progress for over forty years with support from the U.S. and other governments. **The arguments which have been made for and against cold fusion almost all ignore the large body of published information on plasma focus fusion, solid deuterium fiber fusion and capillary fusion.**" Page 233. The authors further discuss each of these developments.

The most important chapter of the book is Chapter 7: "Electrodynamics in the Quest for New Energy." After laying the groundwork of professional understanding, **including all of the appropriate equations**, the last chapter reviews several research topics ranging from cold fusion to water-arc experiments. **The message is that there are still many anomalies in experimental electrodynamics and that these anomalies should**

be pursued, rather than ignored, by the scientific community.

This reviewer is more of a generalist than a specialist, having spent the last seven years reading, reviewing, and publishing reviews of over 3,000 multi-disciplinary papers and books covering the areas of cold fusion and other new-energy systems and other relevant literature. With this background, the following comments have been engendered by the challenges of this excellent book:

1. Ponderomotive forces may be the result of an energetic vacuum which couples matter with the electron flow or is the byproduct of the electron flow in matter in the presence of the energetic vacuum.

2. The **Rowe Effect** (energetics causes the vacuum to spawn proton-electron pairs) may be the source of the anomalous effects in water-arc explosions.

3. High-density charge clusters can be considered as a new form of matter that is yet to be thoroughly studied. It is suggested that high-density charge clusters are formed whenever there are electric arcs. The anomalies of high-density charge clusters (as disclosed in Ken Shoulders' U.S. Patent 5,018,180 and in his book) may be the source of some of the anomalous observations.

This type of scientific investigation is not devoid of practical applications or limited to railguns and water-arc explosions. The knowledge developed in the book has been applied by Dr. Graneau to a very practical metallurgical problem which occurs in the refining of aluminum. **The application of some of these concepts developed by the authors can save many millions of dollars a year in electrical power costs in just the aluminum industry.** There are and will be many other valuable commercial applications of the study of Newtonian Electrodynamics.

If you are seriously interested in cold fusion and new energy developments, or if you are an electrical engineer, a scientist, or a teacher of science, **this book is a must-read for you.** If you are an intelligent lay person or professional, you will find this book full of interesting insights into the history and practice of electrodynamics. **This reviewer wishes to thank these two authors for their contribution to the continued advancements that must be made in electrodynamics if we are to provide a new-energy technology to replace the currently unacceptable pollution of our planet by the burning of fossil fuels.**

AN AETHERIC STUDY FOR NEW ENERGY

A Book Review by Hal Fox

Harold Aspden, AETHERIC SCIENCE PAPERS, published by Sabberton Publications, P. O. Box 35, Southampton SO16 7RB, England, c1996, 168 pages, numerous references, ISBN 0 85056 015 2, page size 8.25 x 11.75 inches. Fax: Int'l + 44-1703-769-830.

AUTHOR'S INTRODUCTION

[The following author's remarks are printed on the back cover of book.] The author has, for some 40 years now, sought to interest the world of science in his discoveries concerning the nature of the force of gravitation. His contribution has not been heeded because the research findings have not developed from the conventional theoretical stream. Yet, from his Ph.D. research at Cambridge on anomalous energy activity in ferromagnetism, Dr. Aspden could see so clearly where the mathematical philosophers had erred drastically in replacing the aether by mathematical symbols before they had fully understood how it stores energy. The aether plays a creative role, besides constituting a universal energy bank, giving us the means to deposit and withdraw energy. Left to its own devices it even absorbs the energy we shed as waste and which we write off under the heading "entropy" but it does something our textbooks say is impossible. It thrives on that energy and regenerates it in a material form by creating the particles we know as protons and electrons. However, scientists have become blind and cannot "see" such an aether in their vision of things. They look only at how created matter evolves and see no creative source. So they devise computer programs to test their imagination of a universe in a notional Big Bang scenario, with scant regard to the simple problem of **how the energy of electromagnetic induction is actually stored in "empty" space in our laboratories here and now on earth.** In so doing they create obstacles in science where none exist, imposing their will on Nature's province and missing key issues which should be obvious to any mechanic. They use equations to represent electrodynamics, say energy has mass, introduce a quantum jitter which makes the position and momentum of that mass uncertain, and then forget to look for whatever it is that accounts for dynamic mass balance and so keeps their jittering wave mechanical universe from tearing itself into pieces. **They try to understand gravity as a property of matter and cannot see that it is a property of the aether by which it responds to the presence of matter to keep it in dynamic balance.** They complicate gravitation by declaring it to be a distortion of 'space-time' by matter but still cannot

reach their objective of field unification. In adopting Einstein's theory mathematicians have confounded our understanding of physics, without realizing that there is a better way forward by which to solve the mystery of unification of gravitation and electrodynamics. Although this unification is of clear record in the scientific literature, one needs a guide map to find a way to the relevant clearing in the jungle of periodicals which line university library shelves. This book provides that guidance and goes further in presenting the full text of fourteen of the basic papers. The reader will see from these papers how easy it is to derive the constant of gravity in terms of the electron charge-mass ratio and determine by simple theory the precise value of the proton-electron mass ratio. Given this unifying connection between gravitation and matter creation, one can see a way forward by which to tap some further energy from the same source as that which fed the creation of the universe. **We are now on the brink of a technological revolution that will deliver us energy in abundance with no risk of pollution, but we need to understand its source, that real medium, the aether, that so many think of as a mere vacuum.** [Emphasis mine. Ed.]

REVIEWER'S COMMENTS

On the last page Aspden observes, "If we could see the system of particles which constitutes the aether that fills all space, we would find that its form depends upon whether there is any local matter present which comprises heavy atoms." In one sentence this is a summary of the nature of the aether that produce gravitational attraction between massive particles. On page ii (preceding page 1) Aspden forecasts, "Very soon now, the world at large will need to face up to the discovery of new ways in which we can generate energy that has no pollution risk." In between these two statements **Aspden presents and defends his theory of the aether and how it can be both the source of energy and antigravity.**

Dr. Harold Aspden, scientist, inventor, patent agent, professor, and writer summarizes his life's work in determining the underlying nature of physics with special regard to an understanding of the long-abandoned aether. **Here, in one volume, is an excellent essay urging the reader to delve into and question the relativistic and quantum mechanical interpretation of matter, energy, electromagnetism, and gravity.** In addition, fourteen of Aspden's most important writings have been republished in this important volume.

This reviewer shares the view that Aspden has been essentially correct in his acceptance of and study of aetheric science. **This book is not destined to become a dusty memorial to a student of reality. Events in the new-energy world are accelerating and therefore the interest in this type of publication will also increase.** Many of the readers of this periodical will be wise to read this book. Although not written for the lay person, it can be read by the intelligent lay person. The book is an important contribution to the engineer or scientist who desires to have a background review of the science that **should be the framework upon which new technology is built.** One of the many messages of this book is that **science** has wandered off into the lands of relativity and quantum dynamics with their obscure and difficult mathematics and **has ignored simpler paths to scientific understanding of nature.**

If you are an engineer or scientist, **or if you plan to gain the education in math and physics to qualify you to read the technical literature,** this book should be yours. If you do not understand all of the concepts presented in Aspden's lucid, technical style, you will be able to use it as a study guide for further study of those concepts that you do not, on the first reading, fully understand.

About half of the book is a tutorial on various aspects of **aether science.** The other half of the book consists of the following Aspden papers, previously written, peer-reviewed, and published from 1986 through 1995:

1. The Theoretical Nature of the Neutron and the Deuteron.
2. Meson Production based on Thomson Energy Correlation.
3. An Empirical Approach to Meson Energy Correlation.
4. The Physics of the Missing Atoms: Technetium and Promethium.
5. Synchronous Lattice Electrodynamics as an Alternative to Time Dilation.
6. Instantaneous Electrodynamic Potential with Retarded Energy Transfer.
7. The Theory of the Proton Constants.
8. Conservative Hadron Interactions Exemplified by the Creation of the Kaon.
9. A Theory of Proton Creation.
10. The Theory of the Gravitation Constant.
11. A Theory of Pion Creation.
12. Standing Wave Interferometry.
13. The Theory of Antigravity.
14. Retardation in the Coulomb Potential.

In paper 4, Aspden discusses the physics behind the scarcity of technetium and promethium. They appear capable of assuming supergravitational or antigravitational properties and therefore scarce

(they went elsewhere). However, from this view, **Aspden suggests closely associated elements that may form the basis for antigravity devices.**

In paper 5, Aspden discusses an alternative to the idea of relativistic time dilation. The simple concept is that the clock is modified. That is a much simpler explanation than the one offered by the theory of relativity.

In paper 9, Aspden provides a theory by which a sea of primordial muons can produce proton-electron pairs. With the statement, "...involve a concentrated muon field and a critical threshold at which muons can combine with a degenerate electron state to form a proton and an electron." Our readers will want to determine if this concept fits the **Rowe Effect** where the vacuum (the aether) is caused to produce hydrogen by an explosive force.

Paper 10 presents a summary of Aspden's theory of gravitation.

Paper 12 reviews some of the experimental techniques used to determine if there is an aether and some of the misconceptions that were adopted. **A relatively simple experiment is discussed by which any well-equipped laboratory should be able to make definitive measurements of the aether.**

Paper 13 is Aspden's 1991 contribution to extend his own principles of gravitation theory. **Anomalous gravitational effects, reproducible in the laboratory, reveal the potential of antigravity devices or systems.**

[This book is available directly from the author. U.S. buyers can obtain a copy by sending a check drawn on a U.S. bank for \$25 U.S. dollars (\$33 for airmail) made out to Harold Aspden. Send to address shown in the bibliography at the top of this review.]

REVIEW OF SIERRA CLUB BOOKS

By Hal Fox

The Sierra Club Books, 100 Bush Street, 13th Floor, San Francisco, CA 95104, kindly sent me a copy of their latest book catalog and a review copy of The Sierra Club Green Guide.

In their book catalog there were two energy-related books offered: The Home Energy Decision Book, by

Gigi Coe, Michael Garland, & Michael Eaton, ISBN: 0-87156-816-X for \$9.95, and Creative Energy, Bearing Witness for the Earth, by Thomas Berry, ISBN 0-87156-622-2, a 96-page essay on the author's "abhorrence of self-serving, anthropocentric activity rooted in the narrow focus of religion and science."

When renewable, non-polluting energy is such an important part for the future of a clean, green world, the Sierra Book Clubs appear to have scant offerings. However, they did a better job in the book, The Sierra Club Green Guide, Everybody's Desk Reference to Environmental Information, by Andrew J. Feldman. The following is a review of the "Green Guide":

As promoted on the cover, the Green Guide provides information "featuring more than 1200 essential resources, including Internet Sites, Bulletin Board Systems, and Electronic Databases to help you answer any environmental question." The Chapters in this \$25, 304-page paperback (ISBN 087156-471-8) include the following in two parts: Part One - Environmental Issues, the first 188 pages include the following chapters: General, Agriculture, Air, Biodiversity, **Energy**, Environmental Justice, Health and Toxics, Sustainable Communities, Waste, and Water; Part Two - Green Living (pages 189 to 246) includes chapters on: Architecture, Education, Employment, Gardening, Grants, Investing, Shopping, and Travel. The book has three appendices (Federal Information Centers, Database Vendors, and Publishers (a ten-page list in three columns), and a good index (21 pages, 3 columns).

For those goals and objectives championed by the Sierra Club that include aiding the environment, the topic of most interest to our newsletter is **Energy**. The Sierra Club Green Guide provides a sixteen-page chapter on **Energy**. The 23 listings range through Government Clearinghouses, Organizations, Internet Sites, Bulletin Boards, Directories, Bibliographies, Reference Handbooks, Introductory Reading, Abstracts and Indices, and Periodicals. Many of the citations are for alternative energy and nuclear power (both for and against). Solar, Wind, and Alternative Fuels are listed. **There are many excellent citations for these topics that are covered and the reader will find this energy guide useful in tracking down sources of information on standard and alternative energy.** However, after seven years of research and development of cold fusion, not one citation is listed in the index. **Not one organization nor one publisher is listed that provides information on cold fusion, magnetic energy, free energy, or any of the more**

recent developments in tapping the energy of space.

These emerging technologies that are being commercialized in 1996 are nowhere mentioned in the **Sierra Club Green Guide**, which bears a 1996 copyright date. We believe that it will be environmental organizations who will be some of the major promoters of the coming energy revolution, **as soon as they find out that such a technological revolution is happening and that such new-energy technology will be dramatically important in cleaning up the environment.** We will be suggesting to Sierra Club Books that they include the following information in their next edition of The Sierra Club Green Guide:

Books: Fire From Ice, by Eugene Mallove, John Wiley & Sons, c1991, ISBN 0-471-53139-1.

Space Energy Impact in the 21st Century, by Hal Fox, Fusion Information Center, c1996, in press, with its over 3000 references on diskette.

The Coming Energy Revolution, by Jeane Manning, c1996, Avery Publishing Group.

Publications: *Infinite Energy* edited/published by Eugene Mallove; *Fusion Facts* a monthly newsletter edited by Hal Fox; *Cold Fusion Times* quarterly newsletter edited/published by Mitchell Swartz; "*Cold Fusion*" edited/published by Wayne Green; *New Energy News*, a monthly newsletter edited by Hal Fox; *Fusion Technology*, an international journal for the American Nuclear Society, edited by George Miley; *Planetary Association for Clean Energy Newsletter*, edited by Andrew Michrowski, Ontario, Canada; and the *Journal for New Energy*, published by Fusion Information Center.

Organizations: Institute for New Energy, P.O. Box 58639, Salt Lake City, Utah 84158; Academy for New Energy, 1304 S. College Ave., Fort Collins, Colorado 80524; Planetary Association for Clean Energy, 100 Bronson Ave, #1001, Ottawa, Ontario K1R 6G8, Canada.

Internet: Institute for New Energy Home Page: www.padrak.com/ine/ which contains many important scientific papers and current reports on all areas of new-energy research.

Those of you who are interested in finding more information about environmental and clean energy related topics are urged to obtain a copy of The Sierra

Club Green Guide. However, suggest that they update their Energy chapter.

Meetings

The SECOND CONFERENCE ON LOW-ENERGY NUCLEAR REACTIONS

will be held at College Station, Texas on September 13-14, 1996.

Papers addressing issues of Low-Energy Nuclear Reactions will be presented at the conference.

Attendance: Conference space is limited. The meeting is restricted first to participants on the basis of their contribution.

Proceedings: Conference papers will be printed immediately after the conference as vol 1, no 3, of the *Journal of New Energy*. This journal is abstracted by *Chemical Abstracts*.

Conference Cost: \$100 per person for conference attendees. For further information contact Dr. Lin at 409-845-3661.

THE GERMAN ASSOCIATION OF VACUUM FIELD ENERGY

plans a conference in the Singapore Hyatt, Singapore, in early **October 1996**. Inquiries may be directed by Fax to Germany: (05 11) 31-84-17.

INTERNATIONAL SYMPOSIUM ON CONSCIOUSNESS, NEW MEDICINE AND NEW ENERGY

Yomiuri Hall, Tokyo, Japan
November 21-22, 1996

An International symposium to discuss and present research results in such areas as consciousness phenomena, holistic medicine, integration of Western and Eastern medicine, and new energy technology. The sponsor is the Japan Green Cross Society. 18 key-note speakers have been determined, among them 5 are overseas speakers, including Paramahansa Tewari. Conference chairman is Dr. Shiuji Inomata, and overseas advisory board consists of Dr. W. Harman (USA), Dr. David Lorimer (UK), and Dr. Beverly Rubik (USA). Participation fee is approximately US\$ 185 (¥20,000).

Contact: Mr. Tetsu Nagano, Japan Green Cross Society

10F Takanawa-chuo Bldg.
2-20-23 Takanawa
Minato-ku Tokyo 108 JAPAN
Tel: +81(0)3-3442-7521
Fax: +81(0)3-3442-7651

For academic information contact:

Dr. Shiuji Inomata
2-2-2 Sekigawa-cho
Arai-shi
Niigata 944, JAPAN
Tel/Fax: +81(0)255-72-0558

ICCF6

Sixth International Conference on Cold Fusion

will be held 13-17 October 1996
Hotel Apex Toya, Hokkaido, Japan
Conference Secretariat:
Tel +81-3-3508-8901
Fax +81-3-3508-8902
E-mail mac@iae.or.jp

The conference will consist of both oral and poster sessions covering experimental work and theory on the following topics:

- Excess Energy Phenomena in D₂/Metal Systems
- Correlation Between Excess Energy and Nuclear Products
- Nuclear Physics Approaches
- Material Science Studies
- Innovative Approaches (Miscellaneous Phenomena)

Registration fee of ¥40,000 (about \$400) includes a banquet and proceedings. A technical tour to the NHE lab is scheduled on Oct. 18, along with other professional and social events.

Hotel: Deadline for guaranteed accommodation is August 1. Contact:
Hotel Apex Toya Hokkaido
Aza-Shimizu, Abuta-machi, Abuta-gun
Hokkaido 049-56, Japan.
Tel: +81-142-73-1111 Fax +81-142-73-1157

Registration: Final Deadline August 1. Send for application package to Conference Secretariat
c/o NHEI-Center, IAE
Shinbashi TS Building
1-22-5 Nishi-Shinbashi, Minato-ku
Tokyo 105, Japan
(tel. info above)

Commercial Column

The following companies (listed alphabetically) are commercializing cold fusion or other enhanced energy devices:

COMPANY: PRODUCT

American Pure Fusion Engineering and Supply:
Developing "Fullerene Fusion Fuel™." Salem, Oregon. The

president, Warren Cooley, can be reached at 1-800-789-7109 or 503-585-6746. Email to: Coolwar@aol.com

CETI (Clean Energy Technologies, Inc.): Developers of the Patterson Power Cell™. Dallas, Texas. Voice 214-982-8340, FAX 214-982-8349.

Clustron Sciences Corp.: New energy research consulting and information. Contact: Ron Brightsen, 703-476-8731.

ENECO: Portfolio of intellectual property including over thirty patents issued or pending in cold nuclear fusion and other enhanced energy devices. Salt Lake City, Utah. Contact Fred Jaeger, Voice 801-583-2000, Fax 801-583-6245.

E-Quest Sciences: Exploring The Micro-Fusion™ process. Seeking qualified research partners for their sonoluminescence program. Contact Russ George, FAX 415-851-8489.

Fusion Information Center (FIC): Development of new energy systems. The world's most complete resource depository for cold fusion research information, as well as other new energy research including zero-point energy; space energy research; electronic, electromagnetic, and mechanical over unity devices and more. We are the publishers for *Fusion Facts*, *New Energy News*, and *the Journal of New Energy*. Voice 801-583-6232, Fax 801-583-2963.

Holotec AG, Clean Energy Technology, contact André Waser, Gen. Mgr., Bireggstrasse 14, CH-6003, Luzern, Switzerland. Phone 011 41-41 360 4485, or Fax 011 41-41 360 4486.

Hydro Dynamics, Inc.: Hydrosonic Pump, heat-producing systems using electrical input with high thermal efficiencies. Rome, Georgia. Contact James Griggs, Voice 706-234-4111 Fax 706-234-0702.

International Management Systems Co. (IMSC): Technical project/program management assistance. Contact Mark Harris or Richard Youngs, Phone 801-583-6232, Fax 801-583-2963, or Phone/Fax 801-255-3000.

JET Energy Technology, Inc.: Design and manufacture of π -electrode systems, calorimeters, and associated equipment and systems. Consulting regarding radiation, materials, and other scientific and engineering issues. Weston, MA. Contact Dr. Mitchell Swartz, Voice 617-237-3625. Fax 617-237-3625.

Labofex, Experimental and Applied Plasma Physics: R&D of PAGD (Pulsed Abnormal Glow Discharge) plasma technology. Developments include portable power supplies, electric vehicles and autonomous housing. Licensing.

Ontario, Canada. Contact Dr. Paulo N. Correa.
Tel 905-660-1040. Fax 905-738-8427

Magnetic Power Inc.: The Joint Venture partner with Sciex (UK) for Takahashi supermagnets and supermotors in North America. Sebastopol, CA. Contact Mark Goldes, Voice 707-829-9391, Fax 707-829-1002.

Nova Resources Group, Inc.: Design and manufacture ETC (Electrolytic Thermal Cell); EG (commercial power cogeneration module); and IE (integrated electrolytic system). Denver, CO. Call Chip Ransford, Phone 303-433-5582.

UV Enhanced Ultrasound: Cold Fusion Principle being used for an ultrasonic water purifier. Hong Kong. FAX 852-2338-3057.

Zenergy Corporation: Founded in 1996 to facilitate the introduction of commercially viable energy alternatives. (formerly Power Cell Technologies) Chandler, AZ. Contact Reed Huish: 602-814-7865, Fax 602-814-7665, e-mail: reedh@indirect.com

Note: The Fusion Information Center has been acting as an information source to many of these companies. We expect to augment our international service to provide contacts, information, and business opportunities to companies considering an entry into the enhanced energy market.

INFORMATION SOURCES

Academy for New Energy (ANE) is a subsidiary organization to the International Association for New Science, which has specific goals directed toward the field of alternative and "New" energy research. 1304 S. College Ave., Fort Collins, CO 80524. Tel. 970-482-3731

ANE Newsletter, quarterly publication of ANE, providing an open forum for discussion, and disseminating newsworthy and inspirational information on invention and new energy. Edited by Robert Emmerich.

Advanced Energy Network Newsletter, quarterly, a reprint of articles and papers from other energy publications, with book reviews and worldwide conference list. Advanced Energy Network, P.O. Box 691, Rondebosch 7700 Capetown, Rep. South Africa.

Cold Fusion, monthly newsletter, edited by Wayne Green, 70 Route 202N, Petersborough, NH 03458.

Cold Fusion Times, quarterly newsletter published by Dr. Mitchell Swartz, P.O. Box 81135, Wellesley Hills MA 02181. Home Page: <http://world.std.com/~mica/cft.html>

Cycles, a R&D newsletter, published by Dieter Soegemeier, Editor, GPO Box 269, Brisbane,

QLD.4001, Australia. Phone/Fax: +61 (0)7 3809 3257.

Electric Spacecraft Journal, quarterly, edited by Charles A. Yost, 73 Sunlight Drive, Leicester, NC 28748.

Electrifying Times, 3 issues per year, published by Bruce Meland, 63600 Deschutes Road, Bend, OR 97701, Phone (503) 388-1908, FAX (503) 382-0384, E - M A I L 102331.2166@compuserve.com.

Fusion Facts monthly newsletter. Salt Lake City, UT. 801-583-6232, also publishes Cold Fusion Impact and Cold Fusion Source Book. Plans on-line database access.

Fusion Technology, Journal of the American Nuclear Society, edited by Dr. George Miley, publishes some papers on cold nuclear fusion. 555 N. Kensington Ave., La Grange Park, IL 60525.

Infinite Energy, new bi-monthly newsletter edited by Dr. Eugene Mallove (author of Fire from Ice), P.O. Box 2816, Concord, NH 03302-2816. Voice: 603-228-4516. Fax: 603-224-5975 E-mail: 76570.2270@compuserve.com

Institute for New Energy (INE), organization to promote and help find funding for new energy research.

Home Page: www.padrak.com/ine/ contains many important scientific papers and current reports on all areas of research.

E-mail: ine@padrak.com Salt Lake City, Utah.

Voice 801-583-6232, Fax 801-583-2963.

New Energy News monthly newsletter for INE, highlighting the research and development in the worldwide new energy arena. Edited by Hal Fox.

Journal of New Energy, quarterly, presenting papers representing the new areas of energy research, leading-edge ideas in the development of new energy technology, and the theories behind them. Published by the Fusion Information Center, Inc., for the Institute for New Energy. Editor: Hal Fox.

KeelyNet BBS - Science and health oriented information exchange that specializes in nonstandard research, much of it on new energy. Jerry Decker, 214-324-3501.

Internet: www.keelynet.com E-mail: jdecker@keelynet.com

Planetary Association for Clean Energy Newsletter, quarterly, edited by Dr. Andrew Michrowski. 100 Bronson Ave, # 1001, Ottawa, Ontario K1R 6G8, Canada.

Now available: *Clean Energy Review*, a technical and scientific discussion on nuclear fuel wastes disposal. Discusses transmutation as one possible solution. \$5 U.S. and Canadian, \$7.50 other countries.

Space Energy Journal, quarterly, edited by Jim Kettner & Don Kelly, P.O. Box 1136, Clearwater, FL 34617-1136.

21st Century Science & Technology, P.O. Box 16285, Washington, D.C., 20041. Includes cold fusion developments.

The above list of commercial and information sources will be growing. New listings will be added as information is received. Send information to *NEN*, P.O. Box 58639, Salt Lake City, UT, 84158.

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