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### THE ECONOMICS OF GOODNESS From Governor Michael O. Leavitt's State of the State Address: "Shaping the Future: The Promise and Potential of the 21st Century"

[Editor's Note: On rare occasions, a new concept emerges that can change the world. On January 19, 1998 in his address to the Utah State Legislature Governor Leavitt concluded with just such an important and challenging economic concept. Bold added by editor.]

January 19, 1998

Last month, I was asked to participate in a panel discussion with a dozen world-renowned economists, futurists and a handful of corporate leaders. There we were on the 107<sup>th</sup> floor of the World Trade Center by those huge windows overlooking New York Harbor. The Statue of Liberty in the distance.

The point of the panel was to discuss the future, and to get it [the discussion] rolling we were given a scenario: "Look forward to 2015 and tell us what will be most surprising." It went around the table. And then it came to me.

You're surrounded by the smartest economists in the world, what do you do? Mesmerize them with macro theory? No, you create a diversion. At least that's what I did. "Since we are forecasting the future," I said, "I will tell you how the Nobel Prize in economics will be won in 2015." ...[edit out the body of State of the State address]...

I would like to conclude tonight by taking you back to the World Trade Center, and to our discussion about who would win the Nobel Prize for Economics in 2015. At the root of this is a lesson I've learned from public service that I believe offers a key to the state of our state in the  $21^{st}$  century.

The big surprise is that the Nobel Prize for Economics in 2015 will not be won by an economist, but by a sociologist who comes up with a new economic theory called the **Economics of Goodness.** 

It is a simple but powerful idea. Every nation or state has economic assets that produce wealth. It may be minerals, a seaport, favorable climate. But there is an asset of immense power inherent in any community that will use it - the inclination of its citizens to do the right thing, voluntarily. The operative notion is that there is nothing more economically devastating than a growing population of people that instinctively do wrong. And there is no stronger economic force over the long run than people doing right.

Just one example: imagine the economic heft of a nation free of drug and alcohol abuse. Health care costs would plummet, worker productivity would skyrocket. Families torn apart by the abuse and financial hardship wrought by substance addiction would remain together. Welfare rolls would fall. Crime costs would shrink, and that society would build fewer prisons. Imagine the power of a nation able to invest those trillions of dollars into education, investment or research. Such a nation would dominate the world economy. One of the participants who heard this couldn't contain himself. "You're turning this into a religious discussion," he said. Before I could respond, one of the best known economists in the world beat me to it. "Wait a minute," he said. "I'm an atheist and this isn't about religion. It's about the supply and demand of human behavior and the predictability of its consequences."

It may be the only time I have said amen to an atheist. The discussion went on for nearly half an hour. Finally, another one piped up, "This kind of discussion irritates me," he said, proceeding to talk about the different values employed in the diverse world cultures. "Who's to say what's right? It is all relative."

It isn't relative. The idea that behaviors are relative was not invented by this generation, but it has been perfected by this generation, and this generation will ultimately declare it a fallacy. Because the recorded history of mankind is replete with examples that certain behaviors produce a long-term positive result. They are ageless, timeless principles. People who work hard, are honest with each other and practice kindness and compassion will prosper. Civilizations built on a foundation of strong families and communities, patriotism and individual responsibility will endure. A nation is but the aggregate character of its people.

This is our moment to define a new century for our children. We are defining it tonight in the sunset of the  $20^{st}$  century. We are charging ahead to shape, to polish and to perfect it in the sunrise of the morrow. Thank you. Good night and God bless Utah.

Editor's comments: Nearly all of the readers of *New Energy News* that I have met are involved in efforts to bring about a dramatic change in the way the world produces and distributes energy – you are involved not from greed but from a concern for the well-being of your children, your grandchildren, and the world. You readers are an important part of the Economics of Goodness. But it was Governor Leavitt who has said it best and we commend this concept to you. Governor Leavitt also said, "I am asking the legislature this year to make a clear statement to out-of-state utility companies that want to dump nuclear waste in the west desert, near a military compound where cruise missiles sometimes get lost. **Our policy is simple: we don't want it!"** By the time you read this, we believe that Governor Leavitt will be aware that there is technology being developed (partly in Utah) that **will stabilize nuclear waste on-site** and avoid the dangers in packaging, transporting, and storing for thousands of years.

> LOW-ENERGY NUCLEAR TRANSFORMATION

Where Did the Thorium Go? Hal Fox and S-X. Jin

### **PROBLEM STATEMENT**

It has been claimed that in a LENT-1 reactor, when operated according to the protocols provided by the Cincinnati Group, that most (over 90%) of a small amount of thorium is transformed into stable elements. Refer to Fig. 1. A solution of thorium nitrate containing a measured amount of thorium (from 0.1 to 0.5 grams) is placed in the zirconium reactor and clamped between Teflon<sup>™</sup> seals by using stainless steel end plates. The thorium solution is chemically tested to determine the amount of thorium (4300 parts per million with 0.1 grams of thorium in a 25 ml solution). In addition, a gamma-ray spectroscope (currently using a sodium iodide 2-inch crystal obtained from Ludlum Instruments) is used to provide a spectrum of the gamma-ray emissions from the thorium daughter products. **Note: the weak** gamma-ray emission from thorium-232 (the mother element) cannot be accurately measured with this gamma-ray equipment. Only the gamma-ray emissions from some of the daughter products can be identified on this type of a sodium-iodide-generated **spectra.** The spectra of the daughter products is obtained by setting the APTEC software for the Multi-channel analyzer for a specific number of counts (e.g. 100,000 counts). The problem is to provide a low-cost method to follow the thorium and determine to what extent the thorium nuclei are transformed into stable elements.

### THE EXPERIMENTAL APPROACH

The thorium solution is processed according to the LENT-1 protocols. The before-processing solution and the after-processing solution are chemically assayed for thorium. A typical report is 4300 parts per million in the before-processing solution and less than 10 parts per million in the after-processing solution. Therefore, we are confident that the thorium has been removed from the processed solution.

The after-processing solution was obtained by allowing any precipitates to settle out of the solution and carefully pouring off the solution. Due to the small amount of precipitates, the precipitates from several experiments were combined and submitted for chemical analysis. The chemical analysis showed that there were 9600 parts per million of thorium in the combined precipitates from five experiments. From the weight of the precipitates, and the concentration of the thorium, it was calculated that 2.57% of the thorium originally introduced into the reactor was present in the precipitates. Now we need only determine where the other 97% of the thorium is located.

Refer to Fig. 1. There is no evidence from gamma-ray analysis to show that any of the thorium daughter products has stuck to the Teflon<sup>TM</sup> seals. However, it is reasonable to suggest that the thorium has been removed from solution and has somehow stayed on (plated, penetrated, etc.) the cylindrical electrode or onto the disk electrode. Scientists familiar with thorium and zirconium state that **the thorium metal**. That professional observation has been taken as a scientific fact.

Experimental observation has shown that the zirconium electrodes erode during the thirty- to sixty-minute processing time. The action of the alternating current applied to the electrodes does form a thin layer of zirconium oxide on each electrode during each anode period. The precipitates are strongly believed to be mainly from the erosion of the zirconium oxide from the

The visual evidence shows two electrodes. considerable erosion. For example, if a thin zirconium disk is used, the disk may become so eroded from a thirty-minute processing that the half of the disk immersed in the electrolyte appears lacy where portions have been completely etched or eroded away. Both of the electrodes show evidence of pitting and erosion. The hypothesis is that the transformation of the thorium into stable elements takes place on or in these pits (where charge clusters have been formed and impacted). Because of the erosion of the zirconium electrodes, it is logical to believe that this is not a place where the thorium can accumulate.



Fig. 1 Where is the Thorium?

Because it is difficult and expensive to make micro-chemical measurements of the electrodes (but planned for the next series of experiments), the following procedure was used: Each of the following:

electrodes was placed in close proximity to the sodium-iodide gamma-ray detector (in essentially the same manner as previously done with both the before-processed solution and the afterprocessed solution). The APTEC multi-channel analyzer software was set to create a spectra from the same number of total counts as performed previously. In the case of the spectra thus obtained from both electrodes, there was a significant difference in the disk spectra compared with the original solution spectra. The spectral peaks from the daughter products had disappeared or were considerably lower as compared with the spectra (using the same number of counts) of the before-processed solution. The spectra from the after-processing solution exhibited the same features -- a lowering of the counts from the thorium daughter products. Our logical conclusions are the

1. At least some of the thorium daughter products have been removed from the processed solution in essentially the same manner that the thorium has been removed from the solution. This is evidenced by the lack of thorium-daughter spectra.

2. Neither the cylinder nor the disk electrode show evidence of "plating out" of the thorium daughter products. The spectra from both the cylinder and disk electrodes show strongly diminished lead-212 counts (as does the postprocessed solution). This finding is consistent with the concept and experimental evidence that neither the thorium nor the thorium daughter products have been plated out onto either the disk or cylindrical electrodes.

From the results of a chemical analysis, it is known that the precipitates do contain some thorium. It would, therefore, be expected that the precipitates also contain a proportional amount of the daughter products similar to the amounts found in the initial thorium solution. The spectra of the precipitates (using the same number of counts) show that this is the case. There is little observable difference between the precipitate spectra and the original thorium spectra. It is logical to conclude the following: 3. The small amount of thorium in the precipitates has essentially the same ratio of daughter products as found in the initial beforeprocessing solution. Therefore, the same number of counts **should produce gamma-ray spectra that are essentially identical with the initial spectra** of the before-processed solution. That conclusion is experimentally observed.

Although, experimental work is encumbered by the use of relatively inexpensive equipment, it is suggested that this gamma-ray spectra approach, used in Trenergy's laboratory, supports the following hypothesis:

In a LENT-1 reactor, using proper protocols, the processing of a weak solution of thorium nitrate will transmute most of the thorium and its daughter products into stable elements. By a combination of gamma-ray spectroscopy and chemical analysis, the proposed (observed) thorium and/or daughter products will be (has been) transformed into new elements.

These experimental observations must be labeled as inconclusive until a careful series of experiments are also subjected to microchemical analysis and the new elements identified. Such a plan is the next experimental investigation to be accomplished and reported.

## FURTHER REASONING AND OBSERVATION

It is hypothesized that the neutron-rich thorium will produce nuclear fragments that are neutron rich (isotopes lying to the higher neutron end of a line of elemental isotopes) and that such isotopes will decay to stable elements by betaemission (the changing of a neutron to a proton by the emission of a high-energy electron). By a careful analysis of a chart of nuclides, it is observed that nearly all such nuclear fragments have short half-lives (from less than a second to a few days). It is hypothesized that these nuclear fragments will, therefore, exhibit shortterm measurable amounts of gamma-ray emission. It is further hypothesized that specific isotope radioactivity during the beta-emission stabilization processes will be difficult to observe

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### **SUDDENLY ITS SPRING** By Hal Fox

Let yellow-petalled crocus Flung through the snow provoke us To thoughts of warming spring for which we long. Spring-returning birds in flocks Sing the vernal equinox To coax each flowering shrub forth with song.

The fluctuating jet streams Northward for its Summer dreams And lures away the Winter's harshest cold. The Sun, following its way, Lingers longer every day, So daffodils will raise their golden lode.

Winter's softened snow-filled breeze Wanders now through budding trees And rustles last year's nests that on limbs cling. The hill's melting snows decline. New green tinges every pine. Buzzing bees declare, "Suddenly its Spring".

We join with you in welcoming a new spring and a new time for the fullness of new-energy systems to grow and flourish in this year.

using a sodium-iodide detector. However, some useful experimental measurements can be obtained by observing changes in particle emission immediately following the processing of the thorium solution. For example, it has been determined that the overall particle emission (alpha, beta, and gammas) tends to increase **after the completion of processing** for a few hours, and then decay over time to near background.

It is further hypothesized that a continuation of the reactor processes **after the thorium has been essentially removed from the electrolyte** will continue to produce nuclear reactions. It is hypothesized that these nuclear reactions involve elements that are bound to the electrodes, elements from the electrolyte, and also zirconium from the electrodes. Therefore, equipment that will measure the amounts and energy levels of alpha, beta, and gamma radiation will be useful. However, the ultimate experimental evidence will be the microchemical determination of the amount of new elements (not initially present in the solution or in parts of the reactor) that are found in the afterprocessing solution or in the precipitates.

### CONCLUSIONS

A high-probability conclusion is that thorium can be transmuted into smaller elements in a relatively inexpensive and low-energy reactor. It is probable that this new technology can be developed into systems that will stabilize some (perhaps much) of the radioactive wastes stored at DOE weapons-related sites and also stabilize the spent fuel pellets stored at various nuclear power plant sites.

## **Fusion Briefings**

THE NEW PARADIGM AND COLD FUSION Shiuji Inomata (President, JPI.)

Dr. E.F. Mallove, U.S.A, pointed out in his insightfull article [1],"Is New Physics Needed?," that to understand the cold fusion phenomenon, a very different physics and mathematics are needed and the ordinary Newton-Einstein type physics would not work. I would certainly agree to his view. I will describe my idea to that line briefly in this note. A repelling force between two positively charged nuclei, i.e., Coulomb force is as below; ESCGS unit.

$$f = \frac{Qq}{r^2} r^0 \tag{1}$$

where f is the repelling force, Q, q are the electrical charges of the nuclei.  $r^0$  is the unit vector. When  $r \rightarrow +0$ ,  $f \rightarrow +\infty$ , and we need very high energy in order to bring the two nuclei in a short distance wherein a strong force will act and to fuse them together. Here, we complexify the electrical charges as follows:

$$\begin{array}{c} Q = Q_1 + iQ_2 \\ q = q_1 + iq_2 \end{array}$$
 (2)

where "i" is the imaginary number unit and the meaning of the complexified electrical charge will be mentioned later. Analogously with the equation (1), we define the force f between the nuclei, using a complex calculus as below:

$$f = Re \left[ \frac{(Q_1 + iQ_2)(q_1 + q_2)}{r^2} \right] r^0$$
 (3)

where "Re" means to take the real part of the quantity in the parenthesis. Executing the computation, we obtain:

$$Eq.(3) = Re\left[\frac{(Q_1 q_1 - Q_2 q_2) + i(Q_1 q_1 - Q_2 q_2)}{r^2}\right]r^0$$
$$= \frac{Q_1 q_1 - Q_2 q_2}{r^2}r^0 \qquad (4)$$

$$= \frac{Q_1 q_1}{r^2} r^0 \frac{Q_2 q_2}{r^2} r^0 \tag{5}$$

The first term of Eq. (5) indicates Coulomb force between two positively charged nuclei, so it is a repelling force. On the other hand, if  $Q_1$  and  $q_2$ are both positive, the second term represents a pulling force because of the minus sign. So, in the equation (4), if the following conditions are met,

$$Q_1 q_1 - Q_2 q_2 = 0$$
 (6)

$$Q_1 / Q_2 = q_1 / q_2$$
 (7)

It will make the force f zero, canceling out the repelling Coulomb force between nuclei and make them fuse in room temperatures: cold fusion!

This will happen, for example, in the case  $Q_1 = Q_2$ and  $q_1 = q_2$ .

Now, we relate  $Q_{\rm 2}$  ,  $q_{\rm 2}$  with the gravitational masse, m as follows

$$\begin{array}{c}
Q_2 = G^{1/2} M \\
q_2 = G^{1/2} m
\end{array}$$
(8)

Where G is the gravitational constant. Putting them into the second term of the right handed side of the equation (5), we obtain:

$$-\frac{Q_2 q_2}{r^2} r^0 = -\frac{(G^{1/2} M) (G^{1/2} m)}{r^{1/2}} r^0$$
$$= -\frac{GMm}{r^2} r^0$$
(9)

So, the second term is nothing but gravity as contrast to the first term which is Coulomb force. In the new paradigm of science called "Psychotronics,"  $Q_2$  and  $q_2$  are the shadow electrical charges which are non-material and the true cause of gravitation which Isaac Newton could not disclose. The shadow electrical charge is also identified with the newly defined neutrino, i.e., shadow Dirac neutrino in the new paradigm of science. In other words, a cloud of the newly defined neutrino cancels the repelling force between the two nuclei and make them fuse. The details of the new paradigm science are described in the references [2], [3]. Thus, the cold fusion phenomenon questions the plausibility of the mechanistic and materialistic paradigm of modern Western science since the 17th century, leading to a scientific revolution. Lastly, vacuum is a balanced sea of neutrinos, which is non-material aether.

### References

- 1. E.F. Mallove, "Is New Physics Needed?" *Infinite Energy*, November-December, 1996.
- 2. Shiuji Inomata, "Science of Consciousness and New Scientific World-View, We are in the Midst of the Second Copernican Revolution," *J. New Energy*, vol 2, no.3 1998.
- 3. Shiuji Inomata, "Paradigm of New Science, Principal for the 21st Century," *Gijutsu Shuppan Sha*, Tokyo, 1987.

### TRITIUM PRODUCTION

Stanislaw Szpak, Pamela A. Mosier-Boss, Roger D. Boss (Naval Comd., Control & Ocean Surveillance Cntr., RDT&E Div., San Diego, CA), Jerry J. Smith (US Dept. Energy, Washington, DC), "On the Behavior of the Pd/D System: Evidence for Tritium Production," *Fusion Technol.*, vol 33, no 1, 1998, pp 38-51, 14 refs, 7 figs, 1 table.

### AUTHORS' ABSTRACT

Evidence for tritium production in Pd/D system under cathodic polarization is presented. A comparison of the observed distribution and that

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calculated, based on the conservation of mass, leads to the conclusion that tritium is produced sporadically at an estimated rate of  $\sim 10^3$  to  $10^4$ atoms/s. The results of several runs are interpreted by employing the concept of an electrode/electrolyte interphase and the accepted kinetics of hydrogen evolution. Burstlike events followed by longer periods of inactivity yield poor reproducibility when distributions are averaged over the total time of electrolysis.

### **FUSION EFFECTS IN SOLIDS**

Hideo Kozima, Kaori Kaki, Masayuki Ohta (Shizuoka Univ., Dept. Phys., Fac. Sci., Japan), "Anomalous Phenomenon in Solids Described by the TNCF Model," *Fusion Technol.*, vol 33, no 1, 1998, pp 52-62, 68 refs, 1 table.

### AUTHORS' ABSTRACT

More than 25 typical experimental data sets of the cold fusion phenomenon have been analyzed phenomenologically by the TNCF (trapped neutron catalyzed fusion) model based on an assumption of the quasi-stable existence of the thermal neutrons in solids with special characteristics, giving a consistent explanation of The densities of the the whole data set. assumed thermal neutron in solids have been determined in the analyses from various experimental data and were in a range of 10<sup>3</sup> to  $10^{12}$  cm  $^{-3}$ . The success of the analyses verifies the validity of the assumption of the trapped thermal neutron. Physical basis of the model were speculated, facilitating the quasi-stable existence of the thermal neutron in the crystals, thereby satisfying definite conditions.

### CONCLUSION (part)

The basic premise of the model - the existence of quasi-stable trapped neutrons in the crystal, and reactions between the trapped neutron and another nucleus - is supported by the success of the analysis given in Sec. III. The reality of the premise has not been verified by microscopic theory though, and the premise could be replaced by a more reasonable one, if some new phases of the cold fusion phenomenon tested the old and discarded it. The progress of the scientific idea should go like that. Efforts to develop theoretical investigations along this line have been continued by the authors.

#### RADIATION DETECTION

Chem. Abs., vol 126, no 16, 1997

V.S. Bushuyev, V.B. Genodman, L.N. Jerikhina, S.P. Kuznetsov, Yu.A. Lapushkin, I.P. Matviyenko, A.I. Nikitenko, A.D. Perekrestenko, N.P. Saposchnikov, S.M. Tolokonikov, A.M. Tzkhovrebov (USA), "Experiments on Detection of Nuclear Radiation at Heavy Water Electrolysis," *J. Opt. Res.*, vol 4, no 2/3, 1996, pp 171-179 (Eng.); Nova Science Pub.

### ABSTRACT

Cold fusion from the detection of nuclear radiation at heavy water electrolysis is discussed. Neutron and  $\gamma$ -ray detection is considered from heavy water electrolysis with palladium electrode.

#### CALORIMETER DESIGN

Chem. Abs., vol 126, no 16, 1997

C. Ferrari, F. Papucci, F. Salvetti, E. Tognoni, E. Tombari (IFAM/CNR, Italy), "A Calorimeter for the Electrolytic Cell and Other Open Systems," *Nuovo Cimento Soc. Ital. Fis., D*, vol 18D, no 11, 1996, pp 1333-1346 (Eng.), Editrice Compositori.

#### ABSTRACT

A calorimetric method and the construction details are presented for a differential calorimeter useful for studying the reactions in an electrolytic cell and more generally slow chemicophysics processes occurring in thermodynamically open systems. The method allows measurements of the heat balance of the cell, from which the enthalpy change of the process under study can be calculated. The theoretical description of the calorimetric cell and the results of several studies planned to describe the performances of the instrument up to the boiling point of the electrolytic solution are reported. The features of this calorimeter fulfill most of the requirements of cold fusion experts, where the heat production is the fundamental and controversial aspect. By controlling both the heat and the matter exchanged, the calorimeter can be used also to study bioenergetics processes, e.g., fermentation, microbial metabolism, biodegradation, and liquid phase chemical reactions, involving gases as reactants and /or products.

### LOOKING AT A NEW PARADIGM

*Chem. Abs.*, vol 126, no 14, 1997

Jiefu Yang, LiJun Tang, XiaoMei Chen (Hunan Normal Univ., People Rep. China), "Possible Nuclear Process in Deuterium-Metal System," *Changsha Dianli Xueyuan Xue-bao, Ziran Kexueban*, vol 11, no 3, 1996, pp 289-295 (Eng.); Changsha Dianli Xueyuan Xuebao Bianjibu.

### ABSTRACT

This paper further points out some problems in the traditional idea and new physics in "abnormal" nuclear phenomena and explores the process, product and conditions before the cold fusion and discusses the dineutron.

### **IDENTIFYING NUCLIDES**

Chem. Abs., vol 126, no 14, 1997

Patent: JP 09 15,210 (97 15,210), "Method for Identifying Nuclides that can be Produced in Cold Nuclear Fusion," Tetsuo Yuhara, Hiroshi Futami (Mitsubishi Heavy ind. Ltd., Japan), 17 Jan 1997, Appl. 29 June 1995, 4 pages (Japan).

### ABSTRACT

To make it easy to discriminate chemical species whose mass numbers are very close, chemical species containing the nuclide to be identified are irradiated with a characteristic wavelength of light for selective ionization, thereby the nuclide thus produced is identified. The ionized species is then further processed for identification.

### ANTIPROTON-CATALYZED FUSION

*Chem. Abs.*, vol 126, no 11, 1997

David L. Morgan, Jr., John L. Perkins, Scott W. Haney (Lawrence Livermore Nat'l. Lab., Livermore, CA), "Antiproton-Catalyzed Fusion," *Hyperfine Interact.*, 1996, 101/102 (Muon Catalyzed Fusion), pp 503-509 (Eng.), Baltzer.

### ABSTRACT

Because of the potential application to power production, it is important to investigate a wide range of possible means to achieve nuclear fusion, even those initially appearing infeasible. In antiproton-catalyzed fusion, the negative antiproton shields the repulsion between the positive charged nuclei of hydrogen isotopes, allowing a much higher level of penetration through the repulsive Coulomb barrier and greatly enhancing the fusion cross section. With their more compact wave function, the more massive antiprotons offer much more shielding than negative muons. If the antiproton could exist in the ground state with a nucleus for a sufficient time without annihilating, the fusion cross sections are so enhanced at low energies that at room temperature values up to about 1000 barns (d + t) would be possible. Unfortunately, the cross sections for antiproton annihilation with the incoming nucleus is even high. A model giving an upper bound for the fusion to annihilation cross section ratio for all relevant energies indicates that each antiproton will catalyze no more than about one fusion. Since the energy to make one antiproton greatly exceeds the fusion energy released, this level of catalysis is far from adequate for power production.

### PATENTS FROM ENECO

US Patent #5,632,870, "Energy Generation Apparatus," Yan R. Kurcherov (Salt Lake City, UT), 27 May 1997; Appl., 27 Apr. 1995, 30 claims, 9 drawings.

### AUTHOR'S ABSTRACT

Electrolytic cell apparatus and methods for generating a useful energy product from a plurality of energy sources. In a preferred embodiment, hydrogen gas is produced at a cathode by transmission of electrons through a low voltage potential barrier to electron flow achieved by careful control of electrolyte constituent concentrations and surface materials on the cathodes. A portion of the energy captured in the hydrogen gas is provided by heat transmitting activity of ions dissociated from water at an anode which catalytically dissociates the water and thereby transfers thermal energy from the anode to the ions and other constituents of the cell electrolyte. Thermal energy is replaced in the anode by absorption of heat from the surrounding environment.

US Patent #5,653,800, "Method for Producing N-Type Semi-Conducting Diamond," Yan R. Kucherov (Salt Lake City, UT), R.Ya. Kucherov (Podlsk, Russian Federation), G.S. Karumidze, Shota Shalvovich Shavelashvili (Tbilist, Russian Federation), Paul S. Evans (Farmington, UT), 5 Aug. 1997; Appl. 3 Aug. 1995, 19 Claims, no drawings.

### AUTHORS' ABSTRACT

A method of making n-type semiconducting diamond is disclosed, which is doped with boron – 10 at the time of diamond formation and bombardment with neutrons for in-situ conversion of boron-10 to lithium-7, while filtering the neutrons from high energy components during irradiation.

### **FUSION REPORT: Summary**

Edmund Storms, "Cold Fusion: An Outcast of Science," *21<sup>st</sup> Cent. Sci. & Technol.*, vol 10, no 4, Winter 1997-98, pp 19-26.

Science, the search for truth, has become polluted with controversy and emotion over the concept of "cold" nuclear reactions. Influential scientists have actively tried to degrade and even stop the work of others in their field, just for continuing research on anomalous phenomena found in low energy nuclear reactions. Why? Storms says "The answer involves three factors: the unconventional nature of the scientific claims, the manner in which the original claims were made public, and the tendency of the media to distort a situation to their own benefit."

Dr. Edmund Storms, retired Los Alamos scientist, elaborates. Although more than 50 examples of excess heat production and nuclear reactions can be cited, with more than ample peer-reviewed experimental verification, still the skeptics remain rabid in their rejection. Tritium production, Helium-4 and transmutation effects are all repeatable although usually difficult, in various different experimental protocols. "Although [some] of this work is still unpublished, the claims are being supported with increased sophistication and consistency." Even biologically induced nuclear reactions have been researched and shown to create lacking elements necessary to survival of yeasts and bacteria, in experiments in Russia and Japan.

"Of course, many readers [and scientists] may successfully avoid this belief." Critical variables have been poorly understood in many failed experiments. Random errors can also be cited for some positive experiments, too. A major toehold for skeptics is the fact that no one hypothesis has been reached that proves and/or demonstrates all the results. But Storms proposes that, because of the variety of effects observed in various types of "cold fusion" experiments, a qualitative relationship between theory and observation is not yet possible, even though many attempts have been made. He reviews several of these theoretical models.

Media distortion ranges from poor reporting and information gathering, to deliberately paying authors to write anti-fusion books. They are taking their cue from establishment scientists, such as those on the ERAB report team, who support highly biased "facts" as truth. "And what can be said of the health of science, when major scientists and scientific societies reject a phenomenon without an honest examination of the evidence?.... there are no end of examples where new and correct ideas are rejected by conventional science,"..... From Galileo to vonBraun, they were all told they were dead wrong.

The cliché that extraordinary claims require extraordinary proof may better be said as: extraordinary claims require extraordinary effort by many researchers to get to the real truth.

### **INFINITE ENERGY**, Contents

vol 3, no 17, Dec. 1997 - Jan. 1998

'97 Asti, Italy, Cold Fusion Conference: Reports William Collis, Peter Gluck, Bart Simon

Interview with Dr. Randall Mills of BlackLIght Power, Inc.

TWA Magazine profile of Eugene Mallove

Demystifying the Marinov Motor Dr. Thomas E. Phipps, Jr.

More Evidence Supports Bulk Transmutation The Cincinnati Group and Trenergy, Inc.

- ICCF7 News and Plans / Calendar
- Jed Rothwell on new Japanese CF Book Randell Mills, Hydrino Patent in Australia

Metalographic & Excess Energy Density Studies of LGEN™ Cathodes Subject to PAGD Regime. Dr. Paulo and Alexandra Correa

Hydrogen from the Vacuum?... and more.... Dr. Paul Rowe

More on Early Twentieth Century Alchemy Robert Nelson

- Excess Heat vs. Transmutation David Moon
- Another Piece of the Puzzle; Unity Engine Graham Toquer; Ken Rauen

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*(Cold Fusion magazine)* Issue #24, December 1997

Hideo Kozima, Kiki Yoshimoto, Kaori Kaki, "Nuclear Fission in the Cold Fusion Phenomenon," p 4.

James A. Patterson, US Patent #5,672,259, "System with Electrolytic Cell and Method for Producing Heat and Reducing Radioactivity of a Radioactive Material by Electrolysis," p10.

James A. Patterson, US Patent #5,628,887, "Electrolytic System and Cell," p 22.

James A. Patterson, US Patent #5,635,038, "System for Electrolysis and Heating of Water," p 38.

Hideo Kozima, Kaori Kaki, "TNCF Analysis of Excess Heat, Tritium and Helium-4 Generation in a Pd / D / Li System," p 51.

Hideo Kozima, Mitsutaka Fujii, Masayuki Ohta, Kaori Kaki, "Jones' Neutron Data Explained using the TNCF Model – A Short Note," p 60.

# **E-Mail Policy**

### EMAIL POLICY FOR NEN

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We welcome information on new energy topics. Please address such topics directly to the email address below.

We welcome specific inquiries from readers and energy enthusiasts. We will try to honor your queries by sending you appropriate information either by email or ordinary mail.

### NEW ENERGY NEWS

We welcome technical contributions of a constructive informative nature. Letters concerned mainly with criticism or suggestions of "what went wrong in your experiment" are deemed to be of little value to *NEN*.

We welcome publishable articles, especially related to experimental evidence of new-energy experiments. Articles should be submitted by mail with easy to scan type and drawings.

We welcome constructive comments about *NEN* and how we can improve each issue.

If you have any important message and can afford a stamp or a phone call, you will ensure **daily** consideration of your message. We will do our best with email but it is much more time consuming than handling a letter or a fax.

Dr. Pat Bailey continues to post selected, timely information on the INE web site. However, for complete, private, and the most timely information, you will receive it first by subscribing to *New Energy News*. When we can afford to do so, we will have a **members-only accessible** posting on some part of the growing world-wide communication system.

Thank you for your understanding. Your comments are invited.

Hal Fox, Editor *NEN* Phone: 801-583-6232, Fax: 801-583-2963 Web Page: www.padrak.com/ine/ E-mail: halfox@slkc.uswest.net or ine@padrak.com

## NOTE TO CONTRIBUTORS AND READERS OF NEN

Contributors of articles are requested to state whether their names & addresses should be printed.

Readers: If you desire to contact a contributor to *NEN* whose name and address have been withheld by their request, you may mail a letter to *NEN* and we will forward the letter.

## Miscellaneous

### THE 1998 DOE BUDGET REQUEST

Here are highlights of the DOE budget request extracted from "FY 1998 Congressional Budget Request - Budget Highlights and Performance Plan," DOE/CR-0046, published February 1997.

The core mission statement of the DOE is:

The Department of Energy, in partnership with our customers, is entrusted to contribute to the welfare of the Nation by providing the technical information and scientific and educational foundation for the technology, policy, and institutional leadership necessary to achieve efficiency in energy use, diversity in energy sources, a more productive and competitive economy, improved environmental qualify, and a secure national defense.

This is the mission statement under which thousands of people and animals were killed or gravely injured by downstream fallout from the Jackass Flats atomic testing; the radioactive contamination downwind of the Hanford Site that totaled three times the environmental radiation caused by the Chernobyl explosion; that permitted the injection of plutonium into U.S. citizens to study the results; and that established the official position that cold fusion should not be funded.

Here are the funding requests for four major areas:

### Energy Resources: Secure Supplies of Clean, Affordable Energy -- \$ 2 billion.

Energy Efficiency and Renewable Energy \$1,017,400,000 Fossil Energy \$384,908,000 Nuclear Energy (not under Nat'l Security) \$330,667,000

National Security: Reducing the Nuclear Danger -- \$ 6.6 billion.

Defense Programs \$5,078,650,000 Nonproliferation & Nat'l Security \$668,000,000 Fissile Materials Disposition \$103,796,000 Nuclear Energy \$81,000,000 Naval Reactors \$647,800,000

### **Environmental Quality:**

### Accelerating Progress, Meeting Commitments -- \$7.8 billion.

Environmental Management \$6,240,635,000 Civilian Radioactive Waste Mgmt. \$380,000,000 Environment, Safety & Health \$162,916,000

### Science & Technology:

Ideas Creating Jobs, Products and Industries for Tomorrow -- \$2.5 billion. Energy Research \$2,536,991,000 Technical Information Management \$11,987,000

Under the more specific **Energy Supply Research and Development** are listed the current programs for which funds are sought: Photovoltaic \$77,000,000 Solar Thermal \$19,800,000 Biopower/Biofuels \$76,500,000 Wind \$42,900,000 International Solar Energy Program \$7,000,000 Geothermal \$30,000,000 Hydrogen Research and Development \$15,000,000 Electric Energy Systems and Storage \$45,500,000

### New Energy Programs ZERO DOLLARS

The total for Fossil Fuel Energy Research and Development is \$365,805,000 and **ZERO for new energy systems**. The requested budget for Energy Information Administration is \$62,800,000 to provide information on oil & gas; coal, nuclear, electric and alternative fuels; energy markets and end use; integrated analysis and forecasting, data processing services; information services, statistical standards, program direction (\$41,800,000 for this); and **ZERO for new energy sources**.

From this brief summary it is understandable that there are many in Congress who are clamoring for the closing of the DOE and the distribution of its activities to other government agencies. An intensive review of the past performance of the DOE in meeting its core mission leaves much to be desired. The current estimated costs for cleaning up the DOE weapons-related sites is \$250,000,000,000 or 13 times the DOE's entire national budget request for 1998.

## THE ELECTRON EQUATION AND ELECTROMAGNETISM

Alberto Mesquita Filho, "The Electron Equation and Electromagnetism," Brazilian scientific journal *Integração*, vol III(11),1997, pp 286 -304, ed. Research Center of São Judas Tadeu Univ. **1997: Electron Centenary Year** 

### ABSTRACT

The special article in December's **Integração** contains the main topics -- properly revised -- of a theory published in 1993 in Portuguese. It is a classic theory referring to electromagnetism, and intending to rescue most of the wise knowledge of physicians who lived in the 19th century and before; it only excludes the concept of electric fluid, something modern Physics subtly insists on accepting.

Full paper available at: http://www.geocities.com/ CapeCanaveral/Lab/9378/electron.html

### EVS 14 - DRIVING THE WORLD Courtesy of Remy Chevalier

Courtesy of Remy Chevaller

The 14th International Electric Vehicle Symposium and Exposition was held December 13-17, 1997 at Walt Disney World Dolphin in Orlando, Florida.

This 14th exposition was hosted by the Electric Vehicle Association of the Americas and the World Electric Vehicle Association. The conference attendees could visit 106 vendors who had booths in the convention hall. One of the comments in the exhibitor's book was "Drive carefully because they can't hear us coming!" From the number of the conference exhibitors, it appears that the electric vehicle is, indeed, coming. Now we need that **new energy onboard battery charger.**  SPACE ENERGY JOURNAL, Contents vol 8, no 4, Dec. 1997

Compound Magnetic Motor – Don Kelly Simple Magnetic Overunity Toy – Greg Watson Unobjective Reporting – Win Lambertson New Energy Reaches Adolescence – Win Lambertson Open Letter ZPE – Hal Puthoff Can the Vacuum be Engineered for Spaceflight Applications – Hal Puthoff Anti Gravity Flight by the Absorption of the Gravity Vortices – M. Holwerda

The Shungite Solution

### LETTERS

to the Editor & Others

### LETTER FROM JIM HUGHES

Isn't it time to rename this phenomena *matrix fusion*? The reaction's analogy is that of Cooper pairs in the matrices of superconductors. In the case of deuterium nuclei, fusion is the result of this pairing.

It might give the scientific community a second chance to embrace this technology source.

Jim Hughes

### LETTER FROM ANTHONY SUTTON

Ed., Future Technology Intelligence Report

The letter from Jim Pardau (*NEN* January 1998) is correct in its criticism of DOE and nuclear waste but misleading in its interpretation of the *SACRAMENTO BEE* Editorial on new energy technology.

The BEE Editorial has two key points:

(1) It supported only ONE fusion technology, that of UC Irvine Emeritus Professor Rostoker.

The *BEE* does not recognize the many possible approaches to new energy. To us it looked like a "puff piece" for Rostoker.

(2) It was negative to other approaches and specifically referred to cold fusion as a "hoax".

We wrote two letters to the *BEE* Editors complaining about use of the word "hoax" in reference to cold fusion and presented confirming evidence for the validity of cold fusion. There was no reply by mail, phone, fax or Editorial correction.

The *BEE* is a newspaper that boasts about its "corrections" policy.

Our conclusion is that the *BEE* has no genuine interest in new energy technologies but has some contact or interest in one and only one prototype technology. This is a political choice, not an economic or technical choice.

This attitude is all too common in the Big City media and does not help our objective. We need to look at **ALL** possible variants of new energy technology whether cold fusion, plasma injection, coated beads or the Rostoker device.

The February FTIR will have a fuller discussion of the *BEE* Editorial

Antony C. Sutton, D.Sc. Ed., Future Technology Intelligence Report PO Box 2903 Sacramento, CA 95812

### LETTER FROM DONALD WALTON

I am permitted access to your excellent magazine to which I contribute on occasions and in addition, since I do not get involved in cold fusion, I also find much of interest contributed on the KeeleyNet by Jerry Decker and Dale Pond.

A particular item (on Keeleynet) entitled: "Anomalous Egyptian Artifacts" and part 2 "Egyptian Tuning Forks," dated Wed. 10th December [archived at www.keelynet.com] is worthy of investigation. It gives added weight to a previous article on levitation plus a quatrain "In ancient times monks of Tibet etc., which you published. Further, levitation using harmonics of the Schuman frequency is being voiced on the KeeleyNet.

In spite of the fact that I detailed a simple method of achieving this effect I have not had any feedback and I am wondering if the use of some half-dozen 74 series I.C.s and three power amplifiers is beyond the mental agility of your readers.

Mental agility of Archeologists is also apparently in the stone age. On New Years day the BBC featured a whole evening on Egyptology including films (fiction) and documentary's.

Two American gentlemen decided to try and simulate the building of a scaled down pyramid. They apparently could not agree between them on whether to use rafts, levers or inclined planes and their thinking only seems to have gone back to the time of Archimedes, notwithstanding that the Pyramid of Cheops was built approx. 2600 B.C.

It appears to have bypassed their learning cycle that Sound is capable of levitation and disintegration. We have examples where ultrasonics are used for welding and also in cold fusion etc., so, the discovery of ancient tuning forks from a few inches to several feet seems to indicate an in-depth ancient knowledge of sound and it's applications.

There are, of course, other means to access archaic knowledge and the abilities of Edgar Cayce are exceedingly well documented but what is more important is where the source of his information has originated from. It is apparent that similar examples worldwide do suggest that other advanced civilizations exist and that knowledge acquired over an eternity can be accessed by those with the skills and whose motivations are honorable, only when the use has undesirable application will information be withheld. The exception being those who dabble in the black arts.

These special abilities are demonstrated by Hermann Jig Schaffer in a booklet "E.T. In Ancient Egypt" obtainable from: Buchdienst R Diam, Wilhemstr. 62 7033 Herrenburg, Fed. Rep. Germany. Thus, we see indications of previous earth civilizations of advanced technology that have existed and passed into oblivion such as the sinking of Atlantis, Lemuria and the Great Flood. Can we, therefore, completely disregard E.T. visitations, Crop Circles, and alternative medical treatments which pose little in the way of a threat other than a threat either to profits or the self appointed status of certain military, political and scientific persons.

It is surprising how events seem to occur in 2000 year cycles. What remains to be seen is whether the Age of Aquarius is to herald in a new age of progress or whether some cataclysm, or visitation depicted in 2 Peter 2 last chapter is imminent. Thus, it would seem encouraging that benefit to the community rather than personal gain seems to be in vogue in the FREE exchange of information now being encouraged.

May the force be with you ! Donald P. Walton.

E-mail: <don@hortonfamily.demo.co.uk> 12, Chatsworth Road Charminster, Bournemouth BH8 8SW England Tel.: 44-1202-302213

### LETTER FROM MIKE CARRELL

I just read the Jan '98 issue of NEN. In the article by Robert Bass on T transmutation [LENT: Tungsten into Silver, Iron, Barium, Tin, Chromium, etc., NEN, vol 5, no 9, pp 7-9], sodium metasilicate is dissolved in the solution, but no Na shows up in Table 1 or 2.

What gives?

Regards, Mike Carrell

You are right, Mike. But they don't have an answer for us yet. See the analysis scans in Infinite Energy, #17 (Dec.-Jan.) on page 52-53. The Na is far diminished in the "after" scan. You can also find their information on the web site at: <u>http://web.gcis.net/cincygrp.</u>

# Meetings

### CALL FOR PAPERS 1998 INTERNATIONAL SYMPOSIUM ON NEW ENERGY (ISNE98) Salt Lake City, Utah August 1998

Deadline for Abstracts: March 15, 1998 Deadline for Papers: May 1, 1998 Send to:

ISNE98

c/o Institute for New Energy P.O. Box 58639 Salt Lake City, UT 84158

Exact details for the symposium will be announced in the near future.

### ICCF-7 INTERNATIONAL COLD FUSION FORUM Vancouver, B.C., Canada April 19-24, 1998

An International Conference on Cold Fusion (ICCF) is held every 18 months to present laboratory results and to exchange ideas for the advancement of scientific knowledge in this promising new field. With the maturation of the field, ICCF-7 seeks to attract a more diverse audience including additional scientists, research institutes, students, national funding agencies, commercial interests, journalists, and spouses. It is the objective of ICCF-7 to provide a productive international forum for communication and education.

### Calendar:

<u>April 1998</u>: Conference. All presenters must hand in their final papers during the conference for timely inclusion in the publication <u>ICCF-7 Proceedings</u>.

A different topic is planned for each day at ICCF-7. An invited presentation with summary review or global implications for the entire field will begin each day's topic, followed by five oral presentations on the topic. Afternoons will be entirely devoted to enhanced poster sessions, which include a 3-5 minute oral preview and summary. A "Top Ten" poster presenters will be selected by the attendees, and each will conduct an expanded 15 minute presentation to the full audience on Thursday afternoon. Three evening workshops will also be held.

Topics include: Heat & Related Products, Nuclear Processes & Products, Materials & Innovative Approaches, and Theory & Nuclear Physics.

Registration fee \$500. Hotel reservations are still open at all prices. For more information or to get on mailing list, contact: ICCF-7 c/o ENECO 391-B Chipeta Way, Salt Lake City, UT 84108 USA Phone (801) 583-2000 Fax (801) 583-6245 jaeger@ENECO-USA.com

### 18th International Symposium on Discharges & Electrical Insulation in Vacuum

August 17-21, 1998 Eindhoven, The Netherlands Hosted by the Eindhoven University of Technology

**Scientific Program**, Papers will be presented on all aspects of: Fundamentals of Discharges and Breakdown in Vacuum; Vacuum Discharge Devices and Applications; and Vacuum Insulation Technology and Applications.

**Mini-Courses** held parallel with conference: Diagnostics for Vacuum Devices, and Production Technology for Vacuum Insulated Devices

A **technical exhibition** will be held featuring components and systems in the area of vacuum discharge devices and vacuum insulated devices (e.g. vacuum switchgear, vacuum deposition and coating, X-ray and microwave tubes and other beam-devices, high-power devices, and equipment for analysis, monitoring and test purposes).

Hotel accommodation in downtown Eindhoven, a short distance from the University Conference Centre, is available through the EUT Conference office at reduced rates. The working language of the symposium is English. All printed matter will appear in English.

Correspondence should be sent to:

Carla Schreurs Congress Office ISDEIV'98, Aud.2.26 Eindhoven Univ. of Technology P.O. Box 513 5600 MB Eindhoven, The Netherlands

phone: (011)-31-40-247-4849 fax: (011)-31-40-245-8195 E-mail: C.L.A.Schreurs@ieb.tun.nl Website: http://www.ele.tue.nl/evt/isdeiv/

> "Meeting Global Energy and Environmental Needs"
>  33rd Intersociety Energy Conversion Engineering Conference (IECEC)
>  August 2-6, 1998 Colorado Springs, CO

Sponsored by the American Nuclear Society, American Inst. of Chemical Engineers, Society of Automotive Engineers, American Inst. of Aeronautics and Astronautics, American Society of Mechanical Engineers, and Inst. of Electrical and Electronics Engineers.

Contact:

ANS Proceedings Office, IECEC '98 555 North Kensington Ave. La Grange Park, IL 60526 Phone: 708/579-8253; fax 708/352-6464 Web page: www.inspi.ufl.edu/IECEC98

### **INTERNATIONAL SCIENTIFIC CONGRESS - 98**

"Fundamental Problems of Natural Sciences" June 22-27, 1998 St.-Petersburg, Russia

Studying problems in: Substance, Electromagnetism, Gravitation Elements, structure and interaction of Earth and Universe systems Mechanics Nontraditional Sources of Energy and Technologies

Contact LOC office, secretary Tatyana Doganonskaya Office: (7) 812-277-00-37 Fax: (7) 812-277-12-56 E-mail: <u>exico@mail.nevalink.ru</u>

### SECOND INTERNATIONAL SYMPOSIUM

#### ON CONSCIOUSNESS, NEW MEDICINE AND NEW ENERGY

November 26-27, 1998 Ibuka Hall, Waseda University, Tokyo, Japan "Toward New Human Civilization"

The Second International Symposium on Consciousness, New Medicine, and New Energy will bring together scientists and scholars from Japan and elsewhere to discuss their pioneering work and raise new questions for further research on the interrelationship of consciousness, matter and energy, complimentary and integrative medicine, and new energy technologies.

Research in these frontier areas challenges the dominant scientific paradigm, but new scientific worldview and paradigm had appeared at the first symposium. This second symposium will help facilitate this new paradigm, based on wholeness which is important for the future of humanity and the whole earth.

Contact: Mr. Hideo Hirano, symposium secretary at: Tel/Fax: 0426-65-9371

# **Commercial Column**

The following companies (listed alphabetically) are commercializing cold fusion or other enhanced energy devices: [Listings with your additional copy, or boxed, for small annual service fee.]

### COMPANY: PRODUCT

American Pure Fusion Engineering and Supply: Warren Cooley, 1-800-789-7109 or 503-585-6746. Email to: Coolwar@aol.com

Clustron Sciences Corp.: Contact: Ron Brightsen, 703-476-8731.

**ENECO**: is in the business of commercializing the exciting new field of low energy induced nuclear reactions in solids via patent licensing, joint-ventures, and co-operative research. ENECO, University of Utah Research Park, 391-B Chipeta Way, Salt Lake City, Utah 84108 USA. Contact Fred Jaeger, Voice 801-583-2000, Fax 801-583-6245. Email: jaeger@ENECO-USA.com

**E-Quest Sciences**: Contact Russ George, FAX 415-851-8489.

**Fusion Information Center (FIC)**: Research and 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 transmutation. We are the publishers for *New Energy News*, and *the Journal of New Energy*. Voice 801-583-6232, Fax 801-583-2963. Contact Hal Fox.

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.: Rome, Georgia. Contact James Griggs, Voice 706-234-4111 Fax 706-234-0702.

**JET Energy Technology, Inc.**: Weston, MA. Contact Dr. Mitchell Swartz, Voice 617-237-3625. Fax 617-237-3625.

Labofex, Experimental and Applied Plasma Physics: Ontario, Canada. Contact Dr. Paulo N. Correa. Tel 905-660-1040 Fax 905-738-8427

**Magnetic Power Inc.**: Sebastopol, CA. Contact Mark Goldes, voice 707-829-9391, Fax 707-829-1002.

**Nova Resources Group, Inc.**: Denver, CO. Call Chip Ransford, Phone 303-433-5582.

**Trenergy, Inc.,** has acquired rights to develop and produce a new-type of thermal power based on the controlled production of clean nuclear reactions from plasma injected transmutation. Contact through P.O. Box 58639, Salt Lake City, UT 84158-0639, Voice 801-583-6232, Fax 801-583-2963.

UV Enhanced Ultrasound: Hong Kong. FAX 852-2338-3057.

**"YUSMAR"- Scientific-Commercial Company:** President: Dr. Yuri S. Potapov, 277012 Kishinev, Moldova. Phone and Fax 011-3732-233318.

**Zenergy Corp.**: Founded in 1996 to facilitate the introduction of commercially viable energy alternatives. 390 South Robins Way, Chandler, AZ 85225. Contact Reed Huish, 602-814-7865, Fax 602-821-0967, e-mail: info@zenergy.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. Write for further information.

#### **INFORMATION SOURCES**

Academy for New Energy (ANE) 216 Commerce Drive, Ste. 4, Fort Collins, CO 80524. Tel. 970-482-3731 *ANE Newsletter*, no longer printed.

Advanced Energy Network Newsletter, quarterly. Advanced Energy Network, P.O. Box 691, Rondebosch 7700 Capetown, Rep. South Africa.

Antigravity News and Space Drive Technology, bimonthly newsletter, pub. J.E.Cox Enterprise, P.O. Box 655, Marietta, GA 30061-655 (Phone 770-218-9693). Per year \$36. U.S., \$48 foreign.

*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/year magazine. 63600 Deschutes Market Rd, Bend, OR 97701 541-388-1908, Fax 541-388-2750, E-mail <etimes@teleport.com> www.teleport.com/~etimes/

*Elemental Energy*, monthly newsletter, edited by Wayne Green, 70 Route 202N, Petersborough, NH 03458.

*Fusion Facts* has become a section in the *Journal of New Energy*.

*Fusion Technology,* Journal of the American Nuclear Society, edited by Dr. George Miley, 555 N. Kensington Ave., La Grange Park, IL 60525.

*Future Technology Intelligence Report*, monthly newsletter, making available technological information now omitted from establishment media. Back issues available at substantially lower cost on the InterNet at <www.tarapublishing.com> FTIR, P.O. Box 423652, San Francisco, CA 94142-3652.

*Infinite Energy,* bi-monthly magazine. 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. Visit our Home Page: www.padrak.com/ine/ which contains many important scientific papers and current reports on all areas of research. E-mail: halfox@slkc.uswest.net ine@padrak.com or 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. Editor: Hal Fox. Address & phone above.

KeelyNet BBS - 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.

Web page: http://energie.keng.de/~pace

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

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.

### VIDEO

### Free Energy: The Race to Zero Point

From Nikola Tesla to New Hydrogen Energy; Plasma Discharge to T.Townsend Brown; Magnetic Motors to Anti-Gravity... the Era of Unlimited Energy has begun!

A comprehensive 110-minute broadcast-quality documentary featuring the most promising devices, processes and theories from brilliant visionary scientists and the most persistent independent inventors on the planet!

Get late information on the history and latest revolutionary developments from the following: Tom Bearden, Dennis Lee, Dave Porter, Dr. Dennis Cravens, Eugene Mallove, Troy Reed, Hal Fox, Jeane Manning, Roy Thornson, John Hutchison, Joseph Newman, Paramahamsa Tewari, Dr. Shiuji Inomata, Moray King, Dr. Brian O'Leary, Tom Valone, Paul Pantone. Hosted by: Bill Jenkins Written & Directed by: Christopher Toussaint Produced by: Harry DeLigter Distributed by: Lightworks Audio & Video Music by: Steve Gaines, Richard Burmer, Mark Swane. State VHS or PAL format.

VHS HiFi \$34.95 + \$3.05 S&H = \$38.00. Free shipping & handling for INE members. Order from: FIC, P.O. Box 58639, Salt Lake City, Utah 84158. Advertisement

### EASY MONEY

I am offering a reward of \$1000.00 (US) to the first person, who can provide their original equation(s) and mathematical proof, for **each** of the items 1 to 5. 6 and 7 are in verbiage format. 6. From a legitimate morphological format acceptable. 7. from any proof out of Einstein's papers or bonifides. No other verbiage, absurdities or speculations permitted.

1. Push Gravity (more than two masses involved) and Push (force comes from way out in space) Inertia, i.e., shielding effect causality.

A. I have the proofs which says they cannot exist. Explain tides, that the force effect varies as the inverse square root, etc.  $[g_n, varies from the center of the Earth to the center of the body near the surface and tides upset same (experimental proof), yet shielding effect remains constant.]$ 

2. Whole numbers in Base 10 (duodecimal or what is now commonly used), answers to Fermat's Last Theorem.

3. Zero-point Energy in the cgs system.

A. ZPE can only be shown in the mks system as it requires "permeability and permittivity of vacuum" to be used, which are **just a number**, a constant of proportionality, due to the system change, i.e., cgs to mks. They can be eliminated and mks changed back to a singular system besides.

4. Gravity waves in cgs or mks system.

A. G can be likewise be eliminated, as it too is a constant of proportionality, in either system. No G, no gravity waves. The mass(es) in Newton's Equation, and all current "m" in equations, is/are **energy** mass, not gravitational, or "inertia" mass, which can be energy mass or weight. Furthermore, using the **second** possible system, **the gravity mass (effect)** system, likewise eliminates the usage of G, as it is not required in same.

B. The actual gravity pull effect equation is  $M = r^2 k$ . k is one numerical value. In the energy mass system it includes G, and in the gravity mass system, excludes G.

5. That what are called "Maxwell's Equations for light" are his original ones.

A. Maxwell failed. The current equations are Oliver Heaviside's and those have been updated besides. Neither one proved that the ratio of the e.m.u. to the e.s.u. was the speed of light, rather **than just a number.** It is inverted besides. t/l not l/t. In Minkowski "space-time" it is just a number, a ratio.

6. More than three forces, Gravity, Electric and Magnetic.

A. From the morphological process, no others can exist.

B. Proof that the "strong" nuclear force is actually the force of gravity.

7. That A. Einstein ever spoke or wrote that, "Mass increases with speed/velocity."

A. He said, wrote or implied it is/was, "The apparent measured mass increases with velocity." Velocity is a **vector**, speed is scalar and not relative. Go read Webster's.

Send a **separate** self addressed and stamped envelope for **each** challenge or my proof of the ones if you wish to see same first. If you wish to challenge same, the applicable rules and my proof (7. excluded) will be sent automatically.

Bert Schreiber 4519 Holly St. Bellaire, TX 77401-5802 (713)661-4608

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