



# New Energy News

Monthly Newsletter of the Institute for New Energy

VOLUME 5, NUMBER 3

ISSN 1075-0045

JULY 1997

Web Page: [www.padrak.com/ine/](http://www.padrak.com/ine/)

E-mail: [halfox@slkc.uswest.net](mailto:halfox@slkc.uswest.net) or [ine@padrak.com](mailto:ine@padrak.com)

NEWS RELEASE

Monday, June 16, 1997

## LOW-ENERGY BULK-PROCESS ALCHEMY

One-Tenth Gram of Thorium Becomes Titanium & Copper  
Most Sacrosanct Principles of Physics Overturned

Dr. Robert W. Bass, M.A. Oxon, Ph.D.

CINCINNATI, OHIO: In a stunning upset of the fundamental dogmas of high-energy nuclear physics, a small group of inspired inventors acting in the tradition of the Wright Brothers of nearby Dayton OH, has achieved reliable, multiply-confirmed, replicable-upon-demand, low-energy, bulk-process, high-speed, modern alchemy. For example, in less than an hour, one-tenth gram of radioactive thorium has been transmuted into nine-hundredths gram of titanium plus one-hundredth gram of copper.

After two years of partial public disclosures, these latter-day Prometheans have finally achieved multiple third-party confirmations by numerous established measurement techniques. Cross-checking procedures rule out all possibility of contamination or other experimental error. We are now calling for the public to encourage the Environmental Protection Agency (EPA), the Nuclear Regulatory Commission (NRC), and the Department of Energy (DOE), to pay attention to this unprecedented technological breakthrough, which seems to have arrived at the height of national concern over the expensive and dangerous problem posed by disposal of massive stockpiles of radioactive wastes produced both by the Department of Defense (DOD) atomic-weapons program and by the nation's many civilian nuclear power-generating plants.

Conventional-minded physical scientists have long-proclaimed that low-energy bulk-process transmutation of one chemical element into another to be an impossible "ancient and medieval dream" whose absurdity has been exposed by modern discoveries concerning the

structure of the atom and its nucleus. Supposedly only multi-million-dollar high energy particle accelerators, operating at energies in excess of tens of thousands of electron volts, can perform nuclear alchemy.

In contrast, the new process announced by the Cincinnati Group, could be reproduced in any high-school laboratory. The total power required to transmute one tenth gram of thorium is less than 300 watts, and the processing time is under an hour, so less than three-tenths of a kilowatt-hour (or less than three pennies' worth of electricity) is the energy requirement. The patent-pending, proprietary reaction vessel, whose technical secrets will be made available for independent replication by others under a Non-Disclosure Agreement [NDA], fits inside of a four-inch cube. Initially, five identical processing cells were fabricated, after the process was discovered by trial-and-error in one corner of a welding shop. Other elements, such as ultra-dangerous cesium-137, and uranium, also have been processed with similar results, auguring hope that mankind's nightmare of long-lived high-level radioactive waste can at last be eliminated. Different sizes of cells have been constructed and operated successfully, indicating that the process can be scaled up from grams to tons.

The objective is to convert a radioactive element into non-radioactive elements. In nature, uranium and thorium decay, by emission of alpha-&-beta-particles, in a complicated chain of

reactions which stops when the final decay products are isotopes of lead. It takes thorium ten half-lives, or 45 billion years, for 99.9 percent of any sample to decay naturally into lead. The new process causes random multiple fragmentation of the thorium nucleus into elements which are non-radioactive when first created, thereby speeding up the process by eliminating the need for further radioactive decay.

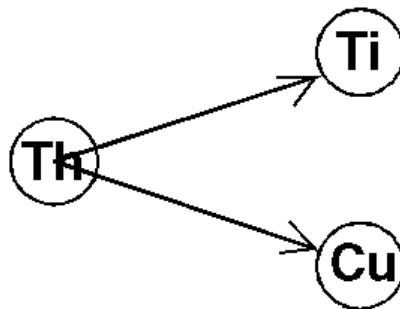
In one particular run, thorium was transmuted entirely into titanium and copper. In this case the transmutation result consisted of ninety-percent titanium and ten-percent copper. In other runs, the result was almost entirely copper, with a small amount of titanium and iron. In one particular test, the result was about one-tenth of a gram of flakes of copper, which could be seen with the naked eye and picked up with tweezers! A color photo of this man-made copper is available. The fact that the copper could not have been due to contamination was subsequently confirmed by processing cell blanks along with the thorium test samples, in which the only difference in the solutions placed into the reaction vessel was the presence or absence of dissolved thorium nitrate. Moreover, the clinching evidence that the copper could not have been the result of error or hoax was that its isotopic abundance ratio was different from that of natural copper by about a thousand percent!

In naturally-occurring copper, the abundance of the isotope of atomic weight 65 (meaning that there is a total of 65 protons and neutrons in its nucleus) constitutes about 45 percent of the amount of the copper isotope of atomic weight 63. But in the test-run which produced macroscopically visible copper flakes, the abundance ratio was increased 973 percent! Likewise, two of the four isotopes of titanium in another run differed from natural isotopic abundance ratios. To produce one-tenth of a gram of copper and titanium isotopes so dramatically different than what occurs in nature, emphasizes the impossibility of a hoax or error.

The Cincinnati Group, remembering the violent skepticism which greeted the claims of Fleischmann & Pons in 1989 to have demonstrated "cold" nuclear fusion, have

subjected their process to the scrutiny of sophisticated measurement process, at both a nationally prominent testing laboratory and two nationally reputable universities, with confirmatory results. The before-and-after testing of the process-sample has employed both quadrupole mass spectrometry (utilizing an inductively coupled plasma excitation source) and atomic-emission spectrometry (based upon scanning electron microscopy). Also used were Geiger counters (to note decrease in external counts during processing) and computer-monitored scintillation counters for more accurate quantitative measurements of initial and final radiation emission by the unprocessed and processed samples.

The basic experimental protocol involves dissolving one gram of thorium nitrate in 100 milliliters (ml) of double-distilled water and other reagents. Then 75 ml is retained for testing as a "before" or unprocessed sample, while 25 ml is inserted into the reaction vessel. Electric current is run through the cell for less than one hour. The contents of the cell are then collected for testing as an "after" or processed sample. To ascertain that no radioactive elements remain in the cell, it is disassembled and each part monitored for radioactivity. Additionally, one unused cell was ground up, dissolved in acid, and the digested mixture tested [by ICP/MS & TEM-EDXA] to ensure that no contaminants sufficient to produce the observed amounts of copper, titanium, etc. were present. Even though such amounts of contaminants were already not to be present, a blank test was also prepared and subjected to the reaction process, in which the sole difference between the blank run and the actual run was the absence or presence of thorium nitrate in the solution introduced into the reaction chamber. Most of the mass-spectroscopy analyses were done on four separate but related samples: (1) a reagent blank [whose results were subtracted from the following results]; (2) a cell blank [as already described]; (3) a processed sample; and (4) an unprocessed sample [from the same initial batch]. The conclusion about what percentage of



the thorium had been transmuted was based upon comparison of items (3) and (4).

One of the many runs based upon the protocol just described led to a "Third Party Verification" Certificate which reads in part: "The quantitative analysis of the data indicated that the amount of thorium which had undergone transmutation was equivalent to the amount of titanium plus copper which had been formed, within experimental error."

Traditionally, science has been based upon openness and peer-reviewed publications, with no details omitted, and widespread acceptance contingent upon independent replication and confirmation. Unfortunately, basic science as practiced today is almost entirely dependent upon public funding, such as from the National Science Foundation (NSF), NASA, or, as already mentioned, the DOD and DOE. But in the case of cold fusion (CF), which is a special case of Low Energy Nuclear Reactions (LENR), the Energy Research Advisory Board (ERAB) Report submitted to the DOE and essentially claiming that CF/LENR and the like are "physically IMPOSSIBLE" has precluded normally funded research in this emergent field. Therefore, most LENR experiments have been bootlegged at government or corporate laboratories or privately funded.

The Cincinnati Group, with a small budget, has obtained results which the august National Academy of Science has branded as "inherently physically impossible," has no choice but to seek Patent Protection for its intellectual property in order to attract the necessary venture capital by means of which this almost-miraculous process can be scaled up from grams to pounds and, eventually, to tons.

Concerned citizens, who would like to see "a twenty-first century science solution" to national problem of Radwaste Remediation (RR), should urge their Senators to ensure that the Patent System functions in the manner which the founding fathers of this country intended, as authorized by the U.S. Constitution.

The Cincinnati Group wishes to express its appreciation to those who have helped them the most, including those elements of the national press who do not cater to "pack mentality." They would not have started their project if it had not been for the courageous decision of the Editors and Publishers of *Popular Science* magazine to

feature as a cover story "It Ain't Over 'Til It's Over!," an unbiased account of the CF scandal by *Wall Street Journal* reporter Jerry Bishop. From this article, the Cincinnati Group learned to contact Hal Fox, founder of the Fusion Information Center [P.O. Box 58639, Salt Lake City, UT 84158-0639], who advised them that the nation perhaps needed RR more desperately than cheap, clean energy at the present time. Fox, who publishes the archival, internationally abstracted, peer-reviewed *Journal of New Energy*, also publishes a *CF Source Book* which he has dedicated to "The Children of Chernobyl." The Cincinnati Group further publicly acknowledges great help from Dr. Eugene Mallove, publisher and editor of *Infinite Energy* magazine [available for an annual subscription of \$29.50 from P.O. Box 2816, Concord, NH 03302-2816], whose next issue will contain much more detail pertaining to the presently announced seemingly-miraculous achievement.

Persons with a scientific interest who would like to peruse unedited copies of the Test Reports summarized above (or contemplate signing an NDA in order to receive full disclosure) may contact Celine at P.O. Box 1262, Covington, KY 41012-1262 or, M-F, at (513) 244-1144. After June 19, the merely curious may consult the Cincinnati Group's forthcoming web page.

## Fusion Briefings

### THE C.F. REVOLUTION

Jed Rothwell, "Cold Fusion and the Future, Part 1 - Revolutionary Technology," *Infinite Energy*, no 12, Jan-Feb 1997, pp 10-19, 31 refs.

"In this inconceivably enormous universe, we can never run out of energy or matter. But we can all too easily run out of brains."  
 – Arthur C. Clarke, from [Profiles of the Future](#).

So begins this article about cold fusion's future, covering the philosophy of energy use, and cold fusion's place in it. Whether using heavy water, or ordinary light water, cold fusion will be commercialized in many ways. Here Rothwell mentions at length thermal cold fusion used for vehicles, for heating, for electrical power generation, and for agricultural uses.

Revolutionary products coming from this new technology, changes to the infrastructure, and military applications are also examined. Food factories, instead of traditional farming, and their impact on world populations and economy are discussed at length.

---

## ENERGY GAIN & TRANSMUTATION

Heinrich Hora, J.C. Kelly (Sch. Phys., U. of NSW, Sidney, Australia), G.H. Miley (Fusion Studies Lab., U. Illinois), "Energy Gain and Nuclear Transmutation by Low-Energy P- or D-Reaction in Metal Lattices," *Infinite Energy*, vol 2, no 12, Jan-Feb 1997, pp 48-52.

### AUTHORS' ABSTRACT

Since reproducible experiments with varying amounts of energy production from nuclear fusion and nuclear transmutations by protons or deuterons in high concentrations in host metals have been shown, some conceptual problems are discussed. We underline here the steps how the experiments for using the swimming electron layer for reduction of the Coulomb repulsion were motivated with using nickel or palladium-nickel single or multiple layers. In support of this, we evaluate the experiments by Arata et al. and confirm on the basis of our earlier derived power law that the reaction distance of the deuterons (or protons) is in the range of few pm. We further evaluate the measured distributions at transmutations of the elements on the atomic number  $Z$  and find an exponential law for the decay of the maxima on  $Z$ . **The result of transmutation of the host metals is generalized by actively adding other nuclides into the near surface or interface for inducing desired transmutations.** These reactions with added materials may be used for a low cost elimination of long-lived nuclear waste and of the abolition of plutonium.

---

## MIRACLE – NOT MISTAKE

Eugene Mallove, "Cold Fusion: the "Miracle" is No Mistake," *Analog, Science Fiction and Fact*, July/August 1997, pp 53-73, 91 refs.

### STAFF SUMMARY

Gene Mallove presents the Cold Fusion story to some of the more open-minded readers in America, with all its research excitement and establishment obstruction. He explains why the cold fusion quest will not live in scientific infamy, but rather herald the beginning of the end of the Fossil Fuel Age and the birth of the New Physics.

"In many ways, the cold fusion **war** these last eight years bears close resemblance to the Galileo affair of nearly four centuries ago." The establishment would adamantly not look through our telescopes, accusing cold fusioners of ignorance, ineptitude and downright fraud. The late physics Nobel laureate and eminent cold fusion theorist, Julian Schwinger, felt compelled to resign from the American Physical Society because of its abuse of the publication process where cold fusion papers were concerned.

The vested academic interests will be eating crow yet, along with several of the more vociferous editors, critics, and writers. Mallove cited one example: magician and debunker, James Randi, wrote in the *American Physical Society News* (June 1994), "The cold fusion farce should have been tossed into the trash heap long ago, but justifiable fear of legal actions by offended supporters has stifled opponents...At risk of being unbearably realistic, I must tell you that Elvis Presley is really dead, the sky is not falling, perpetual motion is a chimera, cold fusion is a dead duck, the earth is not flat, and the fault lies not in our stars, but in ourselves." [*Bon appetit*, guys.]

I must tell you that Elvis Presley is really dead, the sky is not falling, perpetual motion is a chimera, cold fusion is a dead duck...  
 – James Randi, 1994

More to the point of realism, by a writer whose prognostications have repeatedly come true, was this quote, "It is really quite amazing by what

margins competent but conservative scientists and engineers can miss the mark, when they start with the preconceived idea that what they are investigating is impossible. When this happens, the most well-informed men become blinded by their prejudices and are unable to see what lies directly ahead of them." This was Arthur C. Clarke, in his Profiles of the Future. Clarke, a trained scientist and writer, has been a proponent of "cold fusion" and new energy research and development. See his thoughts on this on page 6 of this issue.

Mallove echos the feelings of all new energy advocates when he writes: "**There will come a time – one hopes and expects within the next few years – when cold fusion energy will be completely accepted by the scientific community.** Apart from the scientific and technological consequences of the phenomenon itself being ratified, may we expect a change in the way the scientific establishment conducts its affairs? It is difficult to say."

Summary by Dineh Torres

---

#### **PATTERSON COLD FUSION CELL ON TV** Courtesy of Dr. Atul Bhadkamkar

Michael Gillam, "Good Morning America", on ABC-TV, June 11, 1997, presented an excellent cold fusion review – except they never used the term **cold fusion**. The device, Dr. James Patterson's cold fusion cell, had been shown on Good Morning America a year ago, and this was a follow-up report. Although the narrator stated that excess thermal energy of 100 to 1,000 times the input energy could be achieved, the larger devices were working at about 120% more energy out than being consumed. Also demonstrated was a cell connected to a source of radioactive uranium. After about two hours of processing (running the radioactive liquid through the bed of beads) the radioactivity had been reduced by about half. This is another excellent demonstration that low-energy nuclear reactions can be produced.

---

#### **A CELL FOR HUIZENGA**

Eugene Mallove, "The Cold Fusion Cell that Made Huizenga Blink," *Infinite Energy*, no 12, Jan-Feb 1997, pp 23-25.

#### STAFF SUMMARY

Dr. John Huizenga, author of the book Cold Fusion: the Scientific Fiasco of the Century, made a visit to Cal Poly, Pomona this February, to give students and faculty the "other side" of the Cold Fusion story. Cal Poly, Pomona is known as the home of the Bush-Eagleton team that has been so active and successful in cold fusion research. Dr. Robert T. Bush is interviewed in this article about that visit and, in another interview also in this *IE*, about his current and past research.

Huizenga is a personable and articulate speaker, and very persuasive. Bush puts it, he "certainly seems to have the knack of being able to naysay most people without raising their blood pressure, which I find to be a social skill bordering on the unbelievable." **His talk to about fifty students and faculty was replete with the usual arguments, now disproved, for a lack of nuclear evidence for fusion.** Even before the isotopic evidence, it was known that CF would not mirror the "usual" hot fusion reactions taking place in a Tokamak.

Dr. Huizenga has stated in the past that he had never been to a laboratory where the researchers claimed to have a live CF cell producing excess power, and at this time Drs. Bush and Eagleton had a very up and running CF cell right there in the Cal Poly lab.

During the tour of the lab, Dr. Bush repeatedly invited Dr. Huizenga to take data of the experiment and "show me an error in our work leading to a significant spurious excess power." But Huizenga claimed that he was retired, and then only doing some consulting for Lawrence Livermore Labs., also in California. Bush's response was "this will get you over to the West Coast" and therefore able to check out the data from a real working CF experiment.

Dr. Bush's opinion is that Cold Fusion will turn out to be only the latest surprise in a long line of

surprises in the unfolding of Quantum Mechanics, another example of such surprises being the phenomenon of "high temperature superconductors." Keep your eyes open, Dr. Huizenga, it's not over yet.

---

## KEYS TO UNDERSTANDING

A.L. Samgin, S.V. Vakarín (Inst. High Temp. Electrochem., Ekaterinburg, Russia), "Protonic Conductors are Key to Approaching an Understanding of Anomalous Effects in the Solid/Deuterium System," *Infinite Energy*, vol 2, no 12, Jan-Feb 1997, pp 64-68.

### AUTHORS' ABSTRACT

New data on the structural analysis of proton conducting ceramics and single crystals indicate that processes of explosive character occur inside samples related to excess heat and neutron yields. The strong pressures in solids, involved in cold fusion studies, were predicted from a series of models (ever so dissimilar), for example, from the initial Fleischmann-Pons paper. This is also in general agreement with our conception of the anomalous effects in protonic conductors and oxide bronzes. The processes resulting in such manifestations, as it is in Bridgman's rheological explosion, can arise in materials which show cold fusion effects. What real phenomena takes place, in fact? We believe that such interconnecting factors as the channels of proton transfer, the explosion-like character of processes and the conduction types can be expected to play a crucial role in the anomalous behaviors.

---

## ARTHUR C. CLARKE, FRIEND OF NEW ENERGY

Borrowed from *Infinite Energy*, # 12

"I've written dozens of books on the subject (space travel) and I'm sick and tired of talking about it. I've nothing new to add, except **I think more and more that the new space age, and the new everything age, is linked more and more to the new energy revolution...**

"For one thing, there is this so-called cold fusion. Which is neither cold nor fusion. Very few Americans seem to know what is happening, which is incredible. It's all over the world, except the United States. There are hundreds of laboratories doing it, they've got patents all over the place. The prototypes are on sale now .... There are so many vested interest. There are

the hot fusion boys. All the rocket engineers will be out of jobs, and a lot of the poor guys are already. I don't like to guess at the scenario, but I would say that before the end of this decade, the hand waving will be over and people will accept that this energy exists, whatever it is, and there may actually be several different varieties. A lot of heads will roll at the U.S. Department of Energy and elsewhere."

– an excerpt from Dr. Clarke's comments to *Discover Magazine*, May 1997.

---

## 3 PAPERS BY DR. ARATA

Yoshiaki Arata, and Yue-Chang Zhang (Osaka University, Ibaraki, Osaka), "Deuterium Nuclear Reaction Process within Solid," *Proc. Japan Acad.*, vol 72, Ser. B (1996); *Infinite Energy*, vol 2, no 12, Jan-Feb 1997, pp 53.

### AUTHORS' ABSTRACT

In a series of studies, a significantly large amount of helium ( ${}^4\text{He}/\text{D}_2 \sim (1\sim 0.2) \times 10^{-2}$  and  ${}^4\text{He}/{}^3\text{He} = 4$ ,  $\text{D}_2$ : "fuel" helium: "ash") was clearly detected with a quadrupole mass spectrometer (QMS) as the deuterium nuclear reaction product ("ash") released from the highly deuterated palladium host-solid (Pd-black distributed  $0.02\sim 0.06 \mu$ : average  $0.04 \mu$ ) that had produced large amounts of anomalous excess energy ( $200\sim 500 \text{ MJ}/\text{cm}^3$ ) through long period such as 5000 hrs., when it was heated in a high vacuum ( $\approx 10^{-8}$  torr), high temperature ( $\geq 1000^\circ\text{C}$ ). On the other hand, a simultaneous measurement by another QMS caught a signal of the existence of  ${}^3\text{He}$ , while it is considerably less existence [produced] than  ${}^4\text{He}$ .

In comparable measurements from non-deuterated samples, any helium and deuterium were not detected. This means that there exist no well-known Rutherford type as a main reaction of the deuterium nuclear reaction within Pd host-solid, and an inherent feature of solid-state with much valency electron cloud such as Pd presents a circumstance for a new type of deuterium nuclear fusion reaction which directly produces  ${}^4\text{He}$  as main reaction product. Because the helium ( ${}^4\text{He}$ ,  ${}^3\text{He}$ ) was observed

only after each sample had been heated in a high vacuum, in each case, the laws of physics require that this helium could not have diffused from any outside source other than the Pd metal sample.

Also because helium was observed only after the sample was heated to a relatively high temperature, in each case, it must have been trapped within an interior location of the sample. Because there is no known process that can account for the diffusion of the large amounts of helium into the interior locations of the various samples at the levels that were measured, the only possible explanation for the helium being trapped in this fashion is that it was trapped within each sample after it was first produced as the nuclear ash from an electrolytically induced (Cold Fusion) deuterium nuclear reaction.

To understand these results, the authors have constructed a theory, based upon a coherent

process that is believed to be induced in highly deuterated Pd black crystals. In this theory, it is postulated that Cold Fusion is initiated through the formation of a Strongly Coupled Plasma ("SC-Plasma"), reminiscent of the SC-plasmas that are found within stellar interiors. This postulate is consistent with the assumption that a deuterium nuclear reaction is initiated in a localized zone within a host solid, and it is indispensable that the deuterium be transformed coherently for at least a few picoseconds into an SC-plasma, which the authors refer to as a deuterium "coherent plasma" within the solid-state. **It is also postulated that this coherent solid-state plasma fusion is initiated through a violent, localized vibration of the lattice, which the authors refer to as a "Latticequake."** This Latticequake is essentially accompanied with both of an intense electromagnetic turbulence and violently shaking electron cloud under a many body effect in coherent-state.

[Could be the formation of high-density charge clusters. – Ed.]

## Subscribe to the Journal of New Energy

This journal is dedicated to advancing the cause of new-energy research and development by the rapid printing of peer-reviewed articles by professionals in the new-energy field.

The *JNE* is abstracted by four abstracting agencies including the world-wide delivery of monthly abstracts on CD-ROM by *Chemical Abstracts*.

Some of the latest and most important articles published lately by *JNE* are Shoulders' high-density charge clusters, plasma-injected transmutation, nuclear transmutations in cold fusion cells, the **Rowe Effect**, and the Neal-Gleeson Process for the amelioration of radioactivity.

As the only peer-reviewed journal focusing solely on new energy research and development, *JNE* is a must for those who are active in the search for cutting-edge energy discoveries. The journal is published and airmailed quarterly to subscribers for only \$150 per year. Individual issues \$45.

Published by Fusion Information Center, Inc. Edited by Hal Fox with the assistance of an editorial board of peer-reviewers.

Yoshiaki Arata, M.J.A., and Yue-Chang Zhang (Osaka Univ., Ibaraki, Osaka), "Helium ( $^4\text{He}$ ,  $^3\text{He}$ ) within Deuterated Pd-Black," *Proc. Japan Acad.*, 73, Ser. B (1997); *Infinite Energy*, vol 2, no 12, Jan-Feb 1997, pp 54.

### AUTHORS' ABSTRACT

The authors have clearly proven for the first time that deuterium nuclear reaction was continuously generated inside a highly deuterated solid by showing both the excess energy and corresponding amount of helium as the reaction product generated simultaneously. Whenever there is a nuclear fusion reaction inside a metal, helium generated is unable to escape to the surroundings and is trapped in a frozen state inside that metal. The concentration of the helium within the metal will rise with increasing rate of reactions. Pd-black is under such state as the sample used and sealed within the "closed QMS" developed by the authors (closed vessel including the Getter pump and the QMS). It is completely separated from the surroundings and the internal gases are removed to create super-vacuum. The reaction product released by the "Sample-Heating" process (room temp.  $\leftrightarrow$  1500°C) is thus the only matter which occupies

the interior of the closed vessel and its detection by the QMS is assured.

When the "closed QMS" works under the above mentioned-state, it was clarified that the "ash" or the reaction product of this fusion reaction within a solid is  $^4\text{He}$  and  $^3\text{He}$  and their ratio is  $^4\text{He} / ^3\text{He} \sim 4$ . It can be concluded from the result that the main reaction product is  $^4\text{He}$  and it is created directly as an inherent feature of the solid-state nuclear fusion. Authors think that the reaction process responsible for the creation of  $^3\text{He}$  may be a different one from that creates  $^4\text{He}$ . One of which is the Rutherford reaction process and the other occurs based on the specific properties of solid, similar to the case of  $^4\text{He}$ . The existence of  $^3\text{T}$  will be required that the process is responsible for the generation of  $^3\text{He}$  as the Rutherford reaction. The proof for the existence of  $^3\text{T}$  within the "closed QMS", however, was not obtained in this experiments.

---

Yoshiaki Arata and Yue-Chang Zhang (Osaka Univ., Ibaraki, Osaka), "Solid-State Plasma Fusion (Cold Fusion)," *The High Temperature Society*, Special volume; vol 23, Jan. 1997; *Infinite Energy*, vol 2, no 12, Jan-Feb 1997, pp 54.

#### AUTHORS' ABSTRACT

Using a quadrupole mass spectrometer ("QMS"), significantly large amounts of helium ( $^4\text{He}/\text{D}_2 \approx (1 \sim 0.2) \times 10^{-2}$ , and  $^4\text{He}/^3\text{He} \approx 4$ ,  $\text{D}_2$ : fuel,  $^4\text{He}$ ,  $^3\text{He}$ : ash) were detected from deuterated palladium samples that had produced large amounts of anomalous excess energy (200-500 MJ/cm<sup>3</sup>) during Cold Fusion experiments ( $\approx 5000$  hr.). The helium was released from samples after the observation of excess energy, and only when each sample was heated to a high temperature ( $\geq 1000^\circ\text{C}$ ) in a high vacuum ( $\sim 3 \times 10^{-9}$  Torr).

On the other hand, a simultaneous measurement by another QMS caught a signal of the existence of  $^3\text{He}$ , while  $^4\text{He}$  outnumbers  $^3\text{He}$ . In comparable measurements from non-deuterated samples, any helium and deuterium were not detected. This means that there exist no Rutherford type as a main reaction of the deuterium nuclear reaction within Pd host-solid, and an inherent feature of solid-state with much valency electron cloud such as Pd presents a circumstance for a new type of deuterium nuclear fusion reaction which directly produces  $^4\text{He}$  as main reaction product.

Because, the helium ( $^4\text{He}$ ,  $^3\text{He}$ ) was observed only after each sample had been heated in a vacuum, in each case, the laws of physics require that this helium could not have diffused from any outside source other than the Pd metal sample. Also because helium was observed only after the sample was heated to a relatively high temperature, in each case, it must have been trapped within an interior location of the sample. Because there is no known process that can account for the diffusion of the large amounts of helium into the interior locations of the various samples at the levels that were measured, the only possible explanation for the helium being trapped in this fashion is that it was trapped within each sample after it was first produced as the nuclear "ash" from an electrolytically induced (Cold Fusion) deuterium nuclear reaction.

## *Space Energy*

#### CREATION OF ENERGY & MATTER

Paramahansa Tewari (Exec. Dir., Nuclear Power Corp. of India, Ltd.), "Creation of Energy and Cosmic Matter from the Universal Space Substratum," *Borderlands*, vol 53, no 1 (1997), pp 49-55, 6 refs, 7 figs, 1 table.

#### AUTHOR'S ABSTRACT

The energy in matter is derived from the medium of space which, in a dynamic state, is itself the most basic and primordial source of universal energy. The fundamental matter is identified to the electron which is shown to be a "vortex of space." The velocity of light,  $c$ , plays a broader role in the construction of the universe, in the sense that the fluid substratum of space breaks down in its flow when its speed reaches  $c$ . The basic equations of classical, as well as quantum physics, are derivable from the very "space-vortex" structure of the electron.

**Through a new system of rotating-electro-magnet, electrical power at low dc voltage,**



**and high dc currents, and in excess of the total input given to the system, has been generated, showing thereby, that commercially viable electrical power generation** can be had in violation of the presently held concept of the "energy conservation law," within the domain of the electromagnetic induction effects.

The substantial reality of the space medium of the solar system is proved by showing that the axial rotation of the planets and the sun are associated with the "space vortices" around these cosmic bodies, that produce between the sun and the planets electrical repulsive forces also, which along with the gravitational attraction and outward centrifugal force, determine the orbital stability of the planets.

#### AUTHOR'S CONCLUSION

The medium of space is the only absolute entity that, with inherent motion in it, exists as the primordial dynamic substratum of the universe. The most fundamental state of energy is the "dynamic space" in the form of "space vortices,"

which appear as cosmic matter. The dynamics of space is the "cause" whereas, matter is the "effect." The fundamental matter is the electron, which is a specific configuration of gravitational, electric, and electromagnetic fields forming its structure, and it is the interactions of these fields that assemble, out of electrons, different particles, atoms, and cosmic matter as a whole. The properties of space being "absolute" and "nonmaterial," the detection of "spatial reality" is an elusive task, except through the process of inference and experimental evidence of generation of electrical output power in excess of the input.

Lenz's Law, within the electromagnetic induction phenomenon, is equivalent to the "energy conservation law" in mechanics and thermodynamics. Since the experimental results provide conclusive proof of partially bypassing Lenz's Law and consequent additional power

Breakthrough Video on Breakthrough Technologies **Just Released**

### **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     | Paramahansa Tewari |
| Dr. Shiuji Inomata | Dr. Brian O'Leary | Tom Valone         |
| Moray King         | 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*

VHS HiFi \$34.95 + \$3.05 S&H = \$38.00.  
Order from: FIC, P.O. Box 58639, Salt Lake City, Utah 84158

production, it is possible to commercially exploit this system of high efficiency space power generation for low voltage, high current applications that will also pave the way for self motive engines in time to come.

## Oil Energy

### EXTRACTS FROM GLOBAL ENERGY OUTLOOK

Courtesy of Gordon Moody, Publisher

The following are selections from Moody's international publication *Global Energy Outlook* dated May 1997 (vol 2, number 5):

**Editorial:** "Attendees at the Offshore Technology Conference ... **were more than pleasantly pleased with the aggressive attitude of the new U.S. Secretary of Energy, Federico F. Peña.** ... He proposes to increase domestic energy production through advanced technologies in which government becomes a partner, rather than the adversary." [Efforts are underway to properly brief Secretary Peña on the reality of new-energy technologies. Ed.]

**Inflationary Pressures Subdued in Spite of Full Employment:** "The unemployment rate is close to a record low of five percent." "The shortage of workers is particularly acute in the high-tech information and computer areas." [Hopefully, there will soon be a strong demand for new-energy workers. Ed.] "...the probability of developing inflationary pressures is rising." "Foreign banks currently own 62 percent more of U.S. debt than the Federal Reserve." **"Crude oil contributes to about one-third of the current trade deficit, estimated at about \$173.8 billion. No corrective policies are in place to improve this situation."** [New-energy technologies will soon be available to reduce our dependence on the import of foreign crude oil. Ed.]

**U.S. Consumers Spend Half a Trillion Dollars on Energy Consumption:** "Secretary Peña ... addressed the conferees stating that U.S. consumers spend more than \$500 billion each year on energy products." "All three previous energy shocks were associated with conflicts and unrest in the Middle East, which contains

two-thirds of the known world oil reserves." "The U.S. has vast reserves of natural gas and production second only to that of the former Soviet Union." "Conservation is still an option to reduce U.S. dependence on insecure sources of foreign oil." [With the impending development of new-energy systems, promoting conservation is like asking a thirsty person not to drink water when a huge rainstorm is approaching. Ed.]

**Investment Bankers May be Setting Themselves up to be Burned Again:** "...there is a growing concern that commercial and investment bankers may be setting themselves up to be burned again. ... Some energy lenders say that telltale signs of irrational exuberance is cropping up in some oil patch deals." "In the same May 26th issue of *Business Week*, British Petroleum is credited with having the highest rate of return on capital, followed by Exxon, Mobile, Amoco, Chevron, and Texaco." [We wonder what will happen to the return on capital when new-energy systems begin to proliferate. Hopefully, the return on investments for those farsighted enough to invest in new-energy companies will be far more than the current returns on investment in oil. Ed.]

**Oil Industry Expansion Attributed to Current Worldwide Growth in Demand for Oil:** "Until recently, worldwide demand could be met simply by turning on more taps to consume the excess capacity of the worldwide [oil] industry. **With excess world capacity now between two or three percent, the industry must find new sources of hydrocarbons.**" [Keep it coming, oil industry, we will need it for chemical feedstocks for our children and our grandchildren. Ed.]

**Current Oil Market Slump no sure Indicator for Future Oil Demand Requirements:** "World oil demand is currently growing by about two million barrels per day per year, requiring another 10 million barrels production within five years. At the same time, current fields provided today's consumption are being depleted at about two million barrels per day per year, requiring another ten million barrels production." [The demand for our new-energy systems certainly exists. Ed.]

**A Revolt Among State Environmental Regulators Brewing Against EPA:** "At their annual meeting in March [1997], the state environmental commissioners passed out T-shirts proclaiming: *The states are not branches of the federal government.*" [The availability of new-energy systems that will allow homeowners to **get off the grid** will make Americans even more independent. Ed.]

## GOOD FOR GUNNERMAN

"Reno buses switch to cleaner fuel," Sacramento Bee, 10 May 1997.

Reno inventor Rudolf Gunnerman's A-55 fuel is well on its way to powering public transit vehicles in California. Reno busses started using it this May. Being 55% water mixed with naphtha, a relatively cheap petroleum derivative, it won't meet the EPA's alternate fuels mandate, but it is claimed to produce 50-70% lower emissions of smog-forming NO<sub>2</sub>, and up to 50% less soot than diesel. The A-55 fuel would be easy to use in the transition from gas and diesel over to the clean non-petroleum power sources which are still being developed.

## RadWaste

### ATOMIC WASTE – DOE COVER-UP

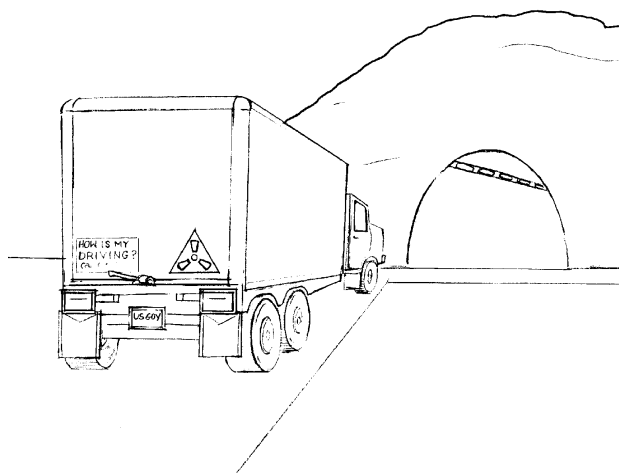
Antony C. Sutton, Editor, *Future Technology Intelligence Report*, vol 9, no 2, February 1997, page 2.

**Congress has required the Department of Energy to accept tons of nuclear waste from the power industry by 1998 ...** DOE cannot do this and is 10 years behind schedule in providing waste disposal facilities. DOE is still conducting feasibility studies at Yucca Mountain, Nevada with a scheduled opening date of 2010.

In any event (as Superfund shows us) DOE spends [too much of] its time and money legal dancing in court rather than on constructive work. Further DOE estimates it needs \$150 billion for nuclear waste storage, which will find strong Congressional opposition.

Given this dilemma, common sense suggests that DOE explore every possible method to solve the physical storage and the cost problems and stay out of court --. that is the very least we can expect from "public servants."

"To the contrary we find extraordinary cases of ignorance, gross incompetency, waste of taxpayers funds and concealment of incompetent actions. In sum, it appears that DOE is good at wasting time in court and good for little else. **Court action won't solve nuclear waste problems.**"



by VINCENT COON

### HANDLING SPENT FUEL PELLETS

Courtesy of Richard Shamp

Michael Morris, president and CEO of Consumers Energy, told the House Energy and Power Subcommittee, "For 15 years, electricity consumers have met their financial obligation for this program [handling highly-radioactive spent fuel pellets from nuclear power plants]. Now, it's the government's turn to act. The contracts say to do it. The laws say to do it. The courts say to do it. Continued federal inaction is the most expensive and environmentally irresponsible option." The federal courts have ruled that DOE must begin taking the spent fuel pellets from nuclear power plants by January 31, 1998 [1].

House Bill H.R. 1270 (similar to S. 104 which passed the Senate 65-34 in April 1997) instructs DOE to develop a safe nuclear waste

management system that includes a temporary storage facility, a permanent storage facility, and safe transportation from nuclear power plants to storage. That is why the Ghosute Indians (Western Utah) have been asked to approve a temporary storage facility on their tribal lands. The long term storage facility is under development [2]. **After two and a half years of drilling through Yucca Mountain, the five-mile long, 25-foot diameter tunnel has been drilled.** The testing and evaluation procedure to determine the fitness of this facility for long-term storage of radioactive wastes is expected to be completed in four more years. However, in 2002, the schedule is to apply for a license to build a repository for spent fuel pellets coming from more than 100 nuclear power plants.

This editor points out that **the DOE has officially adopted the position that there is no technology available that is more economical than geological storage.** Of course, because bureaucrats are loath to make decisions, a large amount of money was paid to the National Research Council to make that determination. It will take about as long as it took to drill the five-mile tunnel for the current DOE direction to be changed in favor of technology that can ameliorate the radioactivity **on site.** Readers of *New Energy News* and the *Journal of New Energy* have access to the latest information about technological developments (about six different methods) that claim to stabilize radioactive elements.

Thanks to the scientists, engineers, and inventors of this world (especially the independent inventors) there are technological solutions to this rad-waste problem.

The size of the spent-fuel-pellets problem is that there are currently about 40,000 tons of such pellets stored at 73 waste storage sites in the U.S. Throughout the world there are 443 operating nuclear power plants producing spent fuel pellets. In the U.S. the Nuclear Waste Fund has collected \$13 billion (about one mil per kilowatt-hour of electricity sold from nuclear power plants goes into the fund). Of course, if the government treats this fund the way they treat the Social Security Fund, the money will have already been spent for other government purposes and your taxes will have to provide the funds to be used. Thanks to the scientists,

engineers, and inventors of this world (especially the independent inventors) there are technological solutions to this rad-waste problem. The new solutions will also be cost effective as compared to the currently estimated cost of \$2,500 per kilogram **per year** for long-term storage of high-level radioactive wastes.

References:

[1] Staff, "Federal Inaction Called 'Expensive, Irresponsible'", *Nuclear Energy insight97*, May 1997, page 1.

[2] *ibid*, "Comin' Through the Mountain", page 4.

## Miscellaneous

### WASHINGTON - TOUGHER EPA RULES

Staff (N.Y. Times News Service), "EPA chief still pushing for tougher rules on air," *Deseret News*, 1 June 1997, p A2.

#### EDITOR'S SUMMARY

By toughening air quality standards as proposed by the EPA would put hundreds of counties in the U.S. out of compliance with the Clean Air Act and **force costly controls on emissions of ozone and fine chemical particles mostly caused by burning fuels.** If the administration realized what a tremendous beneficial impact that new-energy systems will have on air quality President Clinton and his cabinet would be devoting more funds to accelerate the development of new-energy systems. **Instead, the EPA is planning to force states to expend hundreds of millions of dollars on problems that new-energy technology will automatically solve.** What a waste of taxpayers money!

To each is given a set of tools, an hour glass and a book of rules, and each must build, ere his time has flown, a stumbling block or a stepping stone.  
— Anonymous

## GRAVITY WAVES RESEARCH PROJECT

Courtesy of Bill Ramsay

Alastair Couper has a Web Site titled "Gravity Waves Research Project". The Home Page has the following information:

"The Aether is none other than a conceptual container for all the characteristics of space which we measure and experience. The notion that the so called vacuum is in any sense energetically empty is untenable, rather, it is a plenum. [Dictionary definition: all space full of matter.] We assume the Aether to be the medium for gravitational flux. It was Faraday who said with great foresight, "Capacitance is to Gravity as Inductance is to Magnetism." This intuition lay dormant until given validity in the 1920s by T.T. Brown in his study of the Biefeld-Brown Effect."

With the contributions that *NEN* received from both Greg Hodowanec and Bill Ramsay, *NEN* readers should be reasonably informed on gravity wave monitoring.

---

## CONSTRUCTING ANTI-GRAVITY DEVICE

Pierre Sinclaire, "Construction of the Gravito-Magnetic Device", *NEXUS*, vol 4, no 4, June-July 1997, pp 44-46, 5 figs.

### AUTHOR'S ABSTRACT

In this short paper I would like to convey enough information to help anyone who would like to undertake research into the Gravito-Magnetic Device (GMD). I will give a brief description of the hardware and the theory behind the GMD. I will talk about various researchers who have come up with very similar theories and results.

### EDITOR'S COMMENTS

Sinclaire provides highly-detailed drawings but due to printing size the details are not sufficiently clear for some of us to use. However, there is a note: "For better detail, visit the Project Magnet web page at <http://www.cascadia-net.com/magnet/>" The type of effect that is being utilized is "the principle of opposition of magnetic fields at vector angles." The various researchers mentioned by Sinclaire are John Searl, John Hutchison, W.J. Hooper, Floyd Sweet, Wilbert Smith, and Tom Bearden. I have talked to Searl and Hutchison and they do not

have viable, scientific theories. If my information is correct Hooper and Smith are dead. Floyd Sweet, if he had a great secret, took it with him when he died. That leaves Tom Bearden to tell us how this device works. Tom, *NEN* readers would appreciate a short explanation from you.

---

## LIGHT IS THE GHOST OF MASS

Chuck Bennett

This decade has seen an upsurge in the interest to resurrect a workable æther in order to provide a practical medium for the analysis of newly discovered phenomena such as over unity hydrogen energy production, the manipulation of gravitation and over unity electric motors [1-5]. An æther concept based on a permeable medium whereby matter and light waves were separate from each other was squashed as "superfluous" at the turn of the century [6]. Therefore the new æther must provide an answer to the obstacles encountered, such as manifested by water filled telescopes, stellar aberration and the Michelson and Morley null result.

One approach to this overall goal is to invoke the property of quantization (or discrete particles) to the fundamental structure of the æther [7]. In a recent interview with Arthur C. Clarke, the power available from empty space in terms of "zero-point energy" is described by the late Nobel laureate, Julian Schwinger, as the tapping of "quantum fluctuations" [8]. The quantization of the æther may be explained by the view that the æther consists of a sea of particles that are on the order of a million times lighter than the electron. The mass range of the particles is in the range for the spectrum of all light photons. Therefore, the æther may simply consist of a medium of "condensed photons." Then light can be viewed as evaporated mass and mass as condensed light. Steven Rado has characterized this approach in terms of an ideal gas [9]. As far as knowing what is in between the particles, it doesn't matter. And that statement is to be taken literally because there may not be any definable matter between the particles, just uncondensed primordial gradient fields or vacuum.

A theory for gravitation has been presented based on the approach that gravity is the "æther wind" [10]. Gravity is related to mass and mass is related to light energy via the equation,  $E = mc^2$  [11-12]. Gravity can be modeled as a mass gradient and is shown to be inversely proportional to the emanation of light energy as a light gradient by the proportionality constant,  $-c^2$ . In other words, light is basically a "hole" in the quantized æther that travels as a perturbation opposite the knocking action of the particles that comprise the medium. This is why light can be thought of as "the ghost of mass."

This phenomenon is emphasized in two well known actions. When a positron and electron meet, the mass does not necessarily get "annihilated," it simply turns to an equivalent amount of light energy in the form of two powerful  $\gamma$ -photons traveling in opposite directions with opposite spins. In another example, when an electron hops from a higher orbit to a lower orbit, a quantum of light energy as a photon is released (as exemplified by the Bohr hydrogen atom model) in a spectrum of discrete quantum energies. The mass loss of the electron is negligible, but the mass and energy of the photon is described by the relations,  $E = m_p c^2 = hf$ , and  $m_p c \lambda = h$ , where  $m_p$  is the equivalent mass of the photon,  $h$  is Planck's constant,  $f$  is the frequency,  $\lambda$  is the wavelength, and  $\lambda$  is related to  $f$  by  $c = \lambda f$ . Photon emission is a good example of where mass (the electron) goes in and light (the photon) goes out. [See Anastovski & Bennett's book Quantum Mass Theory Compatible with Quantum Field Theory. - Ed.]

A quantized æther allows general relativity to be reduced to the mechanics of a real and workable medium rather than an abstract notion that space is curved described by a stream of ambiguous mathematics. Real models of physics have enabled the engineering of flight and hopefully can be extended to the speed-of-light realm to enable luminal or super luminal space flight.

The three so called proofs of general relativity may be explained by a quantized æther. Gravitation may be the process where the particles that comprise the particle sea are accelerated inward to the center of a mass. Therefore, light would be slowed going against gravity and accelerated towards gravity. This concept has been shown to be true in

experiments where the frequency of photons is shifted to red or blue depending on the direction in the earth's gravitational field. Light from distant stars gets bent towards the sun as viewed from the earth by a very subtle amount. Gravity as the æther wind explains this phenomena. And finally, if gravitation is limited by the tangential speed of the underlying particle of the æther, analogous to sound in gas molecules, then very subtle effects would be observed in rare occasions such as the delay in the orb of the perihelion of the planet Mercury as a deviation from calculations based on Newtonian gravitation.



#### References:

1. H. Fox, "The Nature of the Æther," *New Energy News*, vol 4, no 12, April 1997, p 9.
2. M. Twain, "Æther Workshop," Preparation for Workshop, (to be held at Stanford Univ. July 18-20, 1997). *Plasmatronix, Intl.*, P.O. Box E, Menlo Park, CA 94026, Phone 415-569-3299.
3. H. Fox, "So You Want to be Involved in New Energy?" *New Energy News*, vol 4, no 12, April 1997, pp 2-3.
4. M.G. Millis, "NASA Preparing for the Future," *New Energy News*, vol 4, no 12, April 1997, pp 6-7.
5. H. Aspden, "The Motors the Keep Us Alive," *New Energy News*, vol 4, no 12, April 1997, pp 1-2.
6. A. Einstein, "On the Electrodynamics of Moving Bodies," *Annalen der Physic*, vol 17, no 5, September 26, 1905, pp 891-921.
7. C. Bennett, "A Quantized Æther," *New Energy News*, vol 4, no 7, November 1996, p 7.
8. F. Guteri, "An Odyssey of Sorts," *Discover*, May 1997, pp 68-69.
9. S. Rado, *Aethro-Kinematics*, Aethron Publishing Co., Los Angeles, 1994.
10. C. Bennett, "Gravity as the Æther Wind," April 1997.
11. C. Bennett, "Einstein's Mass Dilation as Æther Drag," *New Energy News*, vol 4, no 12, April 1997, p 7.
12. A. Einstein, "Does the Inertia of a Body Depend Upon its Energy?" *Annalen Derphysic*, vol 18, no 3, November 21, 1905, pp 639-641.

**ELECTRON - HAPPY 100TH ANNIVERSARY**

Courtesy of Remy Chevalier

Marcus Chown, "Just who did discover the electron?", *New Scientist*, 29 March 1997, pg 49.

Happy 100th anniversary, electrons! In April 1897 Joseph John Thomson, a British physicist, is credited with the discovery of the electron. But it took a few more persons to help. In 1858 Julius Plücker (University of Bonn) wanted to learn more about electricity but couldn't study inside of wires. Johann Gissler, a Bonn glassblower, used his mercury air pump to suck air out of glass vessels. Plücker commissioned Geissler to make a glass tube with two plates and evacuate it. When a current passed between the electrodes the thin air glowed but the glow vanished as the air was further removed. However, there was a greenish glow on the glass near one of the electrodes. A student, Johann Hittorf, showed that the glow was caused by invisible rays which stemmed from the other electrode. The rays could be deflected by a magnet. Hittorf called them **glow rays**, but because the rays came from the cathode, they became known as **cathode rays**. [Glow ray tube just missed being famous.] J.J. Thomson thought these rays could be tiny negatively charged particles. Using both magnetic fields and electric fields, Thomson was able to deduce the charge to mass ratio of the **cathode rays**. So Johnson announced that these were tiny particles 1,000 times as small as a hydrogen atom.

Another German, Emit Wiechert, had measured the charge to mass ratio earlier in 1897 and gave a January 1898 lecture. However, it was up to someone to measure the charge on these

The graduate with a science degree asks, "Why does it work?"

The graduate with a engineering degree asks, "How does it work?"

The graduate with a accounting degree asks, "How much does it cost?"

The graduate with a liberal arts degree asks, "Do you want fries with that?"

The graduate with a political science degree asks, "How many bureacrats can we hire?"

**cathode ray particles**. In 1899, Thompson succeeded in measuring the charge – **so Johnson became the father of the electron**. [I wonder why it wasn't Thor who is credited with the discovery. He was throwing whole bolts of electrons around long before Thompson. Ed.]

## Editorial

**SCIENTIFIC ANOMALY**

By Hal Fox, Editor

My Webster's Seventh New Collegiate Dictionary defines **anomaly** as 1: the angular distance of a planet from its perihelion as seen from the sun 2: deviation from the common rule : IRREGULARITY 3: something anomalous; esp: something that deviates in excess of normal variation. **Anomalous** is defined 2: being out of keeping with accepted notions of fitness or order; also: inconsistent with what would naturally be expected.

**A scientific anomaly is a repeatable, experimental measurement not explained by any currently applied scientific model.**

For scientific purposes the following definition is proposed: **A scientific anomaly is a repeatable, experimental measurement not explained by any currently applied scientific model**. Note that this definition is akin to the definition of a scientific fact: *The close agreement of a series of observations of the same phenomena*. Therefore, when first observed, an experimenter may say, "This measurement appears to be an anomaly." When the experimental observation is repeated with the same or similar results then one can say, "We have a scientific anomaly." If there is a close agreement of a series of observations of the same phenomena, then one can say: "Here is a new scientific fact."

From this set of definitions (and from many years of experience) the experimental outcomes that do

not fit the model, hypothesis, or theory are possibly anomalous. Of course, there may be experimental observations that are errors of man or equipment. When a result is carefully (and accurately – without error) repeated, then we have an anomaly.

In this author's judgement, the discovery of new anomalies are the precursors of new science. **Scientific progress would be meager or pathetic without the discovery of anomalies.** Scientific progress comes much more from the discovery and investigation of anomalies than from theory. **Of course good scientific theory has its place and point us the direction of further scientific progress.** Good theories (models) use and explain the new anomalies.

It is important to remember that current science (and for the past few hundred years) has agreed not to allow the use of the supernatural to explain the natural. Our present most excellent stage of technological achievement is the direct result of this decision. We do not allow the actions of angels, demons, gods, or devils to be used to explain scientific anomalies or facts. **However, be suitably forewarned against those who tend to deify (or create dogma) based on any current model or theory and, thereby overly resist scientific investigation of new anomalies.** (A dogma is something held as an established opinion.) A strong dogma in science can cause experimenters to "clean up" their experimental data by removing the anomalies.

Years ago, in experimenting with vortex flow, one of the pertinent papers published a table of data that showed that water introduced tangentially into a eight-inch diameter pipe caused the flow near the pipe wall to flow in a direction opposite to the expected pipe flow. Due to the honesty of the experimenter, the data was left in the paper but there was no explanation (model) for this anomalous behavior. We were able to extend the data and modify the usual accepted pipe-flow model to account for this unusual and unexpected observation. To this day, I thank that experimenter for being honest with his data. He didn't expect it, he couldn't explain it, but he published it. That is the mark of good science.

This publication loves to tell its readers about new discoveries: new anomalies. However, editorial privileges are used to temper our reporting. There are many anomalies that are so different from our accepted models that we don't

know how to even begin to explain them. The **Hutchinson Effect** of the levitation or destruction of materials by combination of energy beams is an example. So we either ignore or make our reports brief.

Just as an example of **far-out anomalies**, we found two articles in the First Quarter 1997 issue of *Borderlands* that you may find interesting. See "An Introduction to the Mysteries of Ground Radio" by Gerry Vassilatos and "The Borderland Experimenter: Ground Antennas" by Gerry Vassilatos and Michael Theroux. Here is a quote from the first mentioned article:

[About early days of telegraph] *Hoping to save the finance of excessive wire line, many telegraph systems implemented the discovery that code could easily "pass through water". To this end, engineers experimented with the use of widely separated ground plates, a means which proved strangely successful. Experiments with ground conduction established telegraphic contact through an isthmus (Morse, 1842), through streams (Vail, 1843), wide rivers (Lindsay, 1843), canals (Highton, 1852), across a bay (Meucci, 1846), through the earth (Stubblefield, 1872) and between distant islands (Preece, 1880). An accidental discovery proved that one long-line system continued operating with great strength of signal, despite the fact that the line had been literally broken in several places. The realization that code signals could actually enter and traverse the ground for several hundred yards, and then reenter a grounded line, triggered a new revolution. Thereafter, combined wired and wireless links formed the greater portion of telegraph exchanges across the miles of North American countryside.*

Cities with single-wire trolley cars (and many telegraph systems) used the ground as a return circuit. The current entering a metal gas pipe and then leaving the pipe could erode a hole in the gas line. That is why you see great care in burying gas lines to ensure that they are covered with some type of tar or other insulation. However, to have the ground be part of a long-line circuit is an anomaly in my model of current flow.



**The second article on experiments with ground antennas is even more anomalous.** If you are a radio buff, you might want to try some of the experiments. The authors state that the ground antenna works best with old vacuum-tube radios with capacitor tuning or radios with germanium transistors. The new digital-tuning models do not work well for these experiments. **Have anomalous fun.**

## LETTERS

### to & from the Editor

#### **APOLOGY TO SALT LAKE TRIBUNE**

The *Salt Lake Tribune*, which has been a locally-owned and operated newspaper for many decades, was recently sold. We owe an apology to the Health and Science editor for not making ourselves known to the new management.

On Thursday, June 19, 1997, the front page of Section C of the *Salt Lake Tribune* carried an outdated article by science writer Lee Siegel, full of disinformation on cold fusion. The article cited three books: T. Kenneth Fowler's [The Fusion Quest](#), Michael Shermer's [Why People Believe Weird Things](#), and A.K. Dewdney's [Yes, We Have No Neutrons](#). Here are some examples of the disinformation quoted by this article:

Fowler is quoted: *The experimental evidence offered to our committee by cold fusion's proponents was crude and unconvincing. Though a few scientists and a coterie of other enthusiasts have continued to claim otherwise, as far as I can tell, the over all conclusion that cold fusion is an illusion still prevails, though I confess I have not been motivated to pay much attention lately.*

Michael Shermer is quoted: *Something is probably pseudoscientific if enormous claims are made for its power and veracity but supportive evidence is scarce as hen's teeth. ... Maybe 50 years of physics will be proved wrong by one experiment, but don't throw out your furnace until that experiment has been replicated.*

A.K. Dewdney is quoted: *[they took] an extraordinary gamble and lost. They lost, in the end, not because they were anxious for Nobel prizes or great wealth. Such factors may explain why they gambled. But they lost because they were wrong.*

Fowler's committee was, apparently, the infamous Energy Research Advisory Board committee that set out to look at cold fusion. When they were shown excess thermal energy they reported "bad calorimetry". When they were shown evidence of some neutrons, they decided "bad instrumentation". When they were shown tritium they said "contamination". Apparently Fowler, by his own admission, has not sought to learn any more about cold fusion since 1989. Fowler is completely unprepared to be considered as currently competent in regard to cold fusion developments.

Michael Shermer is equally unprepared to evaluate cold fusion. In our files we have over 3,000 papers about cold fusion with over 600 papers reporting on successful replication. Shermer apparently reads only those scientific journals that refuse to publish anything about cold fusion.

Dewdney appears to be the least competent, by his own words, to be taken seriously about his comments on cold fusion. Pons and Fleischmann did not gamble, they knew that they had discovered an amazing (but not thoroughly understood) phenomena. And they didn't lose and they weren't wrong. Scientists in over 200 laboratories in thirty countries have replicated and/or advanced the discoveries of Pons and Fleischmann. Over 100 patents have issued in Japan on cold fusion. Over 300 patent applications have been filed in the U.S. (from both American and foreign scientists). Over one hundred million dollars has been spent in Japan on "new hydrogen energy" – the Japanese euphemism for cold fusion. Cold fusion is now being commercialized. How wrong can one writer be?

In the U.S. cold fusion (just a few examples) has been successfully demonstrated using heavy water (John Dash, Oregon), using light water and nickel (Michael Swartz, Massachusetts and Bush and Eagleton, California), using sonoluminescence or cavitation (George & Stringham, California), producing tritium (Bockris, Texas), in proton conductors (Oriani, Minnesota). In addition, two conferences on Low-Energy Nuclear Reactions have been held at or adjacent to Texas A&M and the proceedings published in Salt Lake City, Utah in the *Journal of New Energy*. Most recently, a press release has been issued about the Neal-Gleeson Process which transmutes radioactive thorium into stable elements. This monumental achievement, probable less expected than the production of thermal energy, has been examined and analytical reports verified by Professor George Miley, Editor of the International Journal of the American Nuclear Society, *Fusion Technology*.

The Fusion Information Center has been publishing information about cold fusion and other enhanced energy systems for eight years. We apologize to Lee Siegel for not letting him know about the enormous amount of published technical literature and the huge successes of cold fusion. We apologize for not letting him know that two companies are now selling partial or complete systems guaranteed to produce excess heat with cold fusion devices, such as Jet Technology in Massachusetts. We apologize for not sharing the story of BlackLight Power in Lancaster, Pennsylvania, whose shares have gone from \$0.75 to \$1500 per share due to their commercialization of the production of thermal energy and, probably, because of the support

#### COLD FUSION BIBLIOGRAPHY

Just updated and revised, the most complete bibliography of New Energy research papers and articles [predominantly cold fusion] is available again from the Fusion Information Center on disk [PC]. Containing over 2500 references, it traces the progress of cold fusion research since its beginning in 1989 through the abstracts and articles published in Fusion Facts, the world's first cold fusion newsletter/magazine. Copies are \$15, postage and handling included.

they have received from electrical utility companies.

Please accept our apologies, Mr. Siegel, and we will show you where the **hen's teeth** are located.

Hal Fox, Editor *New Energy News*

---

#### LETTER FROM WIN LAMBERTSON

Thank you for your excellent editorial on "Polarizing the Vacuum," in *NEN* vol 5, no 1, pp 13-14, May 1997. You have the gift to being able to simplify complicated subjects. You followed with "What are the Characteristics of the Aether?" which is also helpful.

We will be in Lexington, Kentucky, at the Springs Inn this summer where I plan to work on my patent application. I will be using the vacuum continuum as my energy source with a one sentence reference to the aether. I will do a modest literature search but plan to include only a few references on the source.

As long as I have a source, I do not have to care if it is polarized or not. It is my feeling that it is polarized but my method does not require it to be polarized.

W.A. Lambertson

---

#### RADICAL TEK LETTER

To answer your question, Radical Tek is an independent technology development and marketing business. Currently, we are marketing renewable energy systems (advance steam piston technology), and a new class of jet propulsion system. Our next technology focus will be the commercial exploitation of Scalar Technology in the fields of communications, wireless power transmission, and electrotherapeutics.

We operate as a "virtual corporation" - worldwide network of research institutes, consultants, contract manufacturers, and other supporting businesses. Radical Tek believes that this structure, coupled with a strategy of low-profile

market introductions of Scalar Technologies (such as a free energy-powered walkman) will make it possible to penetrate entrenched worldwide markets with **unpatented** products.

One key obstacle to commercialization is the need to transform Scalar Technology from an **experimental / theoretical** science to an **applied** science. This is my primary interest in contacting your institute.

Thank you for your time, and I look forward to becoming a member of the Institute for New Energy.

Sincerely,  
Jack Rollan, Chief Technologist  
Radical Tek, P.O. Box 138  
New York, NY 10116-0138

---

#### LETTER FROM DON KELLY

COMING IN THE NEXT ISSUE OF *SPACE ENERGY JOURNAL*:

**"We are now rapidly approaching a major and critical crossroad, in which the public must choose between galloping mediocrity in science and engineering, or a natural and progressive acceptance of new methods and hardware that are now being evolved.** It is an appalling fact that we have not witnessed any tangible progress in electrical engineering since the turn of the century, when Faraday's induction, or the spinning of magnets past electrical coils became the practical and accepted way to produce electricity for all applications."

Don Kelly is urging a study on how to replace oil, gas, and coal-fired boilers with new-energy heat producing systems.

---

"The work of Hans Coler, of Germany during the late 1930's and 40's has been recorded in several British Intelligence Reports, on being No. 1042, titled "The Invention of Hans Coler, Relating to a New Source of Power." Two basic projects were described there: the "Magnetstromapparat," or Magnet Current Flow Apparatus, and the "Stromerzeuger," or Current Flow Device, which were solid-state electrical generators, both using small batteries as their

input power sources and permanent magnets as major components.

Both of these devices are described in the report, along with schematic diagrams. They seem to be the first new energy devices recorded which utilize permanent magnets both within and adjacent to their basic electronic circuitry. The article goes on to discuss more background and overlooked potential of Coler's work.

Contact Don Kelly, *Space Energy Journal*  
P.O. Box 1136, Clearwater, FL 34617.

---

#### LETTER FROM MARTIN HOLWERDA Holland

While reading Greg Hodowanec's "Cosmology Notes" (*N.E.N.*, May 1997, pages 9, 10 and 17) I was so happy to note that a link with the MRA and M-L device was noticed. To this, other European (German) projects like the Coler and Alpha-Theta systems could be added. Of Hans Coler's inventions only the least virulent version is known, the one with the wire-wound 10 millimeters, with steel magnets ordered in a hexagon.

Hans Coler has made very powerful devices of which, unfortunately, nothing is known. This inventor has remarked that magnetism is associated with a frequency of 180 kHz. From this information Chris Monstein, of Switzerland has concluded that this frequency must be associated with a space flow near the magnet of 180,000 cycles /sec. times  $2 \pi \times 10$  mm or 11,310 meters per second. This under the condition that Hans Coler was talking about those 10 millimeter magnets.

The Alpha-Theta device is introduced in **Don Kelly's Manual, Chapter XIV, page 100**. It consists of a bifilar wound magnet with an inner control coil and, an output coil on the outside. I've got one, but have not finished testing it. All the values of the table in Don's Manual have been verified to be 100% true, only the output I couldn't verify as yet. To my knowledge Mr.

Hauser from Denmark, who spoke at one of our yearly congresses, thinks the M-L device is equipped with two stacks of disc-magnets wire-wound with two layers. The inner layer receiving pulses from the Wimshurst-like, counter-rotating wheels while the outer layers are connected in series to serve as output. Also Mr. Sinclair of B.C. Canada, agrees with Mr. Hauser as far as the M-L wiring layout concerned.

Considering the European results, I like to encourage Greg Hodowanec with his efforts but that does not imply I have the final answers. How far does my imagination go? According to my hydraulic model of magnetism any magnet has two opposing electron carrying space streams that are quite considerable. The aforementioned speed of 11.3 kilometers a second could be minimal. This implies that when we put one layer of wire around the magnet, we have a transformer with two opposite D.C. carrying primaries that are out of balance and our freshly added secondary output. So what was my conclusion: in order to greatly improve the induction into the secondary, the first layer of wire around the magnet must serve as bias to change nature's superconducting current into an alternating current. But then a second layer must be added to serve as output. Some of the devices have such an output as it seems.

The Alpha-Theta claims an output that is proportional to the frequency of its sinusoidal "bias" that either doubles or completely cuts off the magnet's out of balance or excess current. The Swiss M-L on the contrary works with very short bias pulses from sparks that have one phase only. With "short" I mean that the device produces 50 Hertz, so the period is 200 milliseconds, which is very long with respect to the duration of a spark. This might be its secret because the stack of magnets is exposed to the **gravity vortex** for this relatively long period. The coils when active could absorb the **gravity vortex** before it reaches the magnets or could absorb gravity energy of the wrong phase.

Because my Alpha-Theta becomes very hot when I double the magnet's excess current, I decided for one phase only by cutting the magnet to zero by using a short bias pulse. The device contains the weakest magnet I could lay my hands on but it still demonstrates an excess current of 400

Ampere per centimeter. The result is that my Alpha-Theta's secondary is exposed to an effective pulsed primary alternating between 0 to 400 Ampere per centimeter. Right now I cannot see the advantage of doubling this gigantic current just for the sake of producing A.C.\* The aforementioned devices have no link with a specific frequency and I think this is not of primary importance. For future design the inner jet velocity divided by the circumference of the magnet might be important, but also the frequency of the incoming gravity vortices. The last could be responsible for abnormal resonances demonstrated in Tesla coils.

Finally, some remarks about page 17 [in May *NEM*]. For easy measurements, vary the resistive load until that load is found that cuts the output voltage to half its open value. This resistive value is equal to the so called internal resistance, and this value delivers the maximum output power. The ratio of voltage over current is called resistance by definition and this ratio is characteristic for the generator under testing. Therefore, it's not a real internal resistor through which heat is dissipated yielding a 50% power efficiency. The efficiency will be 100% when this characteristic voltage to current ratio is matched. When testing, adapt the resistive load to the MRA and not the MRA to the load.

\*It reminds me strongly of the 293% Alexander generator (U.S.P. 3,913,004). Here, the magnetizing coils are on the outside where they belong, and are well exposed to the **gravity vortices**. The collector winding takes care of the bias while the output coils are inside and well protected against any interference. Any student of free energy should study this device

---

No question is so difficult to answer as  
that to which the answer is obvious  
George Bernard Shaw

## *Meetings*

Intersociety Energy Conversion Engineering  
Conference

### **IECEC - 1997**

July 27 to August 1, 1997

Hilton Hawaiian Village, Honolulu, HI

Abstracts in the area of "Innovative Concepts – Cold Fusion" and other Advanced Energy Conversion Technology areas were accepted until January 17, 1997. Draft papers due March 1997, and Final papers are due in May 1997.

More info. available at: <busassist@aol.com>

American Nuclear Society

### **"Nuclear Power IS Serious Business"**

Utility Working Conference, 17-20 August  
1997

Amelia Island, Florida

Competing, continuing, improving in the Power generation industry. For information contact Dave Slaninka at the Meetings Dept., ANS, 708-579-8255. Pre-registration: members \$445, non \$495.

## **ICCF-7**

**International Cold Fusion Forum**

**Vancouver, B.C., Canada**

**April 19-24, 1998**

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:**

June 1997: Local Organizing Committee call for 1-2 paragraph abstracts for sampling of potential presentations. Selection rules and evaluation criteria will be provided at this time.

September 1997: Official call for full, one-page abstracts. Final peer review process begins.

December 1997: Final notification to all presenters regarding the format of their presentation.

January 1998: Deadline for final abstracts to be published in ICCF-7 Program Manual and Website.

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

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.

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

Objectives are not fate; they are direction. They are not commands; they are commitments. They do not determine the future, they are a means to mobilize the resources and energies of the business for making the future.

– P F Drucker

## 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

**CAI, Inc.,** CAI has acquired rights to develop and produce a new-type of thermal power based on the controlled production of clean nuclear reactions from micro-miniature tokamaks (provided by nature). Contact through FIC, Voice 801-583-6232, Fax 801-583-2963.

**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.

**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 Corporation:** 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.

---

### INFORMATION SOURCES

Academy for New Energy (ANE) 216 Commerce Drive, Ste. 4, Fort Collins, CO 80524. Tel. 970-482-3731

*ANE Newsletter*, quarterly publication of ANE, edited by Robert Emmerich.

*Advanced Energy Network Newsletter*, quarterly.  
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/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/](http://www.teleport.com/~etimes/)

**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.

*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](mailto: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/](http://www.padrak.com/ine/) which  
contains many important scientific papers and  
current reports on all areas of research.

E-mail: [halfox@slkc.uswest.net](mailto:halfox@slkc.uswest.net)  
or [ine@padrak.com](mailto: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. Editor: Hal Fox. Address & phone above.

KeelyNet BBS - Jerry Decker, 214-324-3501  
Internet: [www.keelynet.com](http://www.keelynet.com)  
E-mail: [jdecker@keelynet.com](mailto: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.

## CONTENTS FOR JULY 1997

|  |    |
|--|----|
| LOW- ENERGY BULK-PROCESS ALCHEMY           |    |
| A News Release .....                       | 1  |
| FUSION BRIEFINGS .....                     | 3  |
| C.F. Revolution                            |    |
| Energy Gain and Transmutation              |    |
| Miracle – Not Mistake                      |    |
| Patterson Cell on TV                       |    |
| A Cell for Huizenga                        |    |
| Keys to Understanding                      |    |
| Arthur C. Clarke, friend of New Energy     |    |
| 3 Papers by Dr. Arata                      |    |
| SPACE ENERGY .....                         | 8  |
| Creation of Energy & Matter                |    |
| OIL ENERGY .....                           | 10 |
| Extracts from Global <i>Energy Outlook</i> |    |
| Good for Gunnerman                         |    |
| RADWASTE .....                             | 11 |
| Atomic Waste – DOE Cover-up                |    |
| Handling Spent Fuel Pellets                |    |
| MISCELLANEOUS .....                        | 12 |
| Washington – Tougher EPA Rules             |    |
| Gravity Waves Research Project             |    |
| Constructing Anti-Gravity Device           |    |
| Light is the Ghost of Mass                 |    |
| Electron – 100th Birthday                  |    |
| EDITORIAL .....                            | 15 |
| LETTERS .....                              | 17 |
| MEETINGS .....                             | 21 |
| COMMERCIAL COLUMN .....                    | 22 |