

Review Article - Miracle in the Void: The New Energy Revolution

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"Ere many generations pass, our machinery will be driven by power obtainable at any point in the universe. . .it is a mere question of time when men will succeed in attaching their machinery to the very wheelwork of nature." - Nikola Tesla

Imagine a world with abundant, compact, inexpensive, clean energy. Global warming has been reversed. The air is clean. Power and gas stations have been put to other uses, and the unsightly grid system has been dismantled and recycled. An unusual type of energy makes all this possible. It does not come from the sun, wind, rain or tides, nor is it a fossil or nuclear fuel taken from the ground or chemically synthesized. In some cases the source appears to be everywhere in space-time, invisible and infinite. In others, nuclear transmutations seem to be miraculously taking place at room temperature accompanying the release of energy.

Incredible as this scenario appears, we shall see in this article that laboratories around the world are repeatedly tapping into this abundant energy. Some leading theoretical physicists are beginning to understand why and how this is possible. Several companies are in the beginning stages of bringing workable devices to market that clearly produce more energy than what is needed to run them (so-called overunity devices)..

Research Breakthroughs and Commercial Developments

According to knowledgeable observers, we should focus our attention on six new technologies: (1) plasma-type devices; (2) solid-state electromagnetic devices; (3) hydrogen gas cells; (4) super motors based on super magnets; (5) cold fusion or "new hydrogen energy" (the Japanese name for cold fusion); (6) hydrosonic or cavitation devices.

(1) Plasma-type devices - A variety of **plasma-type devices** have been patented and are being developed with private funding for applications ranging from computer chips to power plants. One of the most promising of these devices is called the XS NRG PAGD (Pulsed Abnormal Glow Discharge) reactor. Created by inventors Dr. Paulo and Alexandra Correa at Labofex in Canada, the system is well on its way to commercialization for electric power generation in vehicles and in homes, solidly protected by U.S and foreign patents (U.S. Patent 5,449,989).¹

The reactor's self-oscillating electrical plasma discharge produces electrical energy directly, with no intermediate thermal conversion step. The electricity produced by the Correas' device is effectively free. The Correas write conservatively: ". . .The cost of kWh (kilowatt hours) produced by this technology is estimated to be more than ten times cheaper than what is presently available from any other energy source."

Ken Shoulders' "charge cluster" device is another promising plasma technology. Shoulders worked for a number of years as a researcher for MIT, Stanford Research Institute and private corporations. In the 1960s he helped to develop much of today's microcircuit technology. His high-density charge cluster device produces more than thirty times greater output than input energy.²

Produced by a short pulse of electric potential, a typical one-micron charge cluster is a tightly packed group of about 100 billion electrons which have broken free from their nuclei and have come together into remarkably stable ring-shaped units that look like tiny donuts.

At first glance, they seem to violate a principle of physics that asserts that electrical charges, either positive or negative, repel each other. Shoulders' 1991 patent for "energy conversion using high charge density" was the first successful patent to claim significantly more output than input in a device that could be a practical source of decentralized electrical energy (U.S. Patent 5,018,180). Because charge cluster technology works without the need for magnetic fields or low temperatures, it could well be one of the first new energy devices to be commercialized.

Shoulders' basic process may also be valuable for the remediation of nuclear waste. By bombarding radioactive nuclei with charge clusters, the induced nuclear reactions (primarily fissioning of the heavier elements) result in a reduction of harmful radiation. Laboratory experiments show a dramatic transmutation of radioactive thorium into smaller-mass elements with the marked reduction of the naturally radioactive thorium. With proper engineering complete eradication may become possible.

(2) Solid-state devices - A pioneering solid-state technology is Wingate Lambertson's World into Neutrinos (WIN) process. Dr. Lambertson has conducted materials research and development for such organizations as U.S. Steel, the Universities of Toledo and Rutgers, Argonne National Laboratory, the Carborundum Company and Spindletop. He has been doing independent research over the past two decades on a solid state device which he believes can provide a practical source of power through the harnessing of zero-point energy.³

Lambertson's "electron dam" (E-dam) is made out of Cermet, a highly advanced heat-resistant ceramic and metal composite. An accelerated electrical charge sends a stream of electrons into the E-dam, and the electrons become stored much like a conventional dam stores water. When the electrons are released, they gain energy from the zero-point energy present in the E-dam. After they flow into the unit to be powered, they move into another E-dam for recycling.

Lambertson changed his cermet chemistry and E-dam design when he learned that an unexpected chemical reaction was taking place. A different combination of materials and composite design appears to stabilize the process, and a yield of 145 percent was achieved in tests conducted in 1998. Since that time an induction effect has become a major problem which severely inhibits charge acceleration and yield. The present direction of his research is towards reducing induction in his E-dam using two different complementary approaches. It appears that these approaches will solve his remaining major problem. His highest yield using these approaches in June 1999 was 109 percent. Lambertson is confident that he will achieve higher yields with further experimentation, probably as high as 200 per cent, the level needed for commercial viability. He is currently exploring future production with interested manufacturers. Lambertson has a strong interest in providing new solutions for the energy needs of developing nations.

Highly regarded Canadian inventor John Hutchinson has developed a solid state "crystal energy converter" made out of very common materials which is an electrical power source he claims behaves like a battery and never runs down. This small, self-running power source, which typically puts out DC power amounting to one or two volts, has produced up to six watts of power, and he believes it could be engineered to replace batteries and other power needs.⁴

(2) Hydrogen gas cell - Dr. Randell Mills of BlackLight Power, Inc. has come up with a simple device he believes turns hydrogen into a clean and limitless source of power. In his lab, Mills puts in a small amount of hydrogen gas into a vacuum-sealed, three-quart stainless steel "can", adds a few tablespoons of a common chemical compound, turns up the heat to about 250 degrees centigrade and seemingly creates ten to twenty times more energy than he put into the process.⁵

According to Mills, the secret to BlackLight Power comes from shrinking or collapsing the size of the hydrogen atom from its natural "ground" state to a lower energy state. As the hydrogen nucleus collapses, the electron gives off heat energy, and the smaller the nucleus gets, the more heat the electron gives off. Once started, the reaction can sustain itself, as the hydrogen atoms collapse smaller and smaller, releasing increasing amounts of energy with each collapsing "transition". Of course, we do not yet know whether Mills' theory or some other will eventually be accepted by science as the explanation for this process. The important point is that the experimental results show that it works.

An impressive feature of the BlackLight Power gas cell is its simplicity. If successful, the process is also attractive because it is safe, lacks harmful byproducts or emissions, and does not require the use of exotic or scarce materials. The only "waste" products are collapsed hydrogen atoms, or what Mills calls "hydrinos", which have characteristics similar to helium, being inert and lighter than air.

Because hydrogen is the most abundant element both on Earth and throughout the universe, the abundance of energy available through this process is difficult even to imagine. For example, a cup of water contains enough hydrogen to produce over 3,000 kilowatt-hours of heat if you "collapse" the hydrogen atoms to one-twentieth of their normal size, or enough to provide all the energy needed for an average home - space and water heating plus electricity - for a month.

PacifiCorp, an Oregon-based utility holding firm, has demonstrated its belief in Mills' work by investing more than one million dollars in the company, and other corporations appear likely to follow their lead. With this kind of support, Mills is confident his company will soon complete a BlackLight Power cell that will produce a full kilowatt of heat. Once this is accomplished, it can quickly to bring to market a commercially viable energy cell.

(3)Magnetic Motors - Based on physicist Michael Faraday's observation in the 1830s that anomalous electricity can come off a rotating disk containing magnets, a number of inventors have created motors that they believe have produced over-unity power in public demonstrations. One of us (O'Leary) watched several such demonstrations, as reported in the book *Miracle in the Void*. According to their inventors, some of these new devices produce four to six times as much mechanical energy as input electrical energy. In other words, once a machine achieves a certain threshold of revolutions per minute, it supposedly can be unplugged and serve as a free-running generator of electricity.

A number of magnetic motors have been evaluated by Magnetic Power, Inc., including devices created by the following inventors: Takahashi, Johnson, Tobias, Adams, Yassir, Werjefelt, Kawai, Sweet, Muller and Newman. They have also tested a device called the Magnetic Wankel from the Japanese firm, Kure Teko. None of these devices have yet proven to function over- unity under load.

According to Magnetic Power, there are two eminent scientists whose work on magnetic devices may some day bear fruit: Dr. Paramahansa Tewari, Chief Project Engineer for India's Kaiga nuclear power plant construction program, who is developing what he claims is a "space energy" motor/generator with support from the Indian government; and Dr. Harold Aspden in Great Britain, former patent counsel for IBM Europe, who is working on his version of a practical over-unity magnetic motor.

Many of the devices developed by inventors have proven to be merely magnetic flywheels and are therefore in fact only a type of mechanical energy storage device. As our still incomplete understanding of magnetism continues to grow, it is possible that one day a design based on a new source of energy will prove practical. Roots, a subsidiary of Magnetic Power, is developing room temperature Ultraconductors. TM Made of highly conductive polymer materials, this technology may make possible the creation of very powerful, lightweight motors and generators without the use of iron or copper.

(5) Cold fusion - On March 23, 1989 Drs. Martin Fleischmann and Stanley Pons at the University of Utah startled the world with their claim that they were getting excess thermal energy far beyond electrical input energy from an electrochemical cell with a palladium cathode and a heavy water electrolyte. The cell output, they said, was substantially more than could be explained by any chemical reactions. ⁶

Considerable controversy has surrounded cold fusion ever since the first experiments. In 1989, a Department of Energy research panel, dominated by hot fusion advocates, proclaimed that no government funding should be invested in such a questionable area of research. Since then, following the lead of the scientific establishment, the media has generally either criticized or ignored cold fusion researchers.

However, the evidence for the validity of cold fusion is growing stronger and stronger daily. The peer-reviewed published literature provides overwhelming support for both the nuclear-scale excess heat and nuclear changes in what were supposed to be exclusively chemically active systems. There have been reports of transmutations of heavy elements in various cold fusion experiments - both in ordinary water and in heavy water systems - potassium changed to calcium, rubidium to strontium, and palladium to silver, rhodium, ruthenium, etc.

The Pons-Fleischmann process has been declared valid by Dr. Georges Lonchamp, one of the top members of the French Atomic Energy Agency. Researchers at Los Alamos National Laboratory and the U.S. Navy's China Lake research lab have conducted successful cold fusion experiments. Finally, the U.S. Army has reviewed the pioneering cold fusion research of Dr. John Dash, a metallurgist from Portland State University in Oregon, and decided to fund his work for three years.

Stanley Pons and Martin Fleischmann, despite overwhelming criticism heaped on them by US scientists and scoffing by American media, continued their work in France and England. With funding from a Toyota Foundation, they claim to have made excellent strides in the development of the heavy-water, palladium cathode, electrochemical cells. Currently, months of continuous testing of cells operating at boiling temperature has produced data showing thermal output of twice the input electrical power – all from a tiny palladium cathode.

Clean Energy Technologies (CETI) is marketing licenses for the a power cell invented by Dr. James Patterson, a scientist with a distinguished record of achievement. News of his device spread widely when it was discussed on two ABC shows, *Nightline* and *Good Morning America*.

The Power Cell has produced kilowatt levels of thermal energy at more than twenty times the input electrical energy. It has been independently tested and replicated by several universities, utilities and corporate research laboratories. Motorola has tested a number of cells and found that with at least one cell they were able to turn the input electrolysis power off, walk away, and have the output power of twenty watts (thermal) continue for at least a half a day. On June 11, 1997, CETI announced on *Good Morning America* that a prototype hot water heater is scheduled to be mass-produced within two to four years.

Perhaps the most astonishing finding from cold fusion research is the apparent observation of radioactivity *reduction* in the process! CETI, one of the first cold fusion companies, recently announced it had been awarded a US patent on an electrolytic process for reducing the radioactivity of thorium and uranium. The company claims its process can reduce the radioactivity of radioactive materials by over 90 per cent in periods less than 24 hours – compressing into hours what nature takes billions of years to do. A demonstration of this seemingly successful process was included in the same ***Good Morning America*** story which described Patterson's prototype water heater.

Dr. Norm Olson, a Department of Energy researcher based at its Hanford nuclear facility, was interviewed by ABC and indicated an interest in exploring Patterson's process. He later tested the CETI power cell and found that it did indeed reduce the radioactivity of uranium and thorium. He cautions, however, that much more basic research needs to be done before this or any other process can be developed into a workable technology for dealing with nuclear waste.

There are at least three other groups who also claim to be able to reduce radioactivity by other methods, which have yet to be awarded patents. One of them, the Cincinnati Group, is marketing to scientists a kit which demonstrates their transmutation process. If purchasers follow their suggested protocol and do not get the claimed results, their money will be refunded.

Very much worth watching is a recent cold fusion invention announced at the most recent International Conference on Cold Fusion (ICCF-7), held in Vancouver, B.C. in April 1998. It is the "catalytic fusion" process of MIT-trained chemical engineer Dr. Les Case. Based on more than six years of painstaking research, Dr. Case's discovery appears to be a nearly optimal embodiment of the original Fleischmann-Pons process. A pre-treated activated carbon catalyst with 0.5% to 1.0% palladium or other catalytic metal content apparently can catalyze the fusion reaction of heavy hydrogen (deuterium) gas to helium at elevated temperature (150 to 250 °C). In tests conducted by Dr. Eugene Mallove of *Infinite Energy* magazine, it was confirmed that the Case process achieved a persisting excess temperature that climbed to 13.2 °C above the baseline temperature of 178.1, which represents approximately 7.5 watts excess power. It exhibits the heat-after-death phenomenon that many researchers have reported coming from cold fusion cells: heat production with no input power after the reaction is triggered.

If replication holds up, it may be impossible for anyone to deny Dr. Case's process, especially once he has made a device that can self-sustain - that is, employ no electrical heater power. Mallove believes the process looks well-positioned to be a simple commercial power-generating technology in small, distributed units, as well as in large power plants.

(6) Hydrosonic or cavitation devices - James Griggs' Hydrosonic Pump is already being sold to customers, regularly providing them with over-unity energy. An energy efficiency consultant from Georgia, Griggs invented the pump as a result of his curiosity about a common phenomenon called *water hammer* or **cavitation**. Griggs noticed that heat emanated from fluids, which flow quickly through the pipes of a boiler causing water pressure to drop in part of the pipe. Bubbles formed in the low-pressure areas collapse when carried to areas of higher pressure. The resulting shock waves collide inside the pipe bringing about the water hammer effect.⁷

Griggs' pump is made up of a cylindrical rotor that fits closely within a steel case. When the rotor spins, water is forced through the shallow space between the rotor and the case. The resulting acceleration and turbulence created in the gap somehow heats the water and creates steam. In 1988, a testing expert found that the heat energy put out by the hydrosonic pump was 10 to 30% higher than energy used to turn the rotor.

In 1990, Griggs started Hydrodynamics, Inc. He and his partner have invested over a million dollars in the business. The units they are selling are not only more efficient than standard boilers but they also require less maintenance. They are self-cleaning and eliminate the problem of mineral build-up that reduces the efficiency of standard boilers. Georgia Power and the civil engineering department at Georgia Institute of Technology are currently conducting studies of the pump.

A new cavitation device similar to the Griggs machine is now available for testing, scientific investigation and purchase by research laboratories. This is the "Kinetic Furnace" of Kinetic Heating Systems, Inc. of Cumming, Georgia. Jointly invented by Eugene Perkins and Ralph E. Pope, the furnace is a heat-producing rotary cavitation device for which the inventors have been granted four United States patents, the most recent one in 1994. Numerous independent companies and testing agencies have found the same over-unity performance: Coefficient of Performance or C.O.P. (the ratio of output to input power) in the range 1.2 to as high as 7.0, with most typical operation in the range 1.5 to 2.0. Dr. Mallove and Jed Rothwell of *Infinite Energy* recently confirmed the excess heat in a preliminary on-site test.

The reactions responsible for the excess energy in the Perkins-Pope device may be novel nuclear reactions or the tapping of energy reservoirs that some have referred to as new hydrogen energy states or zero point energy. There is no possibility, according to Dr. Mallove, that the device can be explained by chemical energy or "storage energy".

The Kinetic Furnace represents a technology that will have application in water and air heating, and perhaps in self-standing electric power production and rotary mechanical power production. One of the largest commercial hot water heater manufacturers in the world, State Industries of Tennessee, has been calling regularly to check on the inventors' progress. That company, and no doubt others, are taking a keen interest in the near-term prospect of equipping their commercial water heating systems with devices that could save the consumer 30% or more of their electric utility bills.

First Gate Energies (formerly known as E-Quest Sciences) has created devices that use ultrasound induced cavitation. to produce large amounts (hundreds of watts) of anomalous excess energy. Experimental devices also produce helium and in some experiments significant amounts of tritium. The process does not produce any observable penetrating radiation or nuclear waste. ⁸

There is no consensus regarding how this process works. According to one hypothesis, a myriad of collapsing bubbles form during multi-bubble cavitation produced by intense ultrasound, and the individual bubbles act like micro-accelerators injecting deuterons and other ions into nearby solid lattices. Under the influence of the lattice and with other stimulation, nuclear reactions involving deuterons and other nuclei are initiated and controlled. First Gate has successfully demonstrated their devices and methods at Los Alamos National Laboratory and at SRI International. It is currently seeking strategic alliances with companies which can help them develop commercial products such as hot water heaters and space heaters.

The Physics of Zero-Point Energy As impressive as the experimental evidence may be, most scientists do not seem to understand how these "free energy" devices could work, since they seem to violate the laws of thermodynamics. Only when the new processes are understood properly will it be seen that they behave lawfully. We see a growing consensus among some physicists and systems engineers concerning the changes in theoretical models that will be required to account for the growing number of experiments pointing to this phenomenon.

Some physicists have hypothesized that an all-pervasive electromagnetic energy field must be present for electrons and other particles to be continually vibrating as they radiate away energy. They assert that this "vacuum energy" is a fundamental property of nature, a conclusion based on experiments and observations in quantum mechanics.

Physicists Harold Puthoff, Bernhard Haisch and Alfonso Rueda have recently published papers on this in the prestigious peer-reviewed journal *Physical Review A* and in the highly regarded periodicals *The Sciences* and *Mercury*. In these articles they suggest that if an electromagnetic charge is *accelerated* in the zero point field, there may exist conditions which allow for either the extraction of energy from the field, or dissolution of energy into the field. This accelerative force might then break the monotony of homogeneity and isotropy that has held us back from perceiving the vast benefits that lay within the vacuum of space. In fact, the rotary motions of fluids and magnets, as well as the resonant vibrations inside solid state devices, appear to provide the needed accelerative forces to tap the zero-point field.

One of us (O'Leary) has also looked at the possibility that the zero point field concept might be related to the mysterious interactions found in quantum mechanics and psychic phenomena. In combination, these anomalies of materialistic science might lead us to look toward creation of a new science of consciousness.

The Environmental Imperative During the 1970s, many of us were first exposed to some of growing global energy and environmental problems. The OPEC Cartel, gas station lines, smog, oil spills, oil wars, nuclear accidents, nuclear proliferation and waste disposal were in the headlines and began to become known by the public U.S. citizens and to stimulate needed policy changes.

The global situation is even more critical now than it was in the '70s. Global warming from greenhouse gases coming mainly from the burning of fossil fuels may be the most ominous sign of possibly irreversible damage. A growing consensus among mainstream climatologists is that the unprecedented persistence of El Nino conditions and resulting local weather extremes can be directly traced to overuse of oil and coal for electricity, heating and transportation. Incremental reforms such as emission controls, energy conservation and turning to renewable sources, while helpful, are clearly insufficient to stop, much less reverse, current trends.

Widespread loss of life and deteriorating health throughout the world is caused by both the pollution and the weather shifts. Moreover, these conditions have led to an acceleration of airborne diseases that have already killed hundreds in the affected areas. Public health experts are warning that this may only be the beginning of widespread plagues. Some scientists have warned that global warming is also accelerating ozone depletion, an even more serious threat to life on Earth.

Trends in energy use make the picture look more menacing. During the two decades, which have passed since the time the energy crisis first erupted, we have *tripled* oil consumption and *doubled* electricity use worldwide. *Fortune* magazine has noted that if the per capita energy consumption of China and India rises to that of South Korea (which we believe is a realistic scenario), and the Chinese and Indian populations increase at currently projected rates, "these two countries alone will need a total of 119 million barrels of oil a day...almost double the world's entire demand today." Other experts, including Hal Fox, have estimated that the burning of fossil fuels by all nations at projected levels not far in the future would simply make our planet uninhabitable.

The Transition to a Free Energy Economy Free energy technology holds immense promise for alleviating or eliminating entirely the threat posed by fossil fuel and nuclear pollution. It will also allow all areas of the world, including both developed and developing economies, to meet increasing needs for energy without bringing about environmental disaster.

The rate of invention and communication in the new energy field is accelerating rapidly. Thousands of experiments are being conducted around the world, some by inventors working alone and others by collaborative efforts. Granted, we are largely in the research phase of the research and development cycle, with no guarantees that any particular commercial system will become available within a certain time frame. Granted, too, there have been and will be many false starts and exaggerated claims. However, given the significant initiatives in cold fusion and other new energy technologies in the U.S., Japan and elsewhere, there is little doubt that workable free energy devices will be available soon.

Japan may be first country to achieve a breakthrough to commercially available technology. With minimal domestic energy supply, Japan has little to lose and much to gain from developing new energy sources. There are more institutional barriers to, and less incentive for, the development of free energy in the United States. Yet work here is widespread, and projects are beginning to attract funding from a wide variety of investors, including utilities.

The revolution in personal computing is helping to speed up the free energy revolution. A number of dynamic free energy discussion groups can be found on the Internet, characterized by spirited discussion of emerging issues and down-to-earth exchange of research data and suggestions. Because of the distinctive openness of Internet

communication, cooperation among participating inventors and scientists almost certainly guarantees that potentially workable theories and processes will be widely replicated and tested. Furthermore, no central authority will be able to squelch progress, as it might have been able to do in the past when individual inventors almost always worked in isolation.

We are in the midst of a scientific revolution of unprecedented magnitude. The necessity to overhaul our currently bankrupt energy systems to save the environment is an idea whose time has come. As we bring into existence new forms of power, we will bring about social and economic change unparalleled in human history. The situation we are in demands fresh perspectives and inspired leadership. Can we successfully master the challenges this transformation presents? We believe we must and can do so, but only if we start now the kind of democratic discussion and action this momentous shift requires.

A Bibliography and Guide to Resources

What follows is a listing of the sources of information on the free energy revolution. Included are major books and articles, persons and organisations which are authorities in the field, and selected web sites.

In preparing this resource, we have gained valuable knowledge and insight from a few knowledgeable people who keep close watch over developments in the new energy field, including Dr. Hal Fox, editor of *New Energy News* and the *Journal of New Energy*, Thomas Valone of the Integrity Research Institute, Dr. Eugene Mallove of *Infinite Energy* magazine, Bruce Miland of *Electrifying Times*, and Jeane Manning, author of *The Coming Energy Revolution*.

FOOTNOTES

1. More information on the Correa PAGD Reactor can be found in the following issues of *Infinite Energy* magazine: Issues No. 7, 8 and 9 in Vol. 2 (1996-1997); Issue No. 17 in Vol. 3 (1997-1998); Issue No 20 in Vol.4 (1998-1999).
2. Ken Shoulders' work is discussed in detail in the following peer-reviewed articles:
Ken Shoulders and Steve Shoulders, "Observations on the Role of Charge Clusters in Nuclear Cluster Reactions", *Journal of New Energy*, Vol. 1, No 4, Winter 1996, pp. 111-121.
Hal Fox and Shang Xian Jin, "Low-Energy Nuclear Reactions and High-Density Charge Clusters", *Infinite Energy*, Vol. 4, Issue 20, Summer 1998, pp. 26-30.
An excellent summary of current work was presented by Ken Shoulders at the April 1999 conference on Future Energy. The print and CD versions of the proceedings can be obtained from the sponsor, the Integrity Research Institute, 14422 K St. NW, suite 204, Washington, D.C. 20005. Phone: 800-295-7674
3. for an update on recent work by Lambertson, see Win Lambertson, "1998 Report on the WIN Method, *New Energy News* , New Energy News, Vol. 6, No 7, January 1999, pp. 11-13. Also available at the Institute for New Energy web site: www.padrak.com/ine
4. The latest information on Hutchison's work can be found in John Hutchison, "Letter from John Hutchison: Research Summary", *New Energy News* , Vol 6, No. 1, May 1998, pp. 25-26. In that article he reports that his device is unproven as no tests have been done in the USA. "Only Kyoto Institute of Technology has shown unusual

things. It is undetermined if ZPE is being tapped here. Cells produce ¼ volt and a milliamp per cubic inch in good cells. Cells could be combined into cubic foot (using cubic inch cells in series/parallel) to give useful power. As time goes by my results should be more impressive" (p. 26)

5. Randell Mills' Black Light Power process is discussed in depth at the company's web site www.blacklightpower.com This site includes independent laboratory reviews of the process. Articles on Randell Mills and his work can be found in the following issues of *Infinite Energy* Vol. 1, Double Issue No. 5, 6 (1995-1996); Vol. 2, Issues No.11 and 12 (1996-1997); Vol. 3, Issue No. 17 (1997-1998); Vol. 4, No. 24 (1998-1999).
6. Cold Fusion research has been extensively documented in the pages of *Infinite Energy* and *New Energy News* for a number of years The best historical treatment of the controversy arising out of Pons and Fleischmann's pioneering research can be found in Eugene Mallove's *Fire from Ice: Searching for the Truth Behind the Cold Fusion Furor*, John Wiley & Sons, 1991. Mallove has also authored a more recent overview "Cold Fusion: The 'Miracle is no Mistake" which appeared in *Analog*, July-August 1997, pp. 53-73. Other summaries of this stream of research worth reviewing are two pieces by Dr. Edmund Storms, who once worked at Los Alamos National Laboratory: "Cold Fusion an Outcast of Science," *21st Century Science and Technology*, Winter 1997-1998, pp. 19-26, and "The Latest Word About Cold Fusion", , *21st Century Science and Technology*, Summer 1998, pp. 15-18.
7. More information on the Griggs device can ne found on *Infinite Energy*, Issues no 1 & 3, Volume 1. *Infinite Energy's* coverage of the Kinetic Furnace, a device that works through a similar process, is in Issues, No. 19 and No. 23, Volume 4.
8. The best paper on First Gate's cavitation process is the one co-authored by Roger Stringham, John Chandler, Russ George, Tom Passell, and Dick Raymond, "Cavitation in D₂O with Metal Targets Produces Predictable Excess Heat", *Infinite Energy* Volume 4, Issue 19 (1998), pp. 41-44. A report on experiments performed April 1994 at Los Alamos National Lab and Rocketdyne Labs, Canoga Part, with support from the Electric Power Research Institute, can be found in R. George and R. Stringham, "Cavitation Induced Sono Fusion: Production of Heatr, Tritium, 3 He and 4 He". This article can be found at www.rsrch.com/saturna, Russ George's web site.

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Videotapes

Free Energy: The Race to Zero Point – 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. Hosted by Bill Jenkins, written and directed by Christopher Toussaint and produced by Harry Deligter. Distributed by Lightworks Audio & Video. Can be ordered from Fusion Information Center, P.O. Box 58639, Salt Lake City, Utah 84158

Cold Fusion and New Energy Briefing: Recent Breakthroughs, History, Science and Technology - a two and a half hour video taped lecture and seminar by Dr. Eugene F. Mallove, editor of *Infinite Energy*. Order from Cold Fusion Technology, Inc., P.O. Box 2816, Concord, N.H. 03302-2816.

Cold Fusion: Fire from Water - a fast-paced documentary about what has happened to the Cold Fusion discovery in the years since the Utah announcement. The most recent and comprehensive overview of the work being carried out in laboratories and companies. Order from Cold Fusion Technology, Inc., P.O. Box 2816, Concord, NH 03302-2816.

INFORMATION SOURCES

A list of information sources (listed alphabetically) that are expressing interest in cold fusion or other enhanced energy devices

Periodicals and Journals

Electrifying Times Newsletter.

Published by Bruce Meland, 63600 Deschutes Road, Bend, OR 97701. Phone 503-388-1908; Fax 503-382- 0384EMai102331.2166@compuserve.com

Infinite Energy Magazine - a comprehensive publication that covers R&D in cold fusion and new energy technology, the "Scientific American" of the field. Published six times a year by Cold Fusion Technology, Inc., P.O. Box 2816, Concord, New Hampshire 03302-2816. Tel. 603-228-4516; Fax: 603-224-5975. Email: editor@infinite-energy.com Web site: www.infinite-energy.com

New Energy News (NEN) INE Newsletter The monthly newsletter of the Institute for New Energy. Salt Lake City, UT. TEL 801-583-6232, FAX 801-583-2963. Email: ine@padrak.com
Web Site at <http://www.padrak.com/ine/>

Planetary Association for Clean Energy (PACE) Newsletter Quarterly newsletter, edited by Dr. Andrew Michrowski, 100 Bronson Avenue, No. 1001, Ottawa, Ontario K1R 6G6, Canada, TEL 613-236-6265, FAX 613-235-5876.. Now available: *Clean Energy Review*, a technical and scientific discussion prepared for the Canadian Environmental Assessment Agency's panel reviewing nuclear fuel wastes disposal. Discusses transmutation as one possible solution. \$5.00 U.S. and Canadian, \$7.50 other countries.

Space Energy Journal

Quarterly newsletter/magazine edited by Jim Kettner and Don Kelly, P.O. Box 1136, Clearwater, FL 34617-1136.

WEB SITES

Aether Science: Home Page of Harold Aspden

Ourworld.compuserve.com/homepages/H_ASPDEN

Bearden, Thomas – Authored Files

<http://www.newphys.se/elektromagnum/physics/Bearden/>

Bearden, Thomas – Virtual Times – Authored Files

<http://www.hsv.com/writers/bearden/tommenu.htm>

Bedini, John – Collection of Free Energy Machines

rand.nidlink.com/~john1/

BlackLight Power, Inc. Homepage

<http://www.blacklightpower.com/>

Explore Publications (and Explore Magazine)

<http://www.electriciti.com/explore/>

Free Energy, Anti-Gravity & Quantum Physics: Leading Edge

<http://www.trufax.org/menu/energy.html>

Hot and Cold Running Fusion

<http://www.skypoint.com/subscribers/jlogajan>

Infinite Energy Magazine

www.infinite-energy.com

Institute for New Energy (INE)

<http://www.padrak.com/ine/> Contains many important scientific papers and current reports on all areas of research. Email: ine@padrak.com INE, P.O. Box 58639, Salt Lake City, UT 84158-8639. TEL 801-583-6232, FAX 801-583-2963. Features "New Energy News", the monthly newsletter for the INE, highlighting the research and development in the worldwide new energy arena. Edited by Hal Fox

Homepage by Stefan Hartmann in Germany

<http://www.overunity.de/>

KeelyNet BBS

Science and health oriented information exchange that specializes in nonstandard research, much of it on new energy. Jerry Decker, 214-324-3501. Web site at <http://www.keelynet.com/>. Email: jdecker@keelynet.com

Planetary Association for Clean Energy, Inc. (P.A.C.E.)

energie.keng.de/~pace/

Quest of Overunity, by Jean-Louis Naudin members.aol.com/Jnaudin509/

Weird Science, Anomalous Physics and Tesla Society

<http://www.eskimo.com/~billb/weird.html>

Zero Point Energy and the New Physics

<http://www.dnai.com/~zap/>

*Dr. Brian O'Leary is an independent scientific writer whose latest book is **Miracle in the Void**. Stephen Kaplan has taught political science, community development and creativity courses at a number of colleges and universities. He is currently engaged in research and writing on new energy research.*