



New Energy News

Monthly Newsletter of the Institute for New Energy

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A MESSAGE FROM THE PRESIDENT

By Dr. Patrick Bailey

The 1994-1995 Officers and Board Members of the INE

The members of the INE Board were chosen during several meetings that were announced during the 2nd ISNE. The members of the Board were selected on their willingness to support the INE and their commitment to serve and be active on the various INE Board Committees that were created at these meetings. After the Board Members had been volunteered and selected, formal elections were held to select the INE officers for the 1994-1995 year. The officers chosen are:

President - Patrick Bailey,
Vice-President - Ricky Butterfass,
Vice-President - Kenneth MacNeill, and
Secretary and Treasurer - Hal Fox.

The INE Board Committees created and their chairpersons are:

1. Financial [Obtains INE Funding] (Patrick Bailey)
2. Conference Organization and Administration (Ken MacNeill)
3. Marketing [NEN, Membership, Education, Political] (Brian O'Leary)
4. Technical Advisory (Don Kelly)
5. Proposal and Grants (Bob Sibley)
6. International (Andy Michrowski)

The INE Board Members for 1994-1995 and the Committees listed above that they serve on are: Wolfram Bahmann (6), Patrick Bailey (1,2), Ricky Butterfass (3,5), Christine Ferguson (3,1), Hal Fox (3), Don Kelly (5,4), Ken MacNeill (4,2), Jeane Manning (3,6), Janet Messinger (3,2), Andrew Michrowski (6), Brian O'Leary (3,6), Ede Riesenhuber (2,6), Beverly Rubic (4,5), Bob Sibley (2,5), Greg Wasleski (3,4), Charles Yost (3,4).

Please feel free to contact any Officer or Board Member regarding any questions, concerns, or contributions that

you would like to make in any of these Committee Areas, or in any other area that you wish to contribute in.

INE Officers' Biographies

Patrick Bailey has been interested in the application of advanced energy conversion technologies his entire life. He graduated PBK with honors from U.C. Berkeley with a degree in Engineering Physics and later received his Masters and Ph.D. Degrees in Nuclear Engineering from M.I.T. He served as a Captain in the USAF, and spent three years as a technical staff member at Los Alamos National Laboratory. He then worked for seven years as a Project Manager for the Electric Power Research Institute in the areas of commercial nuclear reactor safety and analysis, and is presently working on the application of advanced technology power systems for aerospace applications, such as for communications and surveillance satellites. Dr. Bailey has published over 65 technical papers in various technical fields, and is very outspoken about the need to research and to understand advanced new energies, their related technologies, and applications. He believes that computers and videotape are the information transfer media of the future, and he is also a host for a local cable TV program on advanced technologies. He is currently seeking opportunities in international business and applied advanced technology areas.

Ricky Butterfass obtained his B.S. degree in Aerospace Technology from Metropolitan State College in Denver. He has served and flown with the US Navy. He has been with United Airlines for 22 years, and is an international crew member with United In-Flight Services. He has interests with the World Future Society, the Institute of Noetic Science, the Search for Extraterrestrial Intelligence, the Mars Balloon Projects, and the International Association for New Science. As a result of his interest in advanced spacecraft, he wrote a paper on the design theory for a "Three Stage (Cold) Fusion Electromagnetic Ramjet" that was published by the IANS

in 1991. He also instructed Dr. Daniel Whitmire on the application of Electric/Magnetic Ramjets, the ionization of ambient water vapor, the ionization of the free space medium and suggested the use of the solar wind as fuels to reduce structural size requirements for ramscoops. He is also a frequent talk show guest on radio KWA! 1080 AM, reporting to and educating the public on the activities of the IANS and the INE.

Kenneth MacNeill is a tool and die maker by trade. He has been involved with the automation industry for the last 18 years, and taught the first course on automation and design ever offered in Florida. This technology requires an in-depth understanding of technical engineering, hydraulics, pneumatics, electronics, and electrical engineering principles. He has been involved in his search for an "over-unity type device" since 1974, when he was also interested in the design of high mileage carburetors. In 1981, he became actively involved with the 1st International Symposium on NE. He was in charge of the operation of the 2nd International Symposium on NE, in Atlanta during September 1983, and the Proceedings of this conference are still referenced today. He has investigated over 20 so-called "free energy devices", and has found only two that have kept his active interest.

Ken is also associated with Cadake Industries, which is a major distributor of books and magnets internationally, because Ken also owns Tri-State Press. Tri-State publishes various esoteric publications and books, such as *The Awesome Life Force*, *The Free Energy Manual*, *The Tesla Coil Builders Guide to the Colorado Springs Notes of Nikola Tesla*, and *Either Technology*.

Hal Fox was the director of the first research laboratory at the University of Utah Research Park. Right after the Pons-Fleischmann announcement was made, Hal Fox and some friends established the Fusion Information Center at the University of Utah research park. This corporation has now become the world's leading center of information on cold fusion. Hal was also co-founder of two other cold fusion-related companies (Fusion Resources, Inc. and Future Energy Applied Technology, Inc., which have merged to become ENECO, Inc.). Hal is editor of *Fusion Facts & New Energy News*. He and his staff have collected, read, and reviewed over 1500 technical papers dealing with cold fusion and new energy technologies. He is author of the book Cold Fusion Impact in the Enhanced Energy Age.

IN RESPONSE TO LETTERS

By Patrick Bailey, INE President

I have received several letters from concerned members that ask the same type of questions that were addressed in the last two issues of *NEN* by Don Taylor, Hal Fox, and Roy Graham. The questions fall into three major categories: (1) What are the words and definitions that should be used to describe an "over-unity" or "free energy" type of device?, (2) What kind of testing and measurement procedures should be used in order to have the INE verify the operation and claims made by someone about a particular device?, and (3) What is the correct, current, and future role that the INE will play in evaluating these devices? The answer to all of these questions is that: ultimately, it is all up to you. My guidance to you, and to the INE as the current President is: That we must be absolutely accurate and very responsible!

There seems to be an active attitude in our culture now, that prefers to have us throw away an entire set of facts based on any one flaw that can be found. We see this on the news every single day, and for those that observe, we see it in the scientific community all of the time. We cannot afford to let simple mistakes or verbal inaccuracies get in the way and impede our progress. We need to be accurate, be responsible, and have a very high degree of integrity in all of our research and reporting.

So, to answer these three questions: (1) For the international transfer of information, we need to clean-up our vocabulary! The terms that we have been using within our discussions and conferences such as "over-unity devices", "free-energy machines", and "perpetual motion machines" should not be used lightly, and probably should not be used at all. Most responsible scientists and engineers have been trained to laugh and totally ignore any articles or reports that contain such terms. These terms are (for sure) great attention-getters, but in the long run, I personally feel that they do more damage than good.

The absolute facts are these: There is no "Free Energy". There is no "Over-Unity Device". There is no "Perpetual Motion". THERE JUST ISN'T! (Too Bad!) Ah, but what we do have is: "Energy that can be extracted for use very easily or very cheaply" (almost free); "Devices that can conveniently extract such energy from various sources (getting more energy out of the device than the device uses)"; and "Very long lasting motion". Energy cannot be created or destroyed - but it can be converted! So, we have invented the term "Potential Energy" to explain how energy can be stored in a "static" mode before we can convert it in a "dynamic" or "electric"

mode. For those that are convinced that no "free energy" machine actually exists, we can easily point to Hoover Dam as a good example. It's really not a "free energy" machine, because the Dam wasn't free - it took a lot of money, time, and effort to build it. But, you could say it is an "over unity" device because it has produced more energy than WE put into it; any good Dam scientist will tell you that. But - all responsible scientists want to view and discuss these kind of machines as "energy conversion devices" - not as "free energy machines." So, we should do the same, if we want them to be easily receptive to our ideas and data. A major objective of the INE research is to discover and understand NEW potential energy sources, such as the energy stored in permanent magnet configurations, in rotating Electro-Magnetic fields, or in the Zero-Point Energy of space. To think we know-it-all now would be very egotistical and very stupid. Galileo, the Wright Brothers, Thomas Edison, and Nikola Tesla are shining examples of researchers who certainly pointed out to the leading scientists of their day that: **THEY DIDN'T KNOW IT ALL THEN! WHY SHOULD WE THINK WE KNOW-IT-ALL NOW?** [Refer Dr. Bailey's paper in the 2nd ISNE Proceedings, page 21-47, for further discussions and clarifications on this topic].

(2) The INE should be - and will be - very careful in officially labeling any device or machine as a success or as a failure. The best way to turn a real failure into a "success" is to measure either the input power and/or the output power inaccurately. We seem to have seen several examples of this over the past two years. The only sure way to know if a device is running in an "over-unity" mode, like Hoover Dam or Three Mile Island, is to have the device operate on its own power. That is the whole point of Hal Puthoff's 2nd ISNE paper, on "... The One-Watt Challenge!" Just make it run on its own power and produce just one extra Watt! When measuring the input and output powers of a device, we should require that state-of-the-art instrumentation be used that utilizes high frequency sampling techniques to measure both the voltage and the current as a function of time, and then calculate the power as a function of time. One such instrument that samples and calculates the power directly in this manner is the LeCroy Digital oscilloscope that was demonstrated by Walter Rosenthal and George Hathaway in their Workshop at the 2nd ISNE (the videotapes are available now). **Using ordinary Amp meters, Volt meters, and etc. that measure RMS values in anticipation of looking at an AC signal will just not give accurate readings when looking at high frequency DC pulses, or other weird-shaped signals that can result in devices with rotating magnetic assemblies.** The 2nd ISNE papers by Rosenthal and Hathaway illustrate examples of proper high frequency measurement techniques and point out the traps that

some researchers can encounter and have actually fallen into when measuring the input and output powers of some device. All measurements will need to be verified by at least two independent research groups before the INE will begin to give any credence to the alleged success of any device's operation. The method of measuring output minus input power is always very suspect. To really demonstrate an "over-unity" or "free-energy" device, replace the input power with some of the output power - have it become "free-running" - and demonstrate the "One Watt Challenge!!!"

(3) The current and future role of the INE should be to support and allow the international investigation and reporting of research and experimental testing of these advanced energy conversion devices. The INE will also support the yearly INE Conference (the International Symposium on New Science, or ISNE). At the ISNE, researchers can present their ideas and findings, regardless of the state of their validation testing. We will encourage EVERYONE to participate. We are also keeping accurate summary files on all known inventors, speakers, theories, concepts, devices, and their actual results. We should NOT be like any other mainstream technical society that only allows and only publishes what is agreed upon and refereed and non-controversial and safe. We want to publish new ideas, exciting results, and encourage investigation! If some, many, or almost all of the devices investigated turn out to really not work: Great! So Be It! Let It Be Known! Document It! We will report those facts with integrity and move forward! The INE should be looking for those one or few devices that REALLY DO WORK in amongst all of the ones investigated. We won't get discouraged about the charlatans and the failures. We care about the successes! Just one success will make this entire effort worthwhile! Let's find one!!!

Editorial

COMETS & NEW PLANS FOR DINOSAUR THINKING

By Hal Fox, Editor

A summer viewing that astronomers will never forget provided an enormous energy display as over 20 fragments of the Comet Shoemaker-Levy struck Jupiter. With plumes of hot gases larger than the earth, the comet fragments met a fiery end. Astronomers, both professional and amateur, from all over the world were

able to view an exceedingly rare, once-in-a-lifetime event. Thousands of pictures were taken of Jupiter using the spectrum from ultra-violet through infra-red. This cosmic event will keep astronomers and astro-physicists busy for years attempting to more fully understand this type of event. Hundreds of newspaper articles have reminded us that this earth suffered a similar cataclysm and lost about ninety percent of its life forms as a huge asteroid hit near the southern edge of the Gulf of Mexico. Many species of dinosaurs were among the life forms that were terminated in a cosmic day of judgement.

New Energy News had no single story that can match the end of an era for Shoemaker-Levy. However, new added bits of information continue to flow into our files and are being reported in *NEN*. These accretions of knowledge are part of the data that is forcing a paradigm (model) shift. The new model of physical reality will spell the end of several generations of cherished scientific belief that will, like the dinosaurs, become extinct. It is part of the editorial plan of this newsletter to support this cosmic event to end scientific dinosaur thinking. **Science should be the pursuit and thrill of discovery, the replacing of outmoded models for new models that more accurately match nature.** Science should not be the coddling of old, outmoded ideas. Tax-money-seeking lobbyists, not true scientists, are the champions of the scientific dogma that is challenged by new discoveries. *NEN* will continue to report on new scientific discoveries that will change our lives, improve our world, and help terminate dinosaur thinking.

Here are some previews of coming attractions that will build on our present understanding of nature and help terminate the dinosaurs:

1. THEORY

Standing on the shoulders of previous writers such as Leaf Turner, Julian Schwinger (who died July 16, 1994), Parmenter and Lamb, Robert Bush et al., Dr. Robert Bass has shown that deuterium fusion (cold fusion) events can be explained by standard physics principles. This work has prompted another paper by a prestigious scientist which will be reported here as soon as the paper is accepted for publication. These papers now show that the pronouncements in three separate books by Frank Close, Gary Taubes, and John Huizenga, denouncing cold fusion as impossible science will have to be reviewed. These books will become collectors items as examples of short-sighted, premature, and opinionated defense of the status quo.

2. CHARGE CLUSTERS & COULOMB BARRIER

We have just run across a letter to the editor (Petr Beckman, now deceased) by our friend and correspondent Harold Aspden, discussing the strange report of high-density charge clusters from the pages of *Galilean Electrodynamics* [1,2]. This article reminds us that we (especially in *Fusion Facts*) have challenged the scientists of the world with the question, "What Happened to the Coulomb Barrier?" [3] when one can create a stable cluster of 10^9 to 10^{13} electrons. The best report of this work is still Ken Shoulders' U.S. patent 5,018,180. Except for the many times that Hal Fox has written about high-density charge clusters, for example [4], there have only been the two articles by Petr Beckman [1] and Ziolkowski [5] and Aspden's letter to the editor [2] to enlighten us about high-density charge clusters. We predict that this technology will surface and challenge our current scientific dogma.

3. PROTON CONDUCTORS & COLD FUSION

During the December, 1993 cold fusion conference held in Maui, Hawaii, Mizuno et al. [6] reported on the use of proton conductors to achieve excess heat, presumably due to cold nuclear fusion. The report indicated that the excess heat was several thousand times larger than the electrical input. This work has now been replicated in the U.S. The details will soon be reported to *NEN* readers.

4. WANTED: MODERN-DAY ALCHEMISTS

A group is being formed to gather historic information on reducing radioactivity and to plan for the use of newly discovered technology to stabilize unstable elements. Here are some of the sources that have reported reducing radioactivity: Yul Brown using Brown's gas. A garage experiment using radioactive metal from the ARCO nuclear site in Idaho showed that the proper application of heat and high voltage could remove the radioactivity. A group in Texas is commercially reducing the radioactivity in certain oil wells. A laser beam zapping technique is reported to stabilize some radioactive elements. None of these techniques have been considered to have sufficient scientific merit to be funded by the Department of Energy. Now we have several papers about cold nuclear fusion demonstrating that various elements have been transmuted e.g. [7]. There is a land area which has suffered the most potent peacetime man-made disaster in the world which will remain radioactive for generations unless we (inventors, engineers, and scientists) do something about it. The land is in the Ukraine and the Republic of Belarus where hundreds of thousands of acres of village, farm, and forest land have been evacuated. The forecast is for twenty million souls to suffer early death due to the

Chemobyl disaster. In Belarus only 8% of the children are deemed to be healthy. They need our help. Send us any information available to you about how radioactive materials have been stabilized. *NEN* sincerely believes that we can learn to solve this problem and restore the abandoned farms and villages back to the people. This will be a "to-be-continued" story.

FROM INFORMATION EXCHANGE TO EXPERIMENTS

For some of our readers, reading about new energy is not enough. They want to perform experiments or, in many cases, "get off the grid". *NEN* is dedicated to bring you more understandable information about our **real energy world**. In addition, we want to bring you more information about experiments that can be performed by individuals or groups (sharing the expense). For example, in this issue of *NEN* we present a simple cold fusion experiment designed and submitted by H. Malcolm Ogle [8] (see page 6), and Charles Yost gives us a few simple electrodynamic wave experiments (page 8). Next month, Dr. Harold Aspden describes some of his experimental work and promises to provide our readers with more information on his developments as he progresses.

The Fusion Information Center (FIC) has just completed a business plan for the manufacture of the **Magnetic Universe, an Educational Toy**. This clever toy was shown to many people at the recent Denver International Symposium on New Energy by its inventor, Lonnie Anderson (male). Lonnie has made a present to INE (Institute for New Energy) of a large percentage of royalties from the sale of this toy. FIC has prepared a business plan, determined the costs of manufacture (\$50,000), and has signed a first marketing agreement for the distribution of this toy. We predict that it will be purchased by many fathers for their children but that the children will have to wait until Dad goes to work so they can get to play with it. This business plan details how the investing entity who pays for the cost of the mold and for the initial sales inventory of this product can make an excellent return on investment. Queries from investing entities are welcome. We will be offering this educational magnetic toy for sale in future issues of *NEN*. Make sure that you get several for stocking stuffers at only \$9.95 each (shipping and handling within the U.S. is free to members of INE.) The product will be made by the "Children of Chernobyl" in Minsk, Republic of Belarus. This is our first small contribution to those 92% of the children of Belarus who are considered to be moderately to severely damaged by the Chernobyl radiation. Do you know someone that will help?

We are now working on the design of a kit by which a child can make a simple electric cannon that will shoot

paper clips or metal hair pins. I made one when I was a teenager. From this device I learned quite a bit about magnetism and magnetic attraction, and timing. This "Mag Shooter" kit will also be advertised in the pages of *New Energy News*. Income will help pay for the publication of this newsletter.

We want similar devices, educational toys, kits, etc. from our readers. You can help *NEN* by providing us with your devices to be sold through the pages of this newsletter. Obviously, *NEN* will expect to have a standard discount for doing the marketing. Or if you desire to have your product manufactured and marketed by our group and return a royalty on sales, then submit your idea (after ensuring that you are protected as the inventor.) Fax or mail information about your "ready to sell" items for our review. They will also be offered to a nation-wide sales organization (the same one that has agreed to sell our Magnetic Universe educational toy.)

CONTRIBUTION OF ARTICLES

Short articles on energy devices and systems are welcome. Any drawings or pictures should be in black and white (for better reproduction in our newsletter). Articles should be about energy. This week we received an interesting article about how the author had a vision just prior to the recent southern California earthquake that did hundreds of millions of dollars in damage (the earthquake, not the vision). However, that is not the type of article for this newsletter. We especially want to hear from you experimenters who find better ways of saving energy, producing energy, practical methods for "getting off the grid", etc. Also experimental evidence of both new science and educational old science are welcome. You are the ones who will lead the world into new energy sources: cold nuclear fusion, tapping space energy, hydrogen, solar, wind, etc. We want to help you exchange your valuable ideas with others. Remember that nearly all of our readers are members of **the Institute for New Energy**. You are those who will be changing the way energy is created, transformed, distributed, and consumed. Tell us about it.

REFERENCES

- [1] Petr Beckmann, "Electron Clusters," *Galilean Electrodynamics*, Sept/Oct, 1990, Vol 1, No 3, pp 55-58, 5 figs, 6 refs.
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- [3] Hal Fox, "What Happened to the Coulomb Barrier?", *Fusion Facts*, May 1992, pp. 18-19.

[4] Hal Fox, "Enhanced Energy Technology," Chap. XI in Cold Fusion Impact in the Enhanced Energy Age, published by Fusion Information Center, Inc., c 1992.

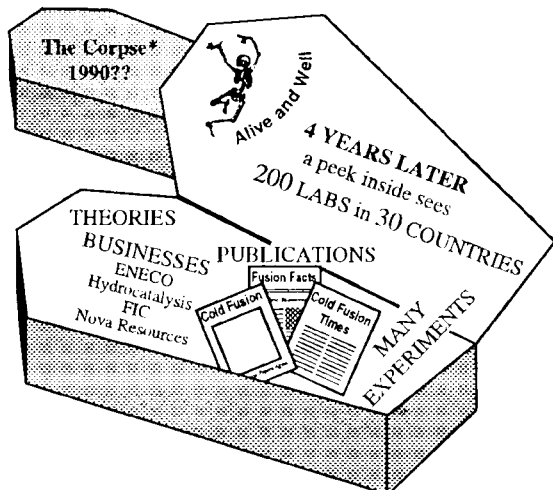
[5] Richard W. Ziolkowski & Michael K. Tippett, "Collective effect in an electron plasma system catalyzed by a localized electromagnetic wave," *Physical Review A*, Vol 43, No 6, 1 fig, 7 refs.

[6] Tadahiko Mizuno, Michio Enyo, Tadashi Akimoto, & Kazuhisa Azumi, "Anomalous Heat Evolution from SrCeO₃-type Proton Conductors During Absorption/Desorption of Deuterium in Alternate Electric Field, presented at the ICCF-4, Maui, Hawaii, Dec., 1994, see also *Fusion Facts*, Feb., 1994, p 17.

[7] Robert T. Bush, "Evidence for an Electrolytically Induced Shift in the Abundance Ratio of SR-88 to SR-86," Cold Fusion Source Book, published by Fusion Information Center, c 1994.

[8] H. Malcolm Ogle, "The Double Nickel Demonstration," *Fusion Facts*, July, 1994, pp 3-4, also reprinted in this issue of *NEN*.

Fusion Briefings



* At the First Cold Fusion Conference at the University of Utah in March of 1990, the president of the American Physical Society labeled the conference as "the last seance for a dying corpse".

NEW YORK - COLD FUSION SEARCH CONTINUED

Jerry Bishop, "Some Scientists Press Search for Cold Fusion Despite Failure of '89," *Wall Street Journal*, Vol CXXXI, No. 9, July 14, 1994, page 1 ff.

EDITOR'S SUMMARY

Jerry Bishop is one of the few journalists who has written fairly about cold fusion. His latest contribution mentions cold fusion proponents (like Dennis Cravens, Edmund Storms, Michael McKubre, and Melvin Miles) and skeptics (like Douglas Morrison). Although Pons and Fleischmann turned down a request for an interview, Bishop cites their December, 1993 quote, "We're interested in scaling up by steps of two, so [1994] we're trying to get up to 300 to 500 watts."

Featured in the article are the garage laboratory results of Dr. Dennis Cravens of Vernon, Texas, who had his first cold fusion success in about July of 1989. It was Dennis Cravens that Fleischmann referred to at the December, 1994 international conference on cold fusion when he stated that Dennis had discovered our secrets. Bishop quotes Fleischmann, "Anyone who listens closely to what we've said can figure it out. Dennis Cravens did." Dennis Cravens has long been a contributor to *Fusion Facts*.

Bishop restates the position of the skeptics that there is an inviolable law of physics that requires fusion reactions to produce nuclear ashes (radiation of gamma rays and neutrons and/or the creation of helium atoms or possible tritium.) What is most often left unsaid is that there are over 300 "allowed" nuclear reactions that **do not produce neutrons, helium, or tritium**. These reactions produce heat, probably from a "gamma" that transmits its energy to the metal lattice or, possibly, into the electrolyte of some types of cold fusion cells. Cold fusion in a metal lattice is not typical of fusion reactions in a sun-hot plasma. The skeptics are still looking for the dead graduate student who, if working with gas plasma deuterium/tritium reactions, would indeed be dead from radiation.

The skeptics also proclaim that ionized deuterium atoms are held apart by powerful mutual repulsion (like charges repel). They believe that only if the hydrogen atoms have energy like the sun can they collide and fuse. This is the Coulomb barrier so well known in **electrostatics**, but often missing in **electrodynamics**. For example, as *Fusion Facts* has cited several times: Each high density charge cluster (Ken Shoulders, U.S. Patent No. 5,018,180) consists of 10⁹ to 10¹² electrons -- **what happened to the Coulomb Barrier here?**

STILL BAD P.R. FOR COLD FUSION

Courtesy of Samuel P. Faile

Daniel Clery & David Bradley, "Underhanded 'Breakthrough' Revealed," *Science*, Vol 265, Number 5168, July 1, 1994, pg 21.

EDITOR'S SUMMARY

This article reports on a retraction of a discovery that had been reported in the German journal *Angewandte Chemie* in February, 1994. Apparently, the leader of the team which had reported on a new discovery in "handedness" of biomolecules (such as proteins and DNA) found that a team member had manipulated the experiments. **The sad part of this report is the following statement: "it could have become organic chemistry's version of cold fusion, says organic chemist T.V. RajanBabu of Dupont's Central Research and Development department in Wilmington, Delaware."** We are puzzled that reporters for the prestigious American Association for the Advancement of Science and its publication *Science* are so ill informed about cold fusion that they are still, after five years and hundreds of successful experiments, so fundamentally **under informed**.

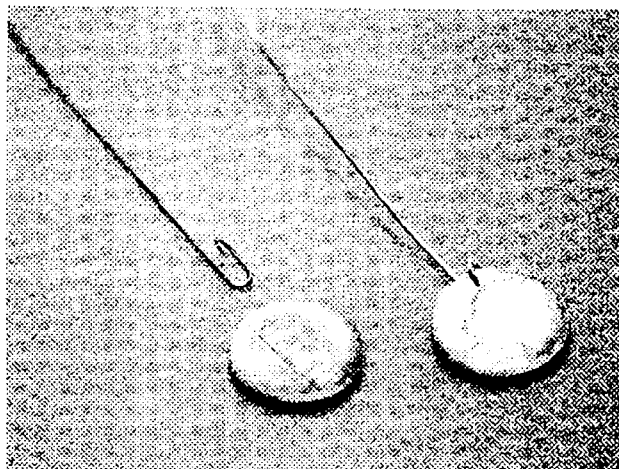
NICKEL EXPERIMENT REPRODUCED

Pursuant to Jerry Bishop's article on Cold Fusion in last August's *Popular Science* magazine, H. Malcolm Ogle writes that it "inspired me to run a series of experiments to try to find the physical truth. As a result of this effort I have developed the Double Nickel Demonstration which is described below. This experiment is so simple that anyone can duplicate it and I would urge them to do so. I have repeated this demonstration five times and it has consistently given excess heat. Skeptics everywhere should try this; especially those in the DOE and the Patent Office." Mr. Ogle is a consulting electrical engineer and a Fellow of the AAAS.

THE DOUBLE NICKEL DEMONSTRATION

This experiment is meant to show that certain electrochemical processes can apparently result in the generation of "excess heat." It uses two five cent pieces as electrodes in a simple electrolytic cell. This is a modification of the Mills experiment using nickel and light water. Potassium carbonate is used to make the electrolyte.

A 100ml beaker is used to hold 95ml of distilled water with 32g of potassium carbonate dissolved in it. Two laboratory type thermometers are used; one to measure the electrolyte temperature and one to measure the air



temperature. The beaker is placed on a small block of foam plastic to isolate it from the table and room air is free to circulate on all sides of the beaker.

The electrode assembly uses two paper clips to hold the nickels and conduct electricity while minimizing the loss of heat from the cell. The clips are bent to grasp the edge of the coins and are clamped in a barrier terminal strip to hold them in position. The surfaces of the paper clips are coated with epoxy to insulate them from the electrolyte.

A ten ohm, ten watt resistor is used to calibrate the cell. To preserve thermal symmetry, the copper leads of the resistor are extended by soldering on paper clips that have been straightened out. The surfaces of the clips, the soldered joint, and the copper leads are then insulated with epoxy.

To insure consistent temperature readings it is necessary to continuously stir the electrolyte. A small motor connected to a variable voltage power supply can provide the needed gentle stirring action. When the power input to the cell is modified, approximately two and one-half hours are required to reach thermal equilibrium.

A second variable voltage power supply is used to provide current for the cell. Suitable instruments are needed to measure the cell current and the cell voltage.

With 300 milliampères flowing through the cell, an excess heat of 20 to 40 percent is consistently observed.

H. Malcolm Ogle, June 24, 1994

THE DOUBLE NICKEL DEMONSTRATION

Material and equipment required:

- 100 ml beaker
- Foam plastic block (2"x2"x1")

Potassium Carbonate (calcinated)
 Two thermometers
 Two US nickels
 Four paper clips (#1 GEM)
 Epoxy
 Two 4-position barrier terminal strips (Radio Shack 274-658)
 A ten ohm, ten watt resistor (Radio Shack 271-132)
 A small motor for stirring
 Two variable voltage dc power supplies
 Instruments for measuring current and voltage

Space Energy

AETHER ENERGY: NEW EVIDENCE

By Dr. Harold Aspden

The enormous energy released by the comet Shoemaker-Levy 9 in crashing into Jupiter is evidence that the aether itself does provide a source of energy and, at last, gives us data confirming theory.

As background, I note that my aether theory, as first published in 1960 under the title 'The Theory of Gravitation' derived an aether lattice energy density equivalent to 144 gm/cc and in the second edition of that work in 1966 I affirmed that that lattice system was in dynamic balance with what can best be described as a leptonic graviton field having the same mass density.

I have concentrated most of my interest in this on the prospect of sensing that aether mass density by its rotational properties with spinning matter, where its angular momentum should reveal itself and that is why I have special interest in the Inomata, Tewari and DePalma 'free energy' projects.

However, I am also of record in my writings as having stated that translational motion of that fluid aether lattice, as with a planet, would involve no unbalanced linear momentum, but there is nevertheless an enormous amount of energy in the linear motion of aether carried with the planet. Indeed, if that planet had the mass density of ice there would be 144 times as much aether energy carried with it as its basic mass kinetic energy.

So, how does this connect with comet Shoemaker-Levy 9? Well, comets are supposedly composed of ice and so, if one could witness a comet brought to rest by collision

with Jupiter, it should shed energy 145 times the amount expected from calculation based on measurement of its diameter before impact. That would correspond to a volume of ice having 5.25 times that diameter.

What has, in fact, been observed? Well, according to the report in the British newspaper, *The Times*, 20th July, 1994 at page 2:

"Yesterday fragment K 9 (of comet Shoemaker-Levy 9) hit the solar system's biggest planet at about 11.20 British Summer Time with such force that some observers believe it could have been more than six miles wide - **more than five times the size predicted.**"

I can add the following quotation from page 189 of my 1980 book Physics Unified:

"It is submitted that the phenomenon of ball lightning is a phenomenon of the space medium. In this connection the thunderball has been related to the vast destruction at Tunguska in 1908 when what appears to be a comet collided with the Earth and yet appeared to impart no momentum able to leave a crater. Comets themselves have weird properties which resemble characteristics of the rotating space medium presented in this work, but it is beyond our scope to enlarge on such a theme."

Can it be that comet Shoemaker-Levy 9 is a message from the blue beyond to us Earthly beings who subscribe to New Energy News, a message telling us that the Gods are with us and it is due time for us to make that breakthrough into a 'free energy' future which draws on that aether energy source?

After all, here is the first observable evidence of a cosmic process such as could feed anomalous input of vacuum energy into our sun, evidence which could make us begin to question the hot fusion theory as the primary stellar heat source.

The task ahead is to capture that energy by intercepting the aether spin that no doubt can be set up in rotating homopolar-type machines and that is a pursuit I am now taking up experimentally at my own home workbench.

Should readers wish to procure a copy of 'Physics Unified', I can supply a paperback version for \$16 or £10. Add \$5 or £3 for airmail delivery.

HAROLD ASPDEN
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 ENGLAND

LONGITUDINAL ELECTRODYNAMIC WAVE EXPERIMENTS

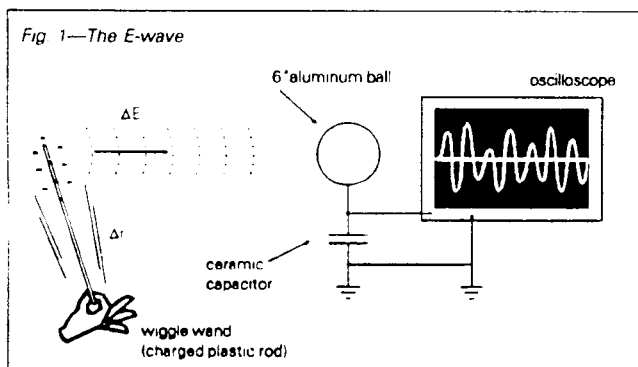
By Charles A. Yost, originally printed in *Electric Spacecraft Journal*, vol 12, 1994, pp 18-19.

This article describes continued electrostatic experiments using a charged plastic rod, called the "wobble wand," which add to experiments conducted in 1993. This continuation was prompted by a Russian patent application (see article this issue, page 20) provided to me at the Institute for New Energy's conference in Denver in May 1994.

The Russian international patent (PCT/GB93/00960) was filed on May 10, 1993 by Stanislav and Konstantin Avramenko of Moscow. It is a straightforward application of the single-wire electrical energy transmission based upon the principle of longitudinal electrostatic waves as described by Nikola Tesla in the 1890s.

ESJ #8 gave a very brief introduction to the idea of electrostatic longitudinal wave experiments which I performed from February to April of 1993. The experiments, which were simple and varied, coupled with those of June 1994, have established certain facts about the transmission of electrostatic potential.

The basic experiment and detection circuit is shown in Fig. 1. An aluminum antenna ball sits on a plastic rod three feet above the ground. The ball is connected directly to the oscilloscope input probe. A 5000V DC, 0.006 μ F ceramic capacitor separates the ball from the ground in order to attenuate the 60 Hz power line radiations. The ball and scope are connected using a coaxial cable, the outside sheath of which is grounded.



Experiment I: In the first series of experiments, it was established that a charged plastic rod could effectively transmit an electric potential waveform through the air. The rod was held more than 10 feet from the ball, and then wiggled back and forth a few inches. The plastic rod

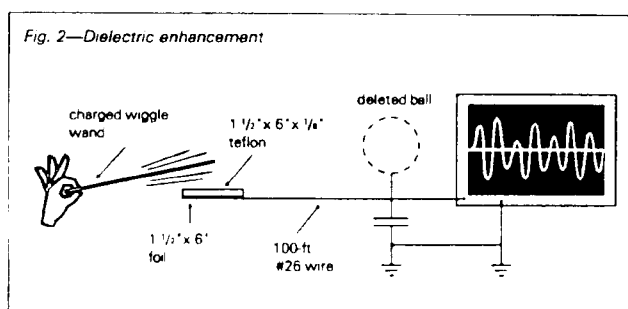
was charged by simple frictional rubbing with a cloth. The voltage pattern oscillated plus or minus a few millivolts. The rod, when wiggled a few inches from the ball, produced potential variations of $\pm 1/2$ volt.

Experiment II: A 100-foot long, enamel insulated #26 wire was attached to the ball and laid along the ground. The same plastic rod was wiggled at the far end of the wire. The oscilloscope registered nearly $\pm 1/2$ volt oscillations, the same amplitude that the scope would register if the rod were wiggled only a few inches away from the ball through the air. There is no noticeable attenuation and no noticeable signal interference through the wire.

Experiment III: There may be a focusing capability, as a charged rod wiggled at the center of curvature, 16 feet from a 12-inch diameter metallic mirror, seemed to produce a stronger response than if wiggled off-axis, at the same radial distance from the mirror. However, this focusing ability is still not certain.

Experiment IV: Wiggling the rod at a given distance, and increasing the antenna area (by adding a flat metal plate), increases the signal strength reception in accordance with the area increase.

Experiment V: With the ball remaining a given size, increasing the plastic rod area increases the signal strength received in accordance with the rod area. It is definite that the aerial transmission effects are not bothered by high humidity (they may even be enhanced). I have done the experiments from 50% humidity to 100% humidity. Underwater is next!



Experiment VI: If the ball antenna is replaced by a flat foil surface covered by a 1/8" layer of Teflon, (see Fig. 2) the static charge transmission signal is greatly enhanced. In fact, simply touching the Teflon surface and making slight movements, or touching the surface intermittently, transmits strong signals. We are talking two to three volts,

not simply millivolts. The gauge and length of the wire do not seem to matter.

It is apparent that by increasing the surface area of the metal plate and/or the wiggled rod, electrodynamic power might very well be transmitted through the small wire conductor. This is no different from what Tesla said: that electrical energy could be transmitted through the ground using longitudinal electrostatics -- wherein the ground is the active conductor. The opposite polar charge is on the ball antenna high above the ground. This is similar to what Eric Dollard has been saying for years (see video review, page 38) and to what the Russian patent says. All this has been indicated with the wiggle of a simple plastic rod charged by frictional rubbing.

Now, suppose we go the next step to really high potentials like those developed by the Tesla magnifier. It operates at high frequencies and is able to inherently produce electrostatic charge separation and effects. This was suggested by Tesla and shown to be possible by Richard Hull and Ron Kovac. There are reports that the device described in the Russian patent application has transmitted 100 watts of power over long distances through hair-thin wire. I would like to point out that these experiments are extremely simple and produce very strong signal transmissions (many volts) with the slightest of electrostatic charge. I encourage others to experiment with this technique.

Charles A. Yost holds a B.S. degree in aeronautical engineering from Northrop University. He can be contacted at 73 Sunlight Drive, Leicester, North Carolina 28748 USA.

EDITOR'S COMMENTS

We commend Charles Yost for sharing his "electret" experiments with us. We strongly encourage you to replicate his work in reading the changes of an electrostatic field by using a moving charged device and monitoring with an oscilloscope. Perhaps some of our readers can write us and tell us where we can buy strong electrets. An electret is made by having an excellent dielectric plastic material become polymerized while curing in a strong electrostatic field. Maybe some of our friends that produce high voltage (like for use with Tesla coils) can make some electrets. The charge in an electret should last for a long time if the plastic material is an excellent insulator. We would like to receive some experimental data where you pivot and rotate an electret (with opposite charges at each end of the electret) near a pickup sphere (or plate) connected to the oscilloscope. Data on the strength of the induced voltage as a function of distance would be of interest. We would expect that the induced voltage would obey the inverse-square law.

Also, what is the difference of the induced voltage provided by a rotating magnet as compared with a rotating electret. Also, there are a small percentage of persons who can see magnetic fields. Is an electret field visible to these persons? Usually a person that can see magnetic fields can see emanations from crystals, especially from the tips of crystals. If you can produce a sensitive measure for the moving electric field (rotating electret), try rotating a quartz or other type of pointed crystal to see if any emanation is measurable. The human body is a generator of fields. After you have established a sensitive measuring device for electrostatic fields try moving your hand back and forth and see if that type of motion develops a measurable longitudinal wave. Please let us know what you learn, we want to share. When you write, please send pictures and/or describe all equipment and measuring distance very precisely.

VACUUM ENERGY

(also known as "zero-point energy," "inertial frame," and "space energy")

Published by the Planetary Association for Clean Energy, Inc., of Ottawa, Ontario, Canada, May 1994)

A synopsis of knowledge from the Denver International Symposium on New Energy, May 14-16, 1994.

Empty space is not truly empty, but contains an enormous amount of untapped electromagnetic energy known as zero-point energy ("zero" referring to the fact that this energy exists even at a temperature of absolute zero where no thermal effects remain).

Vacuum energy is traced to the radiation from fluctuating quantum motion of charged particles distributed throughout the universe. These charged particles produce such well-known physical consequences as the perturbation of atomic spectral lines known as the **Lamb Shift**, the **van der Waals forces** of chemical attraction and the **Casimir Effect** related to the attractive quantum force found between closely-spaced geometries. It is also the inertial frame experienced in acceleration and deceleration. It is likely that gravity is an effect of vacuum energy.

Nobel Laureate Prof. John Archibald Wheeler determined that the zero-point energy continuum of the vacuum has an energy density ranging from 10^{49} and 10^{127} watt-seconds per cubic centimeter, while 1 cubic centimeter of pure vacuum continuum contains enough energy to condense to 10^{80} to 10^{120} grams of matter.

The very premise of **Michael Faraday's** pioneer work on electrical induction is contingent on movement through "a volume of space in which a magnetic field is present"

(and not "magnetic lines of force"). This is the basis of current electrical engineering.

An early utilization of vacuum energy power generation was a car electric engine developed by Nobel Laureate **Dr. Nikola Tesla** for his own personal use, based on his 1901 patent, "Method of utilizing radiant energy" which described a gating procedure for tapping background radiation of the ambient medium: vacuum or space itself. Another stand-alone "radiant energy" system generating 50kW was developed by **Dr. T. Henry Moray** between the 1900s and 1930s using "off the shelf" parts; it was positively reviewed by top electrical industry experts.

Today a number of systems have been presented: large to micro scale vacuum tubes, cermet (ceramic-metallic) semiconductors, magnetic material configurations, and special capacitors. In general they are easy to manipulate, and should be low-cost. Most of these systems are protected by patent applications or by letters patent.

What We Know About Vacuum Energy

Electrical Induction: When a conductor is moved through a volume of space in which a magnetic field is present, current flow is induced in the conductor. (Michael Faraday, 1831)

Magnetic Field: When a direct current flows in a coil, in a volume of space containing vacuum energy, a magnetic field appears in the center of the coil and the orientation of the magnetic polarity can be determined if the direction of the current is known. (Michael Faraday, 1831)

Magnetic materials: Some atomic and/or molecular structures in a volume of space containing vacuum energy can sustain temporarily, or exhibit permanently, strong magnetic fields, especially when such a magnetic material is placed within an electric coil in which current is flowing. (Michael Faraday)

Levitation with conduction sphere: When a conducting spherical electrode is rotated and high-voltage electricity is applied, small metal balls, cork, wood can be supported against gravity in a volume of space. (George S. Piggot, William F. Hamilton, 1904)

Gravity and high voltage: When a mass is connected to high voltage, gravitational attraction is affected. (Francis Nipher, 1916-17)

Gravity and gyroscope: When a spinning gyroscope falls along its axis of rotation, the rate of fall in the Earth's gravity field is slowed. (Bruce DePalma, 1972)

Gravity and magnets/coils: When non-inductive coils are wound around magnets and these coils are energized, the rate of fall in the Earth's gravity field is slowed. (Donald A. Kelly, 1993-94)

N-machines: When layers of magnets and conductors are rotated, electricity is produced. When an N-machine is operated in a no-load condition, input torque measured is the same as when the unit is operated at a full-load condition, distinguishing performance in variance with classical electric motors and generators. (Bruce DePalma, Paramahansa Tewari and Shiuji Inomata, 1977-1994)

Force by high-voltage: When high-voltage is applied to an air foil, mechanical forces are produced. (T. Townsend Brown, 1951-1955, William Hooper, 1968-1974)

Energy stored in magnetic field: Under certain conditions, magnets may store energy in space which can be recaptured for use. This phenomenon may be related to such experimental devices as the Adams magnetic motor developed in New Zealand. (Harold Aspden, 1993)

Electron charge clusters: When a high-density electron charge cluster is produced, it travels at about 0.1 of the speed of light in the electric fields between cathode and anode. Under certain conditions, more energy may be extracted from the high-density charge cluster than is required to produce the charge cluster. (Kenneth R. Shoulders, 1985)

Electric generation and levitation: When magnetic forces are produced at right angles in the presence of rotary motion, high voltage electricity is generated, temperature is reduced and gravity is reduced. (John R.R. Searle, 1957-1994)

Space energy is not isotropic: When cylindrical magnets revolve about their axes, slowing time varies according to direction of rotation, indicating effect of rotation with Earth's magnetic field. (Christian Monstein, 1993-1994). A magnetically responsive test specimen located inside a superconducting electromagnetic solenoid detects forces which vary with time and rotation about the Sun, suggesting that the vacuum has an intrinsic direction property connected with magnetism - and suggests that vacuum energy devices could perform with efficiencies varying with the time of day. (Baurov, Klimenko and Novikov, 1991)

Electric and magnetic fields occur simultaneously as charges move: Time variable electric current (accelerating electron) creates an electric field parallel to that current, inducing electrical currents which last as long

as current is charging. This electric force is a dragging force causing charges to move parallel (or anti-parallel) relative to the direction of current and may be known as the electrokinetic field. (Prof. Oleg D. Jefimenko, 1979-1992). Magnets conditioned to produce a motional field permitting gating to vacuum energy once triggered (9V battery allows production of up to 50kW of useful energy, but resulting in weight loss of generating system.) (Floyd A. Sweet, 1988). These parallel and anti-parallel charges may be separated and engineered for energy production. (Tom E. Bearden and William Jay Fogal, 1993-1994)

Acceleration of electron flow results in excess energy: Acceleration of plasma electrons in physical vacuum results in excess energy. (Prof. Alexandr Chemetskii and J.A. Galkin, 1971-1989; Harold E. Puthoff and Kenneth R. Shoulders, 1991-1994). When electric current flows in an accelerated fashion in a ceramic-metallic semiconductor "cermet," the circulating current provides excess energy to a tank circuit. (Wingate A. Lambertson, 1980-1994)

PROTON INSIGHT WITH HERA

Faye Flam (science writer), "The Inner Sanctum of the Proton," *Science*, vol 264, no 5167, pp 1843-1844.

SUMMARY

The interior of atomic particles has been a mystery, and only now is beginning to be somewhat understood. A tool that is making this possible is the Hadron-Electron Ring Accelerator (HERA) at DESY, the German particle physics laboratory near Hamburg.

Scientists had already known about the proton's main constituents, the three objects known as quarks in each proton. Being so much smaller than the proton, the quarks are like grains of sand in a sea of space, with lots of room to have other activity going on. But until now scientists haven't had the tools to enable them to see what is there. The only theory to help explain it all was the "messy and poorly understood" theory of quantum chromodynamics (QCD). So it was a mystery.

HERA's international team of researchers have found a surprisingly active inner life for the proton (and, by inference, the neutron). They have recorded mysterious collisions in which electrons ricochet off an unidentified object within the proton's inner space. The three familiar quarks (known as "valence" quarks) exist in a surprisingly dense space filled with short-lived "virtual" quarks that wink in and out of existence. Yet most of the electrons traveled through the protons as if they weren't there. As

far as figuring out how many "virtual" particles there are in a proton, the math is just too complicated to have been solved as yet.

So HERA surprised physicists with the bustling crowd of virtual quarks and their attendant gluons (force carrying particles which bind quarks together) that they believe to be in the proton. Because HERA accelerates both the protons and electrons and collides them head-on, it can achieve about 100 times the collision energy of the former fixed-target experiments, therefore enabling the size scale to be 100 times smaller than ever before.

From all the new evidence, and the records of the outcomes of thousands of collisions, researchers can get an impression of a "sea" of virtual quarks and gluons that is extremely active. One physicist commented on there being evidence for about 30 gluons and three or four virtual quarks at any given time. Since this could not have been predicted by current theory, the research will have a profound effect on the understanding of protons and neutrons.

There's also an unidentified object whose presence is inferred by a strange set of collision tracks. In these collisions, the electron seems to bounce off something within the proton, and a very sparse particle jet suggests that something has been knocked out of the proton. But the proton does not disintegrate. This was totally unexpected. Theorists have guessed that the cause may be a "pomeron," a particle theorized in the early 60's but set aside when quarks were identified as the proton's internal components. Nobody has really known what the pomeron might be. It is thought possible, though completely unexpected, that it might be a temporary clump of gluons. Nothing in established theory predicts it.

Particle physics is treading new areas that theory has not covered before. Continued experimentation with HERA may revolutionize some of the currently established research techniques, in addition to the old theories.

Summary by D. Torres

FASTER THAN LIGHT?

Courtesy of Samuel P. Faile

K.A. Fackelmann, "Faster-Than-Light Time Tunnels for Photons," *Science News*, Vol. 146, No. 1, July 2, 1994, page 6, 1 figure.

EDITOR'S SUMMARY

Recently, Raymond Y. Chiao, Paul G. Kwiat, and Aephraim M. Steinberg of the University of California,

Berkeley have measured the velocity of pairs of photons. When one photon travels through air and the other photon strikes a special mirror, some of the photons tunnel through the mirror and appear to travel to the detector at about 1.7 times the speed of light. One explanation for this unusual behavior is that the wave packet of the photon is distorted so that the peak amplitude of the wave packet moves from the center of the wave packet to its leading edge, thereby giving the appearance of having arrived early at the detector. Obviously, additional experiments are planned.

"Thoughts from Bill Whamond," *Elec. Spacecraft J.*, vol 12, pp 29-33, 5 refs, 13 figs.

Bill Whamond has contributed to previous issues of ESJ. His ideas on the magnetic monopole appeared in ESJ #9. The Roos article he submitted, which showed how to convert magnetic field intensity into pressure force, appeared in ESJ #10. In this article, he emphasized similarities between electric, magnetic and gravity force equations; and expresses some of his thoughts about the Searl Levity Disk design.

The content of Mr. Whamond's letters far exceeds the scope of this article. In more recent letters, he has discussed his theories, conceptual as well as rigorously mathematical, about the relationships between spheres (e.g. earth) and pyramids. ESJ hopes to pass along more of his ideas in subsequent issues.

Solid-State Space-Energy Generators

LONGITUDINAL ELECTRIC TRANSMISSION

Stanislav Avramenko and Konstantin Avramenko, Russian Patent: "Longitudinal Electrical Transmission," *Elec. Spacecraft J.*, vol 12, 1994, pp 20-24, 5 figs.

This invention concerns a method for the continuous transformation of electrical energy with its subsequent transmission from the initial source (transformer) to a consuming device, through a transmission line consisting of a single conducting wire.

The primary goal of the invention is to significantly reduce Joule heating resulting from the ohmic resistance in a

power transmission line. A related goal is simultaneous reduction of the metal content of the transmission line.

The goals are partially achieved by the transformation of the electrical energy into the energy of oscillations of a field of free electrical charges (the displacement current or longitudinal wave of the electrical field). This energy is carried via a single wire transmission line and, where necessary, transformed into electromagnetic energy capable of conducting currents in closed circuits.

Rotating Space-Energy Machines

A TALK WITH JOHN SEARL

By Charles A. Yost, *Electric Spacecraft Journal*, vol 12, 1994, pp 6-11, 4 refs, 6 figs.

The purpose of this article is to clarify the description of the Searl Levity Disk design as most recently related directly by John R.R. Searl in personal conversations and to the Institute for New Energy (INE) conference audience in Denver, and in his Book 4.

This article contains several detailed diagrams of the workings of the Searl Levity Disk, as well as descriptive text, and information on Searl's three roller magnet experiments in 1991.

Homopolar Generator with Plasma Disk

By A.V. Frolov

The homopolar generator uses Lorentz force for creation of separation of positive and negative charges in rotating metal disk. The formula is known: $\vec{F} = q + \vec{V} + \vec{H}$, where q is charge, V is velocity and H is intensity of magnetic field.

The approach of N-machine groups to question of increasing of power is conventional: to increase the velocity \vec{V} or intensity \vec{H} . For example, Dr. Inomata, Japan, uses magnets with superconducting coils to increase the strength of the magnetic field through the disk. But it is not the optimal way. The density of free electrons in a copper disk is the same in this case.

It is possible to use another approach. Total force (and power in load) is proportional to the density of rotating plasma:

$$\Sigma \bar{F} = N + q + \bar{V} + \bar{H}$$

N is the number of particles moving in field \bar{H} . In P-F system this density of protons in cathode is near -10^{29} (m^{-3}) that correspond to enormous N in above formula. The utilization of such type of cathode that is saturated by protons in scheme of homopolar generator as rotating disk create new power possibilities for free energy systems.

Note that in this case we will work with rotating plasma and this technology is similar to the idea of magneto-hydrodynamic generator.

Miscellaneous

WILL THE LAW BE REVOKED?

Klaus Volkamer, Christoph Striecher, Kenneth G. Walton, John Fagan, Hartmut Schenkluhn, and Harry Marlot (Deutsche MERU Gesellschaft, Bissendorf, Germany), "Experimental Re-Examination of the Law of Conservation of Mass in Chemical Reactions," *J. Sci. Explor.*, vol 8, no 2, 1994, pp 217-250, 27 refs, 13 figs.

AUTHORS' ABSTRACT

At the beginning of the century the law of conservation of mass in chemical reactions was checked experimentally by Landolt and various other experimenters. Even though in 8 out of 10 chemical reactions studied by Landolt the validity of conservation of mass was confirmed within the margin of experimental errors, in 2 reactions the pre vs. the post comparison of the determined weights indicated mass differences that exceeded the experimental error by up to a factor of 6, indicating apparent violations of the law of conservation of mass. However, by averaging between such results and subjective assessments Landolt discarded these deviations.

We report on careful and systematic repetitions of one of Landolt's chemical experiments. Using modern sensitive and, in one case, automatic weighing techniques, the results obtained reveal time-dependent and long-range gravitational irregularities which are many orders of magnitude larger than expected relativistic mass effects, indicating an apparent violation of the law of conservation of mass in this special chemical reaction. Similar effects could be found in biological and purely physical systems,

as well as synergistic effects between these systems. The observed spontaneous mass fluctuations suggest the existence of a form of cold, dark matter which is detected in the described systems.

BOOK REPORT FROM RUSSIA

We picked up a number of books and pamphlets at the May conference in St. Petersburg, The International Conference on Space, Time and Gravitation. Our friends in Russia sent us the following list of books and short descriptions from among them. We will add more as they are translated.

A.G. Mitrofanov, Ontological Vacuum-Substance Picture of the Universe, Petrozavodsk, Karelia, 1991, 86 pages

An attempt has been made in the book to "rehabilitate" materialistic dialectics, to show how behind the facade of self-evident, century old truths ambiguity, dialectical unity of falsity and truth may be hidden. The conclusions drawn on the basic of the retrospective dialectical analysis of conceptual contents of modern physics allow to come up to the solution of fundamental mysteries of science in a new way, such mysteries as gravity, inertia, corpuscular-wave dualism, etc.

V. Ya. Bril, "Kinetic Theory of Gravitation and Business Offers that Follow from this Theory," St. Petersburg, 1993, 20 pages

This is a publicity article under the motto: our knowledge + your money = common benefit. The essence of the offers: 1) Publication of the monograph "Kinetic theory gravitation and its supplement. 2) Organization of Atlantida search with the help of information unknown before, but obtained within the limits of the kinetic theory of gravitation. 3) Establishing a center to keep a tectonic log of seismodangerous regions. 4) Establishing a center of scientific prognostication of global cataclysms with the help of the method worked out within the limits of KTG. There are also given estimations of expenditures and expected profits from the realization of these plans.

F.M. Kanarev, "Do You Still Believe? or Did You Decide to Check?", Krasnodar, 1992, 64 pages

This a criticism of A. Einstein's theory of relativity.

F.M. Kanarev, The Analysis of the Modern Physics Basic Problems, Krasnodar, 1993, 255 pages

The author shows that ambiguity in the understanding of the space and time unity leads to the loss of cause - effect relationship and to theoretical errors which most

vividly manifest themselves in the theory of relativity. It turns out that the space and time unity is an axiom which realized itself in the synchronism of any objects movement in the long run. Within the limits of this axiom all the formerly postulated basic correlations of quantum mechanics are concluded from the laws of classical physics. Moreover electromagnetic structures of photons and electrons are revealed, there occurs spectroscopy analytical theory, and serious preconditions for atoms and ions model construction are created on the basis of their spectra-analysis. There appears a large number of consequences and well-known physical facts are interpreted in a new way.

F.M. Kanarev, "On the Way to the Physics of the 21st Century," Krasnodar, 1994, 25 pages, in English.

It is shown that The Analytical Theory of Spectroscopy provides a new direction for the future of physics.

A.I. Veynik, S.F.Komlik, Complex Definition of the Material's Chrono-Physical Properties, Minsk, 1992, 95 pages.

Unknown before choral and metric phenomena and new thermo-electrical effects are considered in the book. They allow to successfully break the following well-known physics laws: the third law of Newton's mechanics, Volt's law of the conservation of motion quantity, Klauzius's second thermodynamic law, etc. Ways of experimental definition of basic properties of the enumerated phenomena and effects are described.

Academy of sciences of Russia Institute of mechanical engineering problems, "Aggregative methods in multibody systems mechanics" Edited by V.A. Konoplev, St. Petersburg, 1992, 48 pages, in English

This preprint contains the main results of the investigations carried out in controlled systems-mechanics laboratory of the institute of Mechanical Engineering Problems, Russian Academy of Sciences. A new mathematical formalism of multibody systems, named aggregative, is described. This formalism offers the numerically-efficient algorithms which were applied for practical problems.

F.D. Prussov, Ether Phenomenon, Nikolaev, 1992, 133 pages.

The following characteristics of ether are calculated: density, pressure, viscosity, temperature with due account of disturbances in ether, discrete values of the moment body motion quantity with its position in the central field (electron in atom, planet) are determined on the same basis which created the theory of Mendeleev's Periodic

Table and solar system. The ether theories of superfluidity, superconductivity, and interactions have been made. The longitudinal effect of the magnetic field on electric charge is predicted and discovered, that is a basic for the electric energy generator of an absolutely new type - ecologically clean transformer of kinetic energy of ether's particles.

V.A. Kashkintsev, Physics of Engines of Unidentified Flying Objects, The phenomenon of gas weight dependence on imparted thermal energy, Zhigulevsk Institute of Radio Equipment, 1993, 46 pages.

Possibly to operate the acceleration effective quantity of the gas masses free drop due to the change of their physical state is for the first time theoretically grounded. Possibility to get positive results in Galileo-Newton-Etvish's experiments is for the first time theoretically grounded. The existence of stars gas masses hidden with temperature is the fact for the fact for the first time proved by the author.

There expressed considerations on the possibility to use the discovered phenomenon of gas weight dependence an temperature to make gravitation engines similar to the engines of unidentified flying objects for hypothetical nature. Possibility to develop a gravitation engine is offered.

D.V. Gurevich, Axiom and Dogma of Three-Dimensions, St. Petersburg, 1993, 80 pages.

Are the three dimensions the eminent properties of space and matter or are they a phantom caused by the individual perception? Is the axiom of the three dimensions among the necessary foundations of geometry? Is it possible to propose more constructive definition of dimensions? These and some other questions are the subject of this book. The author aims at the constructing of a "natural geometry of variable curvature and variable number of dimensions."

A.G. Syromyatnikov, Self-Coordinated Field Method in Non-Linear Dynamics Problems, St-Petersburg, 1993, 79 pages

The author formulates an equivalent system of equations for the self-coordinated electromagnetic field that corresponds to the law of the full angular moment conservation of the electromagnetic field.

The dynamics of the self-coordinated field manifests itself by way of shock spin waves, at the front of which an overturn of the electromagnetic field spin vector takes place. It is shown that the self-coordinated

electromagnetic field can be associated with the geometrical twisting of spacetime.

V.F. Zolotarev, B.B. Shamshev, Physics of Quantized Space-Time (in 2 parts), Ulyanovsk Polytechnical Institute, 1992-1993, 103 p, 99 p.

Part I - Introduction, mechanics, thermodynamics, electromagnetic phenomena.

It is shown that the only postulate - that of physical vacuum space quantization can be used as the basis of all (without exceptions) sections of modern physics. This new point of view makes it possible to penetrate into the physical essence of the investigated phenomena with simultaneous simplification of the mathematical apparatus.

Part II - Electromagnetic phenomena (continued), gravitation interactions, inertia field and gravi-inertia phenomena, structure of elementary particles.

In this part the author continues investigation of the electromagnetic phenomena from the point of view of the quantized space-time, the fundamentals of which were given in the first part. The author exposes the physical essence of gravitation interactions; he shows the existence of inertial field as well as similarity and distinctions between electromagnetic and gravitational fields; and he describes the structure of most elementary particles.

E.K. Melnikov, Y.I. Musichuk, A.I. Potiforov and others, Geopathogenic Zones - Myth or Reality?, St.-Petersburg, 1993, 48 pages.

This brochure is devoted to the geopathogenic zones of Earth's crust, represented by tectonic faults and underground water streams, and their influence on the biological objects and on the human health. It is shown that these phenomena are represented by real geological structures, which require investigation from the scientific point of view having a goal to clear the nature of their influence on the biological objects. The final task of the last aspect is recognizing geopathogenic zones for their consideration at town planning meetings, for human health, and for the location of agricultural projects and roads.

V.V. Bubnenkov, "Scale - Discrete Regularity," Moscow, 1993, 11 pages

A search for the hypothetical primary, elementary particles stimulated the discovery of the unknown; the regularity of the fundamental periodic interactions distribution; of the quantitative calculation of elementary

particles power properties; and ascertainment of their spectral realization.

I.I. Smulsky, "A New Approach to Electrodynamics and to the Theory of Gravity," Novosibirsk, 1992, 31 pages

The force between two charged particles does not depend only upon the distance between them (Coulomb's law), but it also depends on their relative velocity. A new analysis of these effects fields results in a force equation derived from Maxwell's Theory with implications for Special and General Relativity as well as the theory of gravity.

V.N. Roganov, "Gravity Vibrating Model (practical recommendations on the manufacture of apparatus and ensuring levitation)," Sebastopol, 1993, 8 pages

The author considers vibrating processes in the still waves of the stationary power fields, and the behavior of vibrating particles in still waves knots.

Quantitative estimation of vibrating object levitation parameters in the conditions of stationary still wave of gravity field is also made.

V.N. Roganov, "Electromagnetic Vortex as Cause of Energy Chink in Space-Time," Sebastopol, 1993, 4 pages

The conclusion is drawn that gravitation is a big super combination of all physical fields, material, etc., etc., where Einstein's basic gravitation equation is summed up for all power interactions and violated symmetries.

M. Ostrikov, New Manifestations of Magnetism (in 3 parts), St. Petersburg, 1994, 106 pages

In the 1st and 2nd parts the author provides an account of the results of theoretical and experimental investigations that discloses the essence of the original and unified world on the basis of a new uniting link - the structure of the magnetic field of annular constant magnetism. He also provides a new interpretation of the basic particle of microcosm, of vacuum, and of the structure of electron, proton and photon.

In the 3rd part, the results of the practical realization of the effects offered in the monograph to the field of medicine and engineering are described. Some technical solutions are also offered. Thus the use of annual constant magnet as basic unity link makes it possible to receive new properties when affecting human organisms and also in applied technical areas.

N.A. Kozyrev, Selected Works (in 3 parts), Leningrad, 1991, 445 pages

- Part 1 - Theoretical astrophysics
 Part 2 - Observation astronomy
 Part 3 - Causal mechanics.

The collection includes the most important works by N.A. Kozyrev on the theoretical astrophysics, observation astronomy and theory of the physical properties of time.

Periodical of Russian Physical Thought, No 1, Reutov, 1991, 59 pages

This periodical covers material on different sources of energy, on the second law of thermodynamics, on mathematical physics, and on the electrodynamics of bodies in motion.

Periodical of Russian Physical Thought, No 2, Reutov, 1991, 100 pages

The periodical covers the material on the works by Prof. A.L. Chizhevsky, on the use of ionized air in industry, agriculture and medicine, and on mathematical physics.

Russian Academy of Sciences, Scientific-Research Institute of Radio-electronic Complexes, "The Universe Investigation Problems" Issue 17, The development of investigation classical methods in natural science, St. Petersburg, 1994, 500 pages

This collection covers the material on light phenomena and ether problems, on the mechanics of macro- and microcosm, on astronomy, on the investigations in the allied areas of natural science.

Tomsk Scientific Center of the Russian Academy of Sciences, International Slav Academy, Petrovskaya Academy of Sciences and Arts Series: "The Universe Investigation Problems", Issue 16, Space and time problems in modern natural science (based on the proceedings of the second international conference). Part II. St. Petersburg, 1993, 373 pages

This collection covers the material on the development of the methods of classical physics, critique of the relativity theory, the alternatives, new experiments, and problems of scientific ethics.

Science is the knowledge in which we place our faith, the solution to our problems, the way out, the way up.
 -Thomas A. Bass

LETTERS

LETTER FROM BERT SCHREIBER

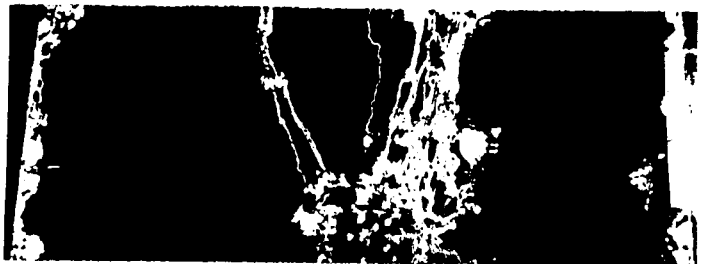
I have some completely new experiments which, like cold fusion, some can be duplicated, some not. The report on this is around 24 pages alone and only covers the basics. The equipment is cheap, less than \$100 will cover everything.

I am attaching one of the experimental results which apparently verifies the Z-pinch effect.

If you think readers will be interested in trying themselves, I will be glad to send copies of pages out of my copyrighted book for you to disseminate (all rights reserved).

I will not make any detailed attempt to explain these films [metallic backed mylar]. They were "shot" using a high voltage quenched spark gap attached to electrodes (razor blades, leaving the vertical lines at the ends of the film as point of contact).

According to current theory, the electrons are supposed to flow directly from one electrode to the other. Apparently not, because some of the metal of the films has been removed (blown away) at essentially right angles to supposed electron flow. In one film [he sent 4 samples] the center is blown away almost at the exact center point between electrodes.



White lines show areas where metallic backing was "blown" completely off the film, or where the end contacts were.

LETTER FROM THOMAS VALONE

... You may be aware of my book on the subject, The Homopolar Handbook: A Definitive Guide to Faraday Disk

and N-Machine Technologies, due to be reprinted in paperback this summer, which includes my Master's thesis and provides the basis for much of my argument.

My critique starts with Paramahansa Tewari's 1993 ISNE paper, which upon the invitation of Toby Grotz, I wrote a two-page "Tewari Report" analyzing his mistakes with the N-machine. Tewari believes that there is an absence of relative motion between the conductor and the magnetic field, which shows he has not done a literature search. He also proposes that such a low voltage, high current machine proves his Space Vortex Theory which generates "mass of electron from the mass-less medium of space." Experimentally, he fails to mention the power factor of the **AC drive motor** or the motor efficiency curve, both of which are vital to input power calculations. Tewari also uses I^2R for the calculation of the output power of the homopolar generator instead of the more reliable $P=IV$. This doubles the error in the measurement of current, not mentioning the resistor error, which can be as high as 10%. Yet, when his machine shows a large, increasing back torque, or drag, Tewari still wants to claim 9 kW output from the machine with 7kW input. It's basically an error in measurement.

Since you mention Inomata, I will comment briefly on his latest paper from 1993 IECEC which is based upon only a 3 inch disc magnet with a 2.5" hole in it. The hole actually reverses the field through the conductor, as shown graphically in my paper on "Armature Reaction in the Homopolar Generator," published in the 1993 ISNE Proceedings. This only begins the problems for Inomata for his current shunt is a milliohm shunt instead of a microhm shunt, while his brush resistance varies radically up to 70 milliohms. With all of this resistance, it is not unusual that the input power to his drive motor goes as high as 300 watts but his little N-machine only can put out 10 watts at its peak (3% total efficiency). He also admits that his back torque is "rather big" but because his homopolar generator output seems to increase with speed, he states that "we had confirmed the incremental over-unity or local violation of energy conservation law. We have concluded that the N-machine is one of different devices and machines which can elicit electrical energy from the vacuum." The basis for his conclusion should never include "incremental" efficiency for even a light bulb will show over-unity efficiency, incrementally.

Lastly, the originator of the N-machine, Mr. Bruce DePalma, is the subject of my 10-page article in the summer edition of *Extraordinary Science* entitled "The Real Story of the N-Machine," which was suppressed by the 1994 ISNE Steering Committee. After fourteen years, I have finally described the details of the early 1980's when N-machine technology was at its peak. All of the

critical photos and quotations were included for the public to reach an informed conclusion.

Sincerely, /s/ Thomas Valone

Meetings

DENVER SYMPOSIUM REPORTED

Richard Hull, "Reports from the 1994 New Energy Symposium," *Elec. Spacecraft J.*, vol 12, 1994, pp 12-17.

The New Energy Symposium, held this past May in Denver, offered researchers and experimenters the chance to meet and network with men and women from all over the world who share the hope that someday soon a new source of energy will be discovered. This article talks about the people and the high points of the symposium, as well as the lectures and demonstrations.

INTERNATIONAL FORUM ON NEW SCIENCE SEPTEMBER 14-18, 1994

New Science includes topics and phenomena which cannot be explained by traditional science and yet may have the potential for significant benefit to the health and conditions for humanity and the planet Earth. The purpose of the forum is to gather open-minded researchers for scholarly presentations and discussions of theories, hypotheses and research results on New Science topics; to provide a constructive setting for interested participants (both lay and professional) to learn more about new science and to provide a worldwide forum and network for its presentation and discussion. Initiating a paradigm shift in science and health care is a major goal of this conference and this association.

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

The Forum will be held on September 14-18, 1994, in Fort Collins, Colorado, at the Marriott Hotel. Several workshops will start on Wednesday evening. Each half-day session will begin with a keynote speaker, followed by concurrent sessions for presentation of papers. Workshops will take place in the evenings.

Registration fee of \$120 will be changed before July 1, from July 1 to September 1 is \$135, and after September 1 the fee is \$150. Daily registration fee is \$55 per person per day or \$30 per half day. Workshops will be offered Wednesday, Thursday and Friday evenings by keynote speakers and others for \$15 each. A banquet will be held on Saturday evening with a special program. The cost of the banquet is \$20 for registrants and \$25 for non-registrants.

The Forum will take place at the Marriott Hotel, at 350 Horsetooth Road. Single rooms are \$59, and doubles are \$69. Their phone number is (303) 226-5200 or 1-800-548-2635. Detailed housing information will be sent upon receipt of registration. Reservations should be made by August 31 to insure group rate.

Sponsored by the International Association for New Science, (303) 482-3731.

SYMPOSIUM ON "THE NEW ENERGY, THE PRACTICAL USE OF VACUUM FIELD ENERGY"

Hotell Foresta, Stockholm, Sept 3-4, 1994
Main Speaker: Dr. Harold Puthoff

Registration fees are US\$ 195, and include lunches and refreshment breaks. Must be prepaid. Hotel rates are \$75 (Fri.-Sun.) and \$115 (Mon.-Thurs.). Write to SAVFE, Scandinavian Association of Vacuum Field Energy, Gräbrödersgaten 10, S-211 21 Malmö, Sweden, or FAX to 46-40-117898.

WANTED: FINANCIAL SUPPORT

We recently received a fax in Russian from the Ukraine. Thanks to Dr. Igor Goryachev, the fax has been translated. A research group has been working for several years on electrochemical cold nuclear fusion. They now have a patent-pending process that produces hydrogen, excess heat, and nuclear byproducts in the form of transmuted elements. Here is a brief summary of their project:

1. The consumable anode material cost about \$1.5 per kilogram.
2. The probable market price of the nuclear byproducts is about \$0.50 per kilogram. [Note: it does not require 1 kg. of anode material to obtain a kg. of byproducts.]

3. The total amount and value of the products obtained will be determined precisely by the end of 1994.

4. It is assured that the commercial efficiency of the process is economically viable "beyond any doubt" if the value of the hydrogen produced is included.

5. The project currently is being developed by five to eight persons.

6. Certain equipment would be purchased from project funds provided.

[Note by Hal Fox: The strong disruption of the value of the currencies in Russia, Ukraine, and Belarus makes it possible to support two or three scientists for about \$1,000 per month. After seven trips to the CIS (Commonwealth of Independent States -- former USSR) I have made extensive contacts with scientists that have some advanced projects and are seeking joint-venture partners. If any of our readers know of any investing entities who would like to participate in this particular development project, we would invite them to contact either Hal Fox or Dr. Igor Goryachev at (801)583-6232 or Fax us at (801)583-2963 for further details. The investing entity should be prepared to invest an estimated \$5,000 to \$10,000 per month for six months. Our group has an office in Minsk and a dollar bank account with PriorBank and are experienced in handling business arrangements in the CIS. Hal Fox is a member of the board of directors of the Ukrainian American International Institute. Also Fox's book (Cold Fusion Impact) has been translated, printed and sold out in the CIS.]

OTHER PUBLICATIONS OF INTEREST

SPACE ENERGY NEWSLETTER, P.O. Box 11422, Clearwater, FL 34616. A quarterly newsletter dedicated to research following in the footsteps of Nikola Tesla, Viktor Schauburger, T. Henry Moray, T.T. Brown and others. Encourages networking of ideas.

ELECTRIC SPACECRAFT JOURNAL, 73 Sunlight Dr., Leichester, NC 28748, 704-683-0313. This quarterly newsletter is the mouthpiece for a network which provides a medium for direct interaction among individuals doing independent research. Supports wide variety of research.

FREE AMERICA NETWORK, P.O. Box 777, Frederick, CO 80530, 303-833-4895. Reports on some scientific research concerned with freeing people from national utilities. Did report on Denver INE Symposium. Mainly concerned with government over-control of private citizens' lives.

The **New Energy News** is a monthly newsletter for the Institute for New Energy, and is mailed free to its members. Yearly subscription rate to individuals is \$35 in the U.S., \$40 to Canada & Mexico, \$50 world wide first class. Rate to corporations, libraries and universities is \$60 anywhere. Contact **New Energy News** for subscription and submissions information at P.O. Box 58639, Salt Lake City, UT 84158-8639. Phone 801-583-6232, Fax 801-583-2963.

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