The Passage of Time ...

ere in New Hampshire the late August leaves give ever-so-slight notice of the approaching fall, when red and yellow and orange will blanket tranquil hills with a riot of color. Soon visitors from near and far will arrive to attend the 1998 Cold Fusion and New Energy Symposium in Manchester, which we and Nature have conveniently arranged to coincide with the peak of the foliage season. One wonders whether the leaves, like the bacteria and higher life forms in some experiments that others have reported, have been transmuting elements all summer long.

Leaves are like lives—emerging, growing, and falling. The unfolding of history in the brief windows of our lives in Cosmic Time makes us aware of the importance of time. So much to do, so little time within which to do it. But we try our best. There are so many questions to be answered, so many extraordinary claims to be properly investigated, and so many people who should be informed of these new directions—and not enough time.

We are blessed with lots of people who have helped our cause. We keep trying to multiply them. A new-found journalist investigator, Charles Platt, will have his major article on cold fusion published in the November *Wired* magazine, on the newsstands in late October. Watch for it. Had we not invited him to explore our field and visit laboratories and ICCF-7, this information would not have reached the prospective 700,000 audience of hightech and high-gloss *Wired*. It has taken time to get to this audience of enlightened technologists, *lots* of care and time.

Almost a year ago, this magazine lost one of the leading lights of our field with the death of engineer/author Chris Tinsley. We deeply feel the passage of that time. A year later, our Publishing Office has expanded and hums with the enthusiastic efforts of a growing staff. Newly arrived here in Bow, New Hampshire is Mr. Ed Wall, who joins us as a key New Energy Research Laboratory engineer charged with helping your dear Editor and others check out various claims for anomalous engines and processes. Burdened as we are already with testing tasks too awesome to contemplate all at once, it is a blessing that Ed made the decision to arrive here when he did! Expect greater things from now on...

And remember, if you are impatient for results and answers: *Things take time*.

Our cover story concerns not new nuclear physics, but overlooked applications of the old nuclear physics—what an overlooked application! Dr. Paul Brown, a respected physicist with Nuclear Solutions, LLC in Colorado, has proposed (and proved, he says) that gamma ray stimulation of hazardous nuclear waste can dramatically cut the half-lives of most of the radioactive nuclides of current focus. Furthermore, the neutron emission from such resonant excitation of nuclei can provide a source of power to carry out the process. We understand that high level discussions with several major corporations may lead to this patent-pending process being introduced in the relatively near term.

Dr. Brown sent me a personal communication that highlights this historical development:

"As you probably know, we are using a high energy x-ray machine which allows us to run experiments on the process ourselves. The latest material I have found in the literature was the work done at Los Alamos where they used colliding electron-positron beams to generate 14 MeV photons, which were then used to photodisintegrate cesium-137 to cesium-136. The purpose of the experiment was to measure the binding energy of the neutron.

"This brings up a very interesting progression. Photo-disintegration was first discovered by using natural gamma emission exposed to deuterium, which emits a neutron to become a hydrogen nucleus. This experiment was further refined to determine the mass of the ejected neutron. Then, it was discovered that the same process (photo-disintegration) could be applied to beryllium-9 which emits a neutron to become Be-8, which almost immediately decays into two helium nuclei (alpha particles). This is where work stopped for some time, because this was all done using natural gamma emission from various radioisotopes. But then came the betatron in 1940. This allowed the generation of high-energy electrons which were then converted to x-rays in the usual manner, allowing the 'mapping' of the nucleon binding energies for all the elements. Of course, all this data is tabulated in the nuclear crosssections reference. Then, in summary, the

g a m m a - n e utron reaction (photo-disintegration) has been used for many years as a research tool for determining the mass of the neutron and its



binding energy to the nucleus.

"The gamma-neutron reaction has also seen practical application, namely the production of neutrons. For many years now, when a source of neutrons is required for a particular application, photo-disintegration, usually of Be-9, is used to generate these neutrons. The number of published papers using this technology over the years is far too great to list.

"I find it interesting that research scientists have been utilizing this principle repeatedly, and in their zeal to develop ever-increasing, high-energy, accelerators and collisions, they simply overlooked the obvious."

Dr. Brown is describing paradigm paralysis perfectly. This is related to the kind of paralysis and lack of vision that has prevented cold fusion and low energy nuclear reactions from receiving the considerable attention that they deserve in the wider scientific community. The hot fusion paradigm has been blind to the new.

Dr. Brown continues his discussion of the implications of photo-disintegration: "Of course, the neutrons produced may also be used in a beneficial manner, kind of a nice by-product. Additionally, I must point out that the treated isotope, with its much shorter half-life is a heat source. This heat may be used together with offthe-shelf technology to generate electricity. In scientific terms: a drum of cesium-137 takes one day to treat. This drum becomes a heat source for the next ten months, and this one drum will produce enough heat to power the x-ray machine for that 10 month period, through the use of a standard heat-to-electricity generator. The real key to this is the odd-A nuclei. In these unstable, radioactive atoms, the neutron is loosely bound. By putting in just a small amount of energy, we unleash the unstable energy contained therein. Much the same as putting

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a match to a log."

Wonderful! This "conventional" process bares some similarity to the match-to-the-log analogy that we have used with "heat-after-death" phenomena that have been found in cold fusion reactions. Once started, the excess heat continues even though the input power has been removed. Cold fusion is really a new kind of "nuclear fire"—without the negative environmental consequences of an uncontrolled fission industry. But now, Nuclear Solutions, LLC has come up with a way of giving us more energy options.

Though Dr. Brown's technology of "photoremediation" of nuclear waste is very welcome, we are mindful of the more astonishing heretical remediation technologies—the electrochemical transmutation methods under development by CETI, The Cincinnati Group, Trenergy, and others soon to come into the fold. It could well be that all these technologies will play a symbiotic role in cleaning up the radioactive waste problem that the nuclear age has left us. Dr. Brown will be at the October 11th CF/NE Symposium in Manchester to discuss progress in his research, as well as to revisit his patented nuclear battery technology that was briefly touched upon in a past issue of Infinite Energy #13/14, p. 52.

We are very proud to be able to publish in this issue the theoretical work of Dr. Robert H. Parmenter, Professor Emeritus of Physics from the University of Arizona. His paper, "A Possible Scenario for the Onset of Cold Fusion in Deuterated Metals," had been rejected out of hand four years ago by a mainstream physics journal because, it was said by a reviewer: "cold fusion does not exist." This rejection occurred even after Parmenter's co-authoring, with physics Nobel Laureate Willis E. Lamb, Jr., of three cold fusion theoretical articles in the Proceedings of the National Academy of Sciences. The abstracts of the latter articles are reproduced in this issue.

Dr. Edmund Storms, productive as ever in his retirement from Los Alamos National Laboratory, graces this issue with another of his extensive reviews of the cold fusion field. Incidentally, but pertinently, "Cold Fusion Revisited" (pp. 16-29) was rejected by the *International Journal of Modern Physics* for the usual spurious reasons.

Does this pattern of rejections of quality papers on cold fusion tell you anything about the health of modern physics? If the establishment physics

journals are sick with pathological skepticism (Ed's phrase) toward cold fusion, then we at *Infinite Energy* are quite happy to make up for its grotesque, unconscionable failings.

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ters, was a part of the presentation.

David Yurth: "A New Approach to a Unified Field Theory." By viewing the torsion fields and the aether as the fundamental causes of electric fields, magnetic fields and gravity fields, Yurth outlined a new view for a Unified Field Theory which must include the torsion fields. Yurth suggests that all fields are effects arising from a universal, holographic causal plane described as the Physical Vacuum. Developments in Russia where torsion field research has been ongoing for more than 25 years was cited and some of the results in the development of new materials was explored.

Hal Fox: "The Superluminal Velocity of Gravity Waves." Fox reported on the life work of Gregory Hodowanec and Bill Ramsay in developing and using gravity-wave fluctuation sensors. It was described that these sensors show that celestial events can be measured (such as the transit of planets through the zenith of the earth's rotation) and that such events appear to be recordable at information transfer rates far exceeding the speed of light. The probable close relationship between gravity waves and torsion fields was presented.

Xian Liu Jiang: "Channeling Effects and Nuclear Reactions in Electrochemical Systems." Jiang reported on experiments to advance the understanding of the low energy nuclear reactions in cold fusion. Nuclear reactions have strong anisotropic behavior and are indicated by the measurement of charged particle beams that have been observed. Processes may be capable of development in which this transient process can be used to enhance the nuclear reactions by several orders of magnitude and bring about commercial applications.

Paul M. Brown: "Solving the Nuclear Waste Problem Through Applied Physics." The presentation was a tutorial on the effect of gamma rays on selected nuclear targets. Under appropriate energy levels a resonance condition assists in the interaction between gamma photons and nuclear reactions. By providing gamma photons at X-ray energy levels, the stabilization of selected radioactive wastes is being experimentally demonstrated.

Hal Fox: "New-Energy Anomalies." Laboratory findings, not consistent with current scientific models, were cited. The further exploration of these anomalies is one of the rewarding areas for scientific advancement. INE members were urged to share information on scientific anomalies.

Valarie Fredley: "A Brief Review of

World Wide Concern and Support for Underdeveloped Cultures." Valarie is an executive employee of the Church of Jesus Christ of Latter Day Saints. She described some of the national and international activities of the newly-formed LDS Charities organization and its worldwide support for the help of people in need. Yalarie was Saturday's featured luncheon speaker.

NETWORKING

Attendees held two separate sessions in which members could network with each other and shares their goals, objectives, and queries. One of the most important summaries of the ensuing discussions is that Kenneth Shoulders is achieving good successes with the further development of high-density, charge-cluster devices for producing energy. Another important new member of INK is David Yurth, who is a key person in the funding for and planned development of torsion field generators and sensors. The consensus for new energy device commercialization is the following: The Hydrosonic Pump is already in production and being marketed. BlackLight Power (Dr. Randall Mills) hydrogen gas development is being funded by at least two electric utility companies. Some solid-state devices are being developed that appear to tap vacuum energy. For the future, one of the most promising technologies is the high density charge cluster technology.

PLANS FOR INE-99 SYMPOSIUM

Plans for INE-99 include the following: Summer 1999 in Salt Lake City, Utah with date to be established. Symposium to be coupled with new energy exhibits open to the public. New Energy companies will be invited to purchase booth space to demonstrate their products. Products are expected to range from publications to working new energy devices and support equipment. A Call for Papers will be published soon.

INE-98 SPECIAL ANNOUNCEMENT

Trenergy, Inc. (one of the corporate supporters of INE-98) announced its affiliation with the WHY Group and Nu Omicron Technologies, Inc. A two-year, two-million dollar development agreement has been signed. The project will emphasize the development of torsion field generators and sensors. An eight- to tenperson development team is being assembled. A suitable building is being purchased. Development work is expected to begin this fall. Trenergy, Inc. is a public company currently selling its

shares in Utah and Nevada. David Yurth is CEO of the WHY Group. Hal Fox is President and S.X. Jin is the Chief Scientist for Trenergy. Trenergy plans to have a Website.

SPECIAL THANKS FOR INE-98 STAFF

The directors, officers, and members wish to thank the staff of INE-98 with special thanks to Robyn Harris (INE Treasurer and Office Manager of Fusion Information Center); Dineh Torres (Graphics Specialist); and Ede. Ede is a special INE volunteer. who has helped in all of the previous new energy conferences. In addition, Derrick Nakarishi gave freely of his time and talents to assist in making the conference a success.

TWO NEW MEMBER CLASSES ARE APPROVED

Three types of membership in the INE are now available: Member; Professional; and Corporate. Please contact INE for information regarding dues and individual membership privileges. (Hal Fox, Fusion Information Center, P.O. Box 58639, Salt Lake City, UT 84158; phone: 801-583-6232; fax: 801-583-2963).

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Did a "free energy" device emerge from the wreckage of the Third Reich and then disappear under the sands of time? Read Robert Nelson's historical review of the Hans Coler episode following World War II and draw your own conclusions. It is fascinating history.

Even more mind-wrenching is John Collins' book, Perpetual Motion: An Ancient Mystery Solved? We offer a variety of reviews. Can it be that in the early 18th Century, Johann Bessler was actually onto something that also disappeared for a much longer time than the purported Coler device? The delicious story entrains such luminaries as jealous antagonists Isaac Newton and Leibnitz. On the one hand, it is supremely difficult to believe that such a device could work at all, especially with what we know of gravity as a "conservative" force. On the other hand, the testing methods employed then and the verification efforts seem sound, at least at first glance. That may be one mystery that never gets answered. Or perhaps, like the recent proof of 300-year-old "Fermat's last theorem," a solution may leap out at us after centuries of time. Reading about Bessler and his travails can only help us to understand a bit more of the scientific revolution in which we find ourselves after all this time. (00)