## **Cold Fusion: Fire from Water**

Istory will record that in the closing decade of the second terrestrial millennium in the common era, human beings began to "burn water" for their primary source of energy.

Thus was the 130 year-old prophecy of Jules Verne fulfilled: "I believe that water will one day be employed as a fuel, that hydrogen and oxygen which constitute it, used singly or together, will furnish an inexhaustible source of heat and light, of an intensity of which coal is not capable. . . I believe then that when the deposits of coal are exhausted, we shall heat and warm ourselves with water. Water will be the coal of the future."—The Mysterious Island, Jules Verne, 1870.

The water "burning" that will transform global civilization will not be the crude chemical burning of hydrogen that so enthralls some environmentalists and fuel cell advocates the world over. That kind of hydrogen burning requires another source of energy to split the water molecule—whether that source be solar power, fossil fuel, or nuclear fission. Nor will it be obscene, last-gasp diversionary technologies such as the splitting of hydrogen from hydrocarbon molecules for use in fuel cells aboard Toyota or Chrysler cars. Just what we need—hydrogen-powered cars running on gasoline!

The technologies that will utterly vanquish the planet's hydrocarbon combustion empires will be the lineal descendants of that remarkable "cold fusion" announcement on March 23, 1989 at the University of Utah. These new energies will come in several "flavors."

One of the most promising "new hydrogen energy" technologies is "catalytic fusion," which is being pioneered in laboratories from New Hampshire to California. It is really a very elegant embodiment of the original Fleischmann-Pons idea, which packed heavy hydrogen nuclei into palladium electrolytically. That electrochemical method suffered from problems in reproducibility owing to materials issues in bulk palladium cathodes.

The pioneering work of Dr. Les Case of Fusion Power, Inc. of Greenland, New Hampshire, which we have profiled in past *Infinite Energy* issues from No. 19 onward, now appears to have been independently validated in a number of laboratories. It began with work at SRI International performed by Russ George and

now continued by Dr. Michael McKubre with catalytic funding, we understand, from a defense research agency (DARPA).

The process is elegant. Heavy hydrogen gas-deuterium gas-in contact with carbon catalysts doped with less than 0.5% by mass palladium, seems to do the trick just about every time the process is tried. As long as the correct catalyst is used and the heat transfer geometry is right, an apparent heat-producing nuclear fusion reaction is catalyzed and helium-4 nuclear ash emerges. Absent are the deadly gamma rays that would be produced in multi-million degree plasma fusion, were this very rare reaction path to helium-4 to occur. What has not yet happened is that blessed self-sustaining mode, in which the reaction, once triggered by auxiliary input, continues by itself. Les Case continues to work toward this critical goal. To the paradigm blinkered conventional physicists, catalytic fusion may be an unthinkable alchemical heresy, but it is happening right now.

Read the interviews with Drs. Case and McKubre in this issue to learn more about progress in catalytic fusion. These were obtained in the course of filming for our forthcoming cold fusion video documentary: "Cold Fusion: Fire from Water." (We expect that this one-hour video program will become available within the first quarter of 1999.)

Another promising water "burning" technology that was triggered by the Fleischmann-Pons announcement is the hightemperature, gas-phase process being pioneered by Dr. Randell Mills at BlackLight Power, Inc. of Malvern, Pennsylvania. In an extensive interview in IE No. 17, Dr. Mills explained his non-nuclear, catalyzed hydrogen-shrinkage reaction. This might be thought of as "superchemistry"—so super that a 200 HP car with a 20-gallon tank of water might travel 100,000 miles. This is a bit more tame than the 55 million miles that a "catalytic fusion"-powered car would travel, but there is plenty of water to go around. Neither process has hazardous by-products-shrunken hydrogen atoms or "hydrinos" from the Mills process, toy balloon variety helium for "catalytic fusion."

In this issue's "Briefs," you will learn that Mills and his staff, flush with new venture capital support, will be relocating to the Princeton, New Jersey area. We predict a catalytic meltdown of the infamous Princeton
Plasma Physics
Laboratory hot
fusion reactor
when Mills and
his boys roll
into town.
Maybe sooner.
BlackLight
Power, Inc. has
let the world



know on its www site that in January 1999 (after we have gone to press with this issue), it will announce a "revolutionary breakthrough." We hope that this will be the long-awaited heat-producing demonstration device. If the world is lucky, it might even be scaled already for electric power generation.

We won't be greedy. Any form of tangible, irrefutable physics-busting technology out of BlackLight Power that "burns" water will be the death-knell for the business-as-usual energy sector. Those who have ignored the signs of impending energy revolution over this past decade are advised to off-load their hydrocarboncombustion stocks—pronto!

Exxon-Mobil et al. will soon look back fondly on the days when crude oil was at its recent highs near \$10/barrel. The emergence of water-burning technology will eventually (perhaps quickly) lead to the price of crude oil dropping to only a few dollars a barrel. This happy event will transpire as the oil cartels—what's left of them—try to dump their remaining reserves on a world market that increasingly will not be needing them (not for combustion, at least). Isn't it wonderful that even in late 1998—before widespread understanding of the new hydrogen energy revolution—gasoline prices in the U.S. have plunged so dramatically? In some U.S. locales the non-tax portion of a gallon of gasoline is approximately the retail cost of bottled spring water! A profile of the future, to be sure.

This issue of *Infinite Energy* has many other articles that are pregnant with promising science and technology. We have the work of Chip Ransford at Nova Resources Group, who took the initiative to explore the Mizuno-Ohmori plasma-electrolysis process in depth. Using ultrapure carbon rods in a very clean cell, he has obtained both apparent over-unity

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energy production and apparent readily obtainable transmutation products. These are ferromagnetic materials coming right out of the water and potassium carbonate electrolyte. See Ransford's "Non-Stellar Nucleosynthesis (p. 16)."

From Italy, Dr. Elio Conte provides a clever experiment involving beta-particle bombardment of a tiny aluminum cathode. He describes this experiment in detail sufficient for many others to check it out. Low-level neutron emission is seen that is correlated perfectly with the meltdown of the cathodes under water. Perhaps this sheds light on the fundamentals of some of the cold fusion reactions. Dr. Conte believes the reaction is an electron-proton fusion. He offers his theoretical insights on the process. We will be hearing more from him in later issues.

Dr. Ruggero Santilli continues his series on the theoretical development of his Hadronic Mechanics as applied to new energies—a prelude to confirming experimental results that he will provide in a future issue of *Infinite Energy*. He is a pioneer in thinking about the shortcomings of quantum mechanics. His work should be examined carefully by those with the talent to do so.

We also report on the astonishing Japanese experimental results involving anomalous hydrogen production from the stirring of water with cuprous oxide catalysts. This work might provide some insight into past claims of excess energy production in water cavitation devices including our own positive results in 1993 with the HydroSonic Pump. Unfortunately, we must at the same time now report negative findings with the Kinetic Furnace, after expending considerable time and energy attempting to coax the machine into life. We do not shirk our responsibility to report failures as well as successes, but failures in one technology—perhaps temporary even in that one-do not detract from what we are convinced is inevitable: a breakout in new energy technology in the early years of the new millennium.

Who has been in the vanguard of keeping information about the impending "Fire from Water" age from the citizenry? Why, none other than those self-righteous denizens of the academia-Government complex, the paragons of pontificating puffery at "CSICOP." Read about them and weep in our expanded "Words to Eat" column in this issue. For a decade now, these bigoted "science cops" have maligned honest, frontier research in new hydrogen energy and

low-energy transmutation. They have been asking for mighty slaps across their smiling faces, and we have delivered the first of many to come—unless an unexpected outbreak of intellectual integrity

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Barbara DelloRusso, Managing Editor bdellorusso@infinite-energy.com

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Fusion, by Tadihiko Mizuno [transl. Jed Rothwell] quotes an orthodox QM theory that includes electron clouds and a harmonic restoring potential as possibly explaining a hypothetical beta-capture proton-transmutation reaction that could account for the convincingly-observed, variegated low-energy-induced transmutations of the metallic ions of the electrode itself. I agree with Mizuno that what is now being discovered by the non-dogmatic minority is not a mere island, but a new continent!

Regards, Bob Bass

the following are comments from our online guest book and www information site. http://www.infinite-energy.com

"Lots of people think that cold fusion is impossible. There's more technology than science in cold fusion and nothing but perpetual engines is impossible. Cold fusion is not PE, so it is guaranteed."

Roman

"It's good to know that you exist and that cold fusion is still alive."

Montford Smith

"Very good source of information and ideas that are accessible to someone like me who has some background scientific knowledge but does not have any particular training in science."

Kerry Hand

"I've noted that your publication evades the input of skeptics. If you defend a fringe position, you should address concerns by sincere skeptics."

Pharlos

"I would like to see results from participating labs made public online for purposes of peer review and experimental verification."

Colin Sheaff

"I'm doing a report about cold fusion and this page helped me out a lot. This page is cool." Wes

"The time will come when a cold fusion device will power every home indepen-

dently. But, it will take another Bill Gates to do it." Herman Kurth

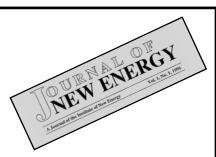
"I just love science and your site."

George Vierling, 14 years old

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occurs at CICOP.

Another wonder of the Cold Fusion and New Energy Age will be the collapse of some of CSICOP's religious fervor as one of its most significant failings becomes apparent to all. CSICOP has deceitfully tried to pass itself off as as an organization dedicated to scientific inquiry in the matter of anomalous energy research. Its own words and actions confirm that at least in the matter of cold fusion energy, some of CSI-COP's major figures have been caught at intellectual fraud. In this case, the fraud is not a small matter or a case of differing philosophical viewpoint about matters of the spirit. This is propaganda and fraud on an unsuspecting public that has affected the very pace of life-sustaining technologies. Fortunately, it is CSICOP, not we, who are going to lose the Cold Fusion War.



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#### **BUREAUCRACY IN ACTION**

- 1. Start with a cage containing five apes. In the cage, hang a banana on a string and put stairs under it. Before long, an ape will go to the stairs and start to climb towards the banana.
- 2. As soon as he touches the stairs, spray all of the apes with cold water. After awhile, another ape makes an attempt with the same result—all the apes are sprayed with cold water.
- 3. Turn off the cold water. If, later, an ape tries to climb the stairs, the other apes will prevent it even though no water sprays them.
- 4. Now, remove one ape from the cage and replace it with a new one. The new ape sees the banana and wants to climb the stairs. To his horror, all of the other apes attack him. After another attempt and attack, he knows that if he tries to climb the stairs, he will be assaulted.
- 5. Next, remove another of the original five apes and replace it with a new one. The newcomer also goes to the stairs and is attacked. The previous newcomer takes part in the punishment with enthusiasm.
- 6. Again, replace a third original ape with a new one. The new one makes it to the stairs and is attacked as well. Two of the other four apes that beat him have no idea why they were not permitted to climb the stairs, or why they are participating in the beating of the newest ape.
- 7. After replacing the fourth and fifth original apes, all the apes which have been sprayed with cold water have been replaced.

Nevertheless, no ape ever again approaches the stairs. Why not?

"BECAUSE that's the way it's always been done around here."

(Circulating on the Internet)

