By Eugene F. Mallove, Sc.D.

Electro-Alchemy and Beyond

Ichemy is in the air. Indeed, it has been very much on the wind since the cold fusion announcement of March 23, 1989. As soon as it got out that helium might be created from hydrogen and metals in jars of water excited by tiny bits of electricity, a new kind of alchemy was unleashed on the world.

Now there is increasing evidence—there is actually over-whelming evidence already—of heavy element transmutations in electrochemical experiments. The question of the hour is whether alchemy has been "resurrected" or whether it never really died? Has it been alive and well in secret places around the globe—much as cold fusion itself has survived despite all the wrong-minded obituaries?

At the very least, alchemy is in ascendency as the 20th century with all its other vaunted scientific discoveries comes to an end. This alchemy revival could well be-most likely is-the greatest science story of the 20th century. We are tempted to call the whole shebang, "Electro-Alchemy," though that may not yet be a broad enough term (see article on page 95). Imagine this: an ancient occult art coming to life-within the framework of rigorous science-to tell us how wrongminded we were most of this century! Wrong about basic scientific fact (the immutability of elements at ordinary conditions)-and using wrong technology to power our entire civilization.

In this century we fought wars over oil and developed horrendous conventional fission and hot fusion (thermonuclear) weapons. The oil barons have had a stranglehold on the planet for a century. It was all for nothing. All along, the answer to global salvation was quite literally in the water —hiding there, just waiting to be discovered!

There is a sense in late 1997 in which the transmutations of

elements at low-energy, alchemy, and "cold fusion" (or is it "cold fission" or "cold fusion-fission"?) are coming together in one grand finale of understanding.

We must tell our loyal readers of the untimely death of our very dear colleague, Christopher Tinsley, who played such a major role in this magazine—with investigations of frontier science too numerous to mention and in stellar compositions of the English language. Those who knew Chris have managed to fill six pages of this issue with tributes to this very great man. They were all stunned by the news.

On October 1st at his home in Nottingham, England, Chris died suddenly and unexpectedly at age 54. He is survived by his children and other family members. His fianceé Susan Seddon, herself a superb writer, will carry on in a likely to be expanded role within *Infinite Energy's* "UK Office."

Though the funeral arrangements and our own recovery process delayed getting into your hands this 2nd Double Issue of 1997 (a record 128 pages!), we trust that you will regard this edition as a fitting memorial to Chris. He was a dear friend, loving father, engineer, superb writer and wit, arbitrator, renaissance man, and more. Basically, a world-class mensch!

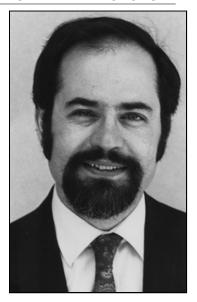
There are so many developments to tell you about in these pages-we wish Chris could have lived to witness them. First, a great landmark: Dr. James Patterson of Clean Technologies, Energy Inc. was awarded U.S. (CETI) #5,672,259 patent September 30, 1997, "System with Electrolytic Cell and Method for Producing Heat and Reducing Radioactive Material by Electrolysis." We can certainly cite this as Patent #1 of the "Electro-Alchemy Age."

Here is the abstract of this monumental achievement:

"An electrolytic cell system and method for producing excess heat for use and for deactivation [of] an actinide series metal by electrolysis in an aqueous media. The electrolytic cell includes a non-conductive housing having an inlet and an outlet and spaced apart first and second conductive grids positioned within the housing. A plurality of preferably cross linked polymer nonmetallic cores each having an improved conductive exterior metallic surface formed of one or more of the actinides or daughter elements therefrom to form a bed of conductive beads are positioned within the housing in electrical contact with the first grid adjacent the inlet. The non-conductive cores are preferably sulfonated and then evaporation loaded with an actinide salt solution, dried and fired at decomposition temperature of the salt. An electric power source in the system is operably connected across the first and second grid whereby electrical current flows between the grids within the aqueous media flowing through the cell."

Even as I write this editorial, the Patterson process for transmuting radioactive actinides is being checked out at high-level places around the country. And people are already liking what they are seeing. How could they not? This is an iron-clad process-with more likely to follow-in which gram-levels of radioactive materials vanish and are fusion-fissioned to yield nonradioactive daughter products. To say the least, Physics-or is it "Fizzix," as Chris would have said-has a lot of explaining to do. THIS SHOULD NOT BE HAPPENING, period. But it is!

And CETI is not alone, as our loyal readers well-know. The Cincinnati Group has begun to distribute its cell kits around the



world—one has already gone out to a high-profile company in Italy. The Cincinnati Group (CG) people have gone to national labs to demonstrate their patent-applied-for process and are beginning to get some positive feedback from observers after some initial setbacks due to cell leaks, etc.

In this issue we feature the preliminary report of Hal Fox and Shang-Xian Jin of Trenergy, Inc., which shows that they have replicated the CG's process many times. We look forward to more comprehensive reports from this outstanding group.

In the next issue of *IE* we will have a complete report of the cold fusion meeting in Asti, Italy, in late November, which William Collis has organized. There is so much excitement in Italy now about transmutation, that the meeting has grown larger than originally planned (see pages 83-84). In fact, Stan Gleeson of The Cincinnati Group will be demonstrating the LENT-1 transmutation cell at the Asti gathering.

For those who are skeptical that a "low tech" electrolytic approach to transmutation can work, we are proud to present the paper of Vincenzo Nassisi from the University of Lecce, Department of Physics, Laboratory of Applied Electronics in Italy (pages 119-

Continued on page 6

122). This physicist used an excimer UV laser to create transmutations on the surface of deuterium-loaded palladium. There is much more to his paper: "Morphologic Deformation and Distribution of Generated Elements in Saturated Palladium Samples Processed by a UV Excimer Laser." Read it and enjoy! Maybe some of the laser boys at MIT and Princeton might even decide to give this a shot, eh? Or, they could just pay CG a mere \$3,000 for a money-back deal on the LENT-1 electrolytic transmutation cell. Better yet, do it both ways, get positive results, and then pull the plug on the hot fusion labs there.

Of all the cold fusion researchers, Dr. Melvin Miles is among the most careful, as his monumental report on his Navyfunded work shows. Jed Rothwell has a wonderful review of the Miles work-an introduction (pages 27-34), but for those wishing to see the full details, we offer the complete report in this issue (pages 35-59). Note well that Miles has documented confirmed helium-production correlated with excess heat generation in Pons-Fleischmann-type cells. This certainly qualifies as one of the first clear indicators of the healthy birth of the Electro-Alchemy Age. Miles calculates that the probability of helium correlation with excess heat not being real is vanishingly small.

With all this low-energy transmutation work going on in the laboratory, we are forced to confront the possibility that low-energy transmutation of even base metals (such as lead or mercury) to gold is a possibility! In this issue of *IE* we have several fine historical reports from Robert Nelson of Rex Research about past claims of alchemical success (pages 97-108). Is this kind of work going on surreptitiously today and has it gone on in the past?

We aren't the only ones to wonder about this. There were some positive results for small amounts of gold production in *thermal* alchemy experiments at Texas A&M University in the Chemistry Department laboratory of Professor John O'M. Bockris in the early 1990s. This work was inspired by the creative proposals and experiments of one Joe Champion, who has now become a conspicuous figure in transmutation work around the world. Now he is based in Arizona and works with many corporations and individuals seeking to investigate the gold-making for themselves.

A sane, highly intelligent hot fusion researcher, Dr. Barry Merriman of the University of California at Los Angeles, has apparently gotten the bug. He is not sure that the results he has gotten so far represent transmutation—far from it!—but he is determined to get to the bottom of why anomalously high levels of gold—100

parts per million level and beyond—sometimes emerge from systems with simple chemical additions to ostensibly (and tested by Barry to be so!) highly pure lead. The non-regular repeatability of these experiments is acknowledged by Dr. Merriman, but he has not given up! In fact, he is working very closely with Joe Champion not only on these table-top thermal experiments, but also investigating what Joe claims are commercial-level operations producing of gold from lead at sites from Nevada to Texas. [Please! Do not ask us for the "recipes," they are still confidential—under non-disclosure!]

All this gold-making investigation—by a hot fusioneer no less!—leaves we mere cold fusioneers seeking a solution to the world's energy problems somewhat breathless. Aw shucks, we'll admit it. We bought the equipment and are going to check out these thermal alchemy processes ourselves. Work has already begun. We are only beginners at this kind of metallurgical analysis with electric kiln and boneash cupels that suck up lead oxides (but

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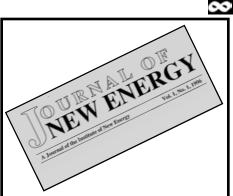
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"Breaking Through" continued from p.6

not precious metals), but we are determined to try to resolve the question once and for all—if Barry doesn't beat us to it. For our part, we'd much rather see free energy than cheap gold and other precious metals—energy is far more important to the well-being of humanity. Furthermore, precious metals such as platinum and palladium are certain to play some role in the electrochemical excess energy systems, though obviously nickel-based, lower materials cost systems might be preferred. But what if platinum could be made cheaply?

We are sure that even <u>cheap</u> gold would not become <u>free</u> gold, because gold has so many uses in anti-corrosion resistance, electric conductors, etc. Think of it! Gold-plated cars and gold-plated bridges! (Literally, "The Golden Gate Bridge.") Still, we wonder how this thermal alchemy—*if it is real at all*—might possibly fit within the context of new physical theories to explain Electro-Alchemy or "cold fusion." That is what is most important. But we could not resist asking economist Charles Barr for his assessment of what the economic consequences of "Gold Fusion" might be (page 96).

Speaking of financial matters, we are happy to tell you that the *New Energy Partners* investment fund has been launched formally. Read about it, take action, and grow rich in spirit and substance. And don't forget to help yourself while helping the world by giving holiday gifts of *Infinite Energy* subscriptions. Bless you all!



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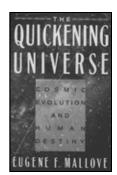
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