By Eugene F. Mallove, Sc.D.

Cheap Electricity NOW!

Talk is cheap, but this is not just talk. We mark the beginning of *Infinite Energy's* second year of publication with a remarkable development. As our extensive cover story reveals, there is now a verified, meticulously documented technology that is able to produce more electricity out than is input to the reactor. It is the so-called XS NRGTM PAGD reactor of inventors Dr. Paulo and Alexandra Correa at Labofex in Canada.

In development since the mid-1980s and before the 1989 cold fusion announcement in Utah, this Pulsed Abnormal Glow Discharge system is well on its way to commercialization for electric power generation in vehicles and in homes. It looks solidly protected by U.S. and foreign patent coverage. Furthermore, it is extensively documented in the copious public disclosures, both in the patents and in others graciously made available to this magazine and reprinted here.

The discovery by the Correas is an amazing achievement: to have isolated a regime of selfoscillating electrical plasma discharge that produces electrical energy directly, with no intermediate thermal conversion step, is a wonder. It may not be the only form of "New Energy"there are other contenders on the way- but it certainly appears to have a commanding lead in the field. We hope that it will "smoke out" other inventors and entrepreneurs, encouraging them to be more energetic in pursuing commercialization of cold fusion and other new energy technology.

How to categorize the PAGD

reactor? It is as though electricity is "squeezed" right out of a metal, for example, aluminum. But the ultimate origin of this energy may well be the vacuum energy of space, as its inventors and Dr. Harold Aspden suggest.

Call it what you will, for all practical purposes, this electricity is *effectively free*. The Correas write conservatively:

"....the cost of kWh produced by this technology is estimated to be *more than* 10 times cheaper than from any other presently available energy source."

The electric car should now be liberated from obsolete primary battery technology. The Correas state: "Moreover, the range of an electrical vehicle utilizing our technology would not be determined by a single discharge cycle of batteries, as those would be constantly recharged by the XS NRGTM power plant. This means that the XS NRGTM electric vehicle could travel >300X the current range of electrical vehicles. And effectively, this range would only prescribe a change of batteries."

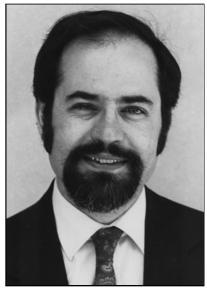
Since we now print at least 5,000 copies of this magazine and have better than 1,000 regular subscribers or recipients in over two-dozen countriesmany of them highly skilled engineers. physicists. chemists, there are bound to be those who should be motivated and able to quickly confirm these results. The patents leave nothing to the imagination. It is crystal clear. There are no "magic," proprietary ingredients. This is as it should be. As you will read, the technology has already been run, in effect, in a self-sustaining mode in the laboratory.

Our good friend Arthur C. Clarke, anticipating the New Energy Age, was quoted in the U.K.'s *Daily Express* newspaper (February 24, 1996): "It's absolutely incredible.. what I've seen makes me 95 percent sure that the greatest technological revolution in centuries is almost upon us. The implications are just stunning."

Well, Art, you wanted a "smoking gun" to take you that last 5% of the way to 100% certainty—this may be it. O.K., O.K ... wait till they send a Correa reactorequipped G.M. Impact electric vehicle to you in Sri Lanka! Since you have reported suffering some major power outages down there recently, maybe you'll settle for a gadget, not connected to the decaying grid, that recharges your computer's batteries?

It is all well and good that we celebrate this new development by the Correas, which was brought to my attention shortly before last April's Third International Symposium on New Energy in Denver, but let us not forget other major developments.

· CETI and its affiliated scientists have now apparently nailed down several of the possible excess heat-producing reaction paths in their Patterson Power Cell. They find that an astonishing cornucopia of transmutations is occurring in the thin metal coatings of their cell beads. This work apparently is confirming the completely independent transmutation studies of Dr. Mizuno and his colleagues in Japan (see page



10 of this issue).

- Motorola tested Patterson cells, and found that with at least one cell they were able to turn the input electrolysis power off, walk away, and have the output power of 20 watts (thermal) continue for at least a half a day! Electrolyte was flowing through the cell at a sustained input/output temperature difference (delta-T) of 15 °C at a flow rate of about 20 ml/min. Hard to fake those numbers!
- · There may now be a theoretical foundation for zero-point energy tapping in water vortex systems- a theory that could become acceptable to mainline scientists. Dr. Claudia Eberlein of the University of Cambridge, writing in the May 13, 1996 Physical Review Letters A, suggests that the light from sonoluminescense is being extracted from the zero-point fluctuations of space! She shows that this explanation is the most likely one to explain the well-established phenomenon that Julian Schwinger delved into in the last years of his life. And, Eberlein provides specific experimental findings about sonoluminescence that could confirm her theory.

Even the May 4th *Economist* magazine (page 110) notes the significance of the Eberlein paper. Of course, nowhere in Eberlein's writing is there any

mention of James Griggs' Hydrosonic pump (which emits blue light from its water vortex), or any other anomalous O-U machines, such as the Takahashi or Kawai magnet motors (see *Infinite Energy #5*&6), but the article makes *very* clear that this phenomenon — if it really is getting energy out of the vacuum — is one of the "weirdest things in physics."

• The examiners at the U.S Patent Office may be brain dead or terminally confused (witness their typical response to cold fusion patent applications these days — see page 60), but the reality of cold fusion and new energy is a major focus in Japan, as preparations for ICCF6 next October in Hokkaido are underway. Perhaps Germany will be next to ignite. Professor Dr. Josef Gruber and Wolfram Bahmann have started the ball rolling in that country. We reprint their open letter, which should be a model for officialdom everywhere:

Testing over-unity devices in Germany

Dear Dr. Mallove, ladies and gentlemen,

This letter is sent to several persons who may be able to supply one or more over-unity devices for "official" testing in Germany.

A two -hour discussion with a high ranking official and his group in Düsseldorf (the capital of the state Northrhine-Westfalia, which is - with some 17 million inhabitants - the largest state of Germany) has recently brought the following good result:

The State Ministry of Economic Affairs, Technology and Transport in Düsseldorf is willing to support activities in which an over-unity device (or perhaps two or more) is tested by specialists at a Northrhine-Westfalian university or research institute. A positive test result will be a breakthrough in matters of "New Energy" in Germany and a tremendous support of the device tested successfully (great publicity etc.) A negative test result would be disastrous in many respects. For these reasons, the test has to be planned and carried out very carefully.

We plan to coordinate and accompany these testing activities in Northrhine-Westfalia (and perhaps also in other States which might provide similar support of the "New Energy" field.)

Please, let us know soon (for sure not later than end of May 1996) whether you could supply one or more devices for testing. If yes, please, give detailed information which may help us in planning and carrying out successfully the intended tests. A negative test result would be a great problem as you can imagine.

Below we specify a few points which may help us in Germany to test your device successfully and to support thereby this device in particular and Space Energy Technology (SET) in general.

- 1. We believe that it is absolutely necessary that you provide as much information about a proper test of your device as available. This may mean, for example:
- The leaders of the test group and we as coordinators are instructed in detail (preferably in your laboratory) before the testing in Germany begins.
- We receive results of previous tests, a brief description of the testing procedures used, the name and address of the testing person or group; in case that differences in test results may be due to differences between or among versions of the device tested, it would be helpful to receive from you information about such differences.
- 2. If there are videocassettes of your device, please, send us soon some copies: two in the American system (NTSC), some 6 or more in the European/German PAL

format if available.

- 3. We receive from you the patent documents in full length.
- 4. Please, state your financial and legal conditions clearly, in a detailed manner.
- 5. We are sure that the German test team(s) insist(s) on an agreement with you to publish the test results (with or without prior statistical analysis of the data). We look forward to your prompt reply.

Prof. Dr. Josef Gruber Chair of Statistics and Econometrics Department of Economics University of Hagen FAX: 49/2331-987-350

Dipl.-Met. W. Bahmann European Secretariat of PACE (Planetary Association for Clean Energy) and International Committee of the Institute for New Energy FAX:49/2443-8221

In closing this commentary, let me say that there is so much more on the frontiers of new energy that we would like to cover in this magazine. Perhaps as the revolution in science and technology accelerates, we will have more resources to do just that. For now, dear readers, we thank you all for your patience, appreciation, and kind support.

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Also available, *Cold Fusion Impact in the Enhanced Energy Age*, a book about the near future of the world energy situation. Phone for information: 801-583-6232



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