A Bombshell in Science

by Eugene F. Mallove, Sc.D.



In January 1941, Austrian physician Wilhelm Reich, a former associate of Sigmund Freud who was then living in the United States as a refugee from Nazi tyranny, brought to the attention of Albert Einstein a profound thermal anomaly: a significant elevation of temperature (average

0.5°C, peak near 2°C, more in other experiments) above the top of a metal box (a Faraday cage). The temperature was higher than that registered by a freely-suspended thermometer in nearby air. In the course of his researches, Reich had measured this anomaly repeatedly with accurate mercury thermometers. To Einstein's credit, he gave Reich a long audience (over four hours), and later measured and verified the thermal anomaly himself on apparatus provided by Reich within a few weeks.

Unfortunately for Einstein and tragic for the world, on the advice of his assistant Leopold Infeld, Einstein very prematurely dismissed the thermal anomaly as a triviality caused by air currents being shielded by a wooden table. He rejected all further communication from Reich about the experiment. As it turns out, that thermal anomaly is real and important, as many investigators have subsequently found. (In preliminary experiments, with some astonishment, I have observed the phenomenon myself.) And, it is associated with electrical anomalies that are relatively easy to measure with standard gold-foil electroscopes placed in such Faraday cages. Taken together, these anomalies offered dramatic insight into a whole new conception of physics—and most likely much else in science, from astrophysics to biology, medicine, and meteorology-based on the preponderance of evidence I have recently examined from many sources. Einstein had told Reich that if the thermal anomaly was real and significant, it would be like a "bombshell" in physics. He was right about that, albeit the bomb had to wait many decades to go off. It is 2001: The explosion has just begun . . .

Beginning on page 12 we present what I believe to be one of the most important technical papers ever to grace this magazine. Dr. Paulo Correa and Alexandra Correa, whose work with patented, over-unity Pulsed Abnormal Glow Discharge (PAGD™) electricity-generating reactors we have previously covered (beginning with IE No. 7 in 1996), have re-examined the thermal anomaly experiment which Wilhelm Reich brought to Albert Einstein in 1941. They have re-done the Reich-Einstein experiment in the most disadvantageous way for Reich (far higher temperature differences—on the order of 10 to 20°C or more—are achievable, they say, by optimizing specially fabricated Faraday cages with multiple layers of dielectric material and steel wool). Still the anomaly persists. They prove conclusively, to the satisfaction of this editor, that this thermal anomaly is real, with extremely high statistical confidence. Others have confirmed this anomaly in working with what Reich called "orgone accumulators" or ORACs, as they have come to be known, but this is the creme-de-la-creme of scientific replications.

Following the Reich-Einstein encounter, World War II played out and we entered the fission nuclear age, a period of obsession by the physics establishment with high energy particle accelerators, thermonuclear weapons, the attempt to control hot fusion,

and abstruse "theories of everything" on the path to a unification of physics, a goal Einstein himself had sought but failed to achieve. This is also the period in which Einstein's theory of Special Relativity (SR) has been considered sacrosanct—not open to criticism by anyone but presumed self-deluded, cranky heretics (of which the publishing record shows there are hundreds).

The world also encountered interminable energy crises and wars to protect access to hydrocarbon fuels. (We are in the midst of another such energy crisis, as this is written.) Then came March 23, 1989. On that afternoon in Salt Lake City, Drs. Martin Fleischmann and Stanley Pons brought another thermal anomaly to the attention of the world—the elevated temperature of a heavy-water palladium-platinum electrochemical cell, above what it should have been for the electrical input power: a persisting calorimetrically measured excess heat that was later confirmed by many high-quality laboratory results. These were buttressed by irrefutable evidence of nuclear ash from low-energy nuclear reactions. The thermal anomaly was brutally attacked by the scientific establishment as foolish error and incompetence; the nuclear evidence was ignored. The thermal anomaly was rejected on the basis of several low-quality, botched experiments, such as that of the hot fusion laboratory at MIT and the misinterpreted experiments by teams at Caltech and at the U.K.'s Harwell Laboratory. History repeated itself: another premature dismissal of a thermal anomaly, another tragic rush-to-judgment.

The attacks against Fleischmann and Pons rose to very high profile in the press and were witnessed by a much larger audience than those who may have known about Reich's travails. Fleischmann and Pons and the scientists who confirmed their findings suffered very badly for their pioneering work. This new energy source from water—even the hope for it, as difficult experiments continued—was denied to the world. Yet Fleischmann and Pons did not have their books burned, as were Reich's in Nazi Germany, in the Soviet Union, and later in the United States in the mid-1950s via the Food and Drug Administration (FDA). This purported arbiter of truth in medicine had arranged by a court-mandated fiat that Reich's claimed biologically interactive, ether-based energy source, which he called "orgone energy" because of its perceived manifestation in certain biological investigations, did not exist. This is precisely what the U.S. Department of Energy (DOE) would do to cold fusion thirtythree years later in 1989. Fleischmann and Pons did not serve time in Lewisburg Penitentiary and die there for their scientific views, as Reich did in 1957. Instead, they and their fellow researchers were subjected to public lynching by the press, egged on by the bigotry of those who claim to be scientists.

In the popular mind, for his purported successful reformulation of basic conceptions of time, space, mass, energy, and gravity, Albert Einstein is ranked as one of the greatest scientists in history. He is the author of the notion of "empty space" or disembodied "spacetime"—a spacetime divorced from energy and mass; he is said to be the destroyer of the physical aether, which all late-nineteenth century physicists agreed had to pervade space in order to explain electromagnetic radiation. Einstein is a "scientific superstar," according to a March 1999 *Time* magazine article (see reprint on the following page). And *Time* named Einstein "Man of the Century." To this organ of misin-

The century gave us scientific superstars like Freud and Einstein, but it also produced its share of ...

CRANKS ...

STANLEY PONS AND MARTIN FLEISCHMANN

Producing energy through nuclear fusion is easy enough to do—provided you have a reactor that can generate temperatures hotter than the sun's. If you could somehow achieve fusion at room temperature, you'd have an unlimited source of power that could retire petroleum, nuclear and solar energy for good.

In 1989 chemists B. Stanley Pons and Martin Fleischmann announced to great fanfare that they had done just that, building a bench-top fusion percolator made up of two electrodes and a slug of heavy water. But Pons and Fleischmann were vague about how their "cold fusion" reactor worked, and when other scientists

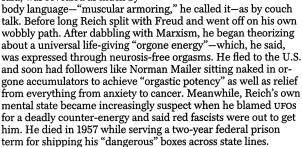
tried to duplicate the pair's results, they got mostly cold water for their trouble.

The University of Utah, which held the patent on the process, allowed it to lapse, and cold fusion fell from view. Pons and Fleischmann repaired to Europe to continue their work—separately and quietly.



WILHELM REICH

Even by his field's indulgent standards, Reich was surely one for the casebooks. Brilliant and charismatic, the Austrian-born psychoanalyst was an early disciple of Freud and produced a shrewd addition to analytic theory: a patient's character, he said, was revealed as much by





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formation the discoverers of cold fusion, whose work led to most of the low-energy nuclear reaction discoveries that followed, are mere "cranks." As you can see in the above reprint, *Time* selected them and Wilhelm Reich for special abuse. Adding insult to injury, this half-page of character assassination appears above an indisputable scientific villain and psychopath, the Nazi war criminal, concentration camp medical experimenter "Doctor" Joseph Mengele.

No surprise, the so-called science writers at *Time* did not mention that Reich and others had obtained repeatable physical measurements of temperature, electroscopic, and other anomalies to substantiate what Reich believed to be a pervading cosmic energy that seemed to be linked to life processes. His "orgone energy" bore some apparent relationship to the cosmic aether, which Einstein had supposedly vanquished. Likewise did *Time* in 1999 ignore the thousands of published technical studies supporting cold fusion and low-energy nuclear reactions. These outrages by *Time* will live in infamy.

It is hard to disagree with the Correas: "The experiment on 'spontaneous heat generation' that Reich set up with Albert Einstein on a winter day in the midst of World War II, at the time when Nazi Germany had the upper hand, is likely the most bungled experiment in the history of science." The second most bungled experiment(s) in the history of science are the claimed falsifications of excess heat by the debunkers of Fleischmann and Pons. In both cases, the methodologies of the sick response by a scientific community, which claims to be objective, are quite similar.

The Correas conclude: ". . . Reich is hereby vindicated by this experiment—even under conditions as disadvantageous

as those we chose, one can detect a significant and persistent, positive temperature difference that proves the irreducible reality of the thermal anomaly discovered. . .For sixty years, the Reich-Einstein experiment has remained forbidden territory—unmentioned by conventional physicists, muddled further by poor experimentation and understanding of Reich's would-be disciples. Not one stringent repetition was ever performed. This alone stands as a tribute to the tortuous slowness of change which the human armor imposes upon human understanding and grasp of natural processes."

The vaunted Second Law of Thermodynamics is hereby conclusively falsified in at least one phenomenon, the Reich-Einstein thermal anomaly. This should be obvious to those familiar with basic thermal physics. The Correas write: "...it is well-established physics that heat can only dissipate—by conduction, radiation, absorption, and re-emission-whereas the observed production of anomalous heat would require that the latter violate entropy and spontaneously accumulate in the outer chamber of the ORAC. Such a notion is not compatible with the electromagnetic notion of passive absorption of blackbody theory—since it requires an active drawing of the radiation field that prevents the equalization of temperatures predicated upon thermal diffusion of energy." The Correas summarize what they believe Reich really had discovered: ". . .that thermal radiation flows both entropically and negentropically by a reverse potential, under assignable conditions..."

The Correas are firm believers in the *First* Law of Thermodynamics, energy conservation, even within the context of their evolving new physics, some of which—far beyond the content of this article—they have decided to publish in the coming months. (*Infinite Energy* will alert its readers on when and how

this compendious experimental and theoretical information can be accessed; please monitor our website for immediate notice.) The Correas state in the present paper: "As thermal energy does not arise *ex nihilo*, it must result from the conversion of some other energy, evidently not thermal." They continue: ". . .it is far from ruled out that sensible thermal radiation cannot take subquantic forms—any more than when one considers latent thermal energy to be the intrinsic energy of a molecule, one is necessarily asserting that this energy exists, as such, as a quantic reality of an electromagnetic nature."

In a comment that, if correct, is *certain* to have enormous import on the development of electromagnetic devices that produce free energy, the Correas lay down this gauntlet: "We believe we can demonstrate both formally and experimentally how the blackbody distribution results from the shedding, above all, by electrons, of kinetic energy that was initially absorbed from exposure to an *electrified flux of massfree energy*. [IE's italics] The implication here is that electricity exists in two distinct quantum forms, massfree and massbound, and that the former, being in fact radiative, interacts with charged matter to yield that smooth distribution that includes thermal photons."

From this time onward, any theorist who claims to have a comprehensive understanding of electromagnetism, mass, gravity, or thermodynamics had best be able to explain the thermal and electrical anomalies that were initially characterized by Reich, and which will be further elucidated in experiments by the Correas and others. For that matter, any nuclear theorist or solid-state physicist who does not pay attention to the results of the cold fusion and low-energy nuclear reaction field cannot possibly claim a coherent grasp of the real physics of this universe. Those who dogmatically persist with the fiction that Special Relativity and thermodynamics are foundationally sound and closed subjects are doomed. In Einstein's ironic phrase of 1953, they will be "shipwrecked by the laughter of the gods."

It turns out there is more to a comprehensive theory of heat than even the Correa's may have perceived, albeit they have grasped a heretofore unsuspected link with concepts of a non-stationary aether. There are, indeed, "more conventional" thermodynamic anomalies that threaten the Second Law of Thermodynamics, which apparently have little to do with the formulation proposed by either Reich or the Correas. Examples of these can be found in the remarkable papers of Maurizio Vignati (p. 22) and Xu Yelin (p. 31). More such results will continue to appear in the coming years. Xu Yelin in China actually created what may be one of the world's first "perpetual motion machines of the second kind" (PMM2)—a device that produces small amounts of electricity for extended periods of time from a uniform temperature reservoir (ambient temperature). It is not a practical device, but its principle and implication is clear: All is far from well with sacrosanct Thermodynamics. Einstein was catastrophically wrong on this point; witness the quote by him in last issue's "Breaking Through" editorial: "A theory is the more impressive the greater the simplicity of its premises, the more different kinds of things it relates, and the more extended its area of applicability. Therefore, the deep impression which classical thermodynamics made upon me. It is the only physical theory of universal content concerning which I am convinced that, within the framework of the applicability of its concepts, will never be overthrown." Ironically, the theory was overthrown right under his nose and he was blind to the evidence.

But though Special Relativity is wrong and Einstein missed the concept of an energetic, non-stationary aether, he is not to be universally condemned, as the Correas will demonstrate in a paper to be published in the next issue of *Infinite Energy*, "Consequences of the Null Result of the Michelson-Morley Experiment: The Demise of the Stationary Aether, the rise of Special Relativity, and the Heuristic Concept of the Photon." He was a great scientist, a great synthesizer of matters that others had brought to his attention, and he had understandable human failings and limitations. Unfortunately, I believe that the status of dogma to which his theories were held has seriously impeded beneficial technologies.

A parting word to those who still believe in the efficacy of Special Relativity and the fiction of four-dimensional spacetime. A simple experiment using mercury thermometers has proved these notions to be flawed by its demonstration of the presence of an energetic aether. To those who will continue to deny, against all odds, the presence of this energetic plenum of nature: Good luck in trying to escape your quagmire of confusion.

In the next issue of *Infinite Energy* we will begin publishing a comprehensive series of articles by experts, including the Correas, which will reconsider the work of Einstein. We will consider the incorrectly cited experimental underpinnings of Einstein's theories and we will deal with questions about what might replace this now unworkable physics. There is no doubt that new theoretical formulations will be required to explain old and new phenomena that Special Relativity and General Relativity Theory explain incorrectly, if at all.

More exciting will be the arrival, now inevitably, of free-energy technologies that build on the physics of an energetic aether. There is absolutely no doubt in this editor's mind, based on tangible physical evidence and experiment, that an era of free energy and exotic propulsion systems is about to ensue. It will be an age unshackled from the dogmas of the past, whether from Einstein, Rudolf Clausius, Lord Kelvin, Sadi Carnot, or anyone else. Energy will be free and the infinite cosmos will be open to Humankind. Whether humanity has the individual and aggregate wisdom to use these new freedoms wisely as they emerge is a far more difficult and ominous question. Amidst some pessimism based on the sorry record of the past, we'll at least try to be optimists! Finally, we promise that in due course, Infinite Energy will address the paradigm shift that will be necessary to assimilate an energetic aether into the biological and other sciences, a task which Wilhelm Reich began and which the Correas and others have taken up. These will be exciting times, but we wish they had come much, much earlier.

Source Material on Wilhelm Reich

Many readers will not be aware of the large body of technical work by Wilhelm Reich (1897-1957), as well as commentary by and about him. The two primary sources we recommend are:

•Orgone Biophysical Research Laboratory, Inc., P.O. Box 1148, Ashland, Oregon 97520. (Tel/Fax: 541-552-0118, demeo@mind.net) (www. orgonelab.org). Since 1978, this non-profit science research and educational foundation has been run by James DeMeo, Ph.D., who has conducted numerous experiments in the orgone energy field. His book, The Orgone Accumulator Handbook, is an extremely useful introduction. It contains history, philosophy, many practical experiments, and references to original documents. (Now also available from Infinite Energy, P.O. Box 2816, Concord, NH 03302-2816, see ad, p. 1.)

•The Wilhelm Reich Museum, P.O. Box 687, Rangeley, Maine 04970. (P:207-864-3443, F: 207-864-5156) (www.tdstelme.net/_wreich), (www.sometel.com/_wreich/). This is an excellent source of primary material, tapes, and books by and about Wilhelm Reich. A large catalog is available. One of the most revealing items, pertinent to discussions in this issue of Infinite Energy is "The Einstein Affair," a 96-page, eye-opening compendium of correspondence between Wilhelm Reich, Albert Einstein, and their associates in the 1940s (in both English translations and original German). Published in 1953 by the Orgone Institute Press, it is shocking, poignant and leaves little doubt about what went on in those fateful days.