

# The Pseudoscientists of APS

Eugene Mallove and Jed Rothwell

**N**ot all attendees at the American Physical Society's Centennial Meeting, held March 20-26 in Atlanta, Georgia, were scientists in the true sense of that word. Many of them were pseudoscientists, as their behavior proved. Some 1,000 physicists, including, we are informed, President Clinton's Science advisor, were present as three pseudoscientists took turns mocking cold fusion at a session dubbed, "Science, Junk Science, and Pseudoscience," Monday afternoon, March 22.

Jed Rothwell, who audio-recorded the entire sorry session, filed this report:

"On Monday there were three good papers on cold fusion, but I had to miss them to attend the anti-cold fusion lynch mob session instead. It featured Bob Park (Prof. Robert Park of the University of Maryland, the APS "spokesman"), John Huizenga (DOE anti-cold fusion henchman, retired), Douglas Morrison (CERN), magician James the "Amazing Randi," and a top Federal science honcho named Dr. Peter Zimmerman from the State Department Arms Control Agency. It was a trip!

"Zimmerman is conducting a *jihad* against cold fusion, vowing to wipe it out in the State Department, the Patent Office (?), and the Commerce Department with the help of the President's Science Advisor. (The Patent Office?!? And they call *us* kooks!) It was depressing and alarming, yet droll. I will describe it in detail when I get a chance. I must tell about the weirdest part here, because if I do not write it down I might think I dreamed it.

"Zimmerman gave a rousing anti-cold fusion talk, pressing all the buttons. He said that one of his first official acts was to cancel a meeting about cold fusion (Conference on Free Energy, later renamed Conference on Future Energy to be held April 29-May 1, 1999 in Bethesda, Maryland; see complete speaker listing on page 85), and 'that's one of the accomplishments I'm proudest of within the last year.' He announced that he and Park will work to exterminate every trace of CF and all other 'junk science' from the Federal establishment. They will see to it that no other meetings are held anywhere else in Washington, which is a hotbed of cold fusion as we all know. He called upon the audience to join him in this crusade, and to report to the highest authorities any rumors about unauthorized research and groups of more than three people caught discussing cold fusion. Naturally, this was met with cheers and applause from an overflow crowd there, which was a sort of sci.physics.fusion [www forum] come to life. I thought people like that only existed on the Internet.

"Anyway, here is the weird part. After the session I approached Zimmerman and asked him for the exact spelling of his name and his job title. He grabbed some papers and held them to his chest, covering his badge, and he said, 'I'm not going to tell you.' He looked like John Cleese in 'A Fish Called Wanda,' when he is caught naked in a stranger's apartment. He said, 'I am not officially here.' I asked if he planned to publish his remarks in the proceedings and he said maybe in a noncommittal tone (meaning: No Way!). Apparently he wants his statements off the record, yet he had made them in front of a cheering crowd and he saw me wearing a press badge, sitting in the front row, taking photographs and recording the lecture on audio tape!

"Does he think I plan to keep it secret? Does he think I am so



Dr. Peter Zimmerman



Dr. John Huizenga



Prof. Robert Park



James Randi



Dr. Douglas Morrison

Photos by J. Rothwell at the APS meeting

dumb I will not look up his name in the conference registry or call State? Let me recap: We have a top science advisor at the State Department—an appointed official of the U.S. Government, mak-

ing maybe \$100 K in taxpayer's money. His proudest accomplishment so far has been to disrupt a meeting, which tells me he needs to get a life, or get a job. He boasted to 400 people that his policy is to ban discussions about cold fusion, and he wants to instigate purges in other departments, BUT he will not put this policy in writing, and he will not give a journalist his name. If that is not Alice-in-Wonderland material I do not know what is. The story is too improbable to sell as fiction.

"To me, this proves once and for all that there is no conspiracy against cold fusion. Two reasons:

1. A guy who tries to hide his name tag could not conspire his way out of a paper bag. His 'cover up' is literally a piece of paper held to his chest, to cover up. Not James Bond.

2. When you announce it is your policy to oppress a field of science to a cheering crowd of 400 [revised upward to 1,000 by Douglas Morrison's count, which in this case we gladly accept] people, and you ask them to join you, that is not a conspiracy, folks. Conspiracies are covert, this was overt (except sort of *ex-post facto* off the record). This was no conspiracy, it was a Movement, a Revival, or a Crusade. It was like nothing I have ever seen before, or ever hope to see again.

"And no, I did not snap a photo of the guy holding the paper over his name tag, but by golly I hereby claim the movie rights."

Formally, the session "papers" and then descriptions were listed as: **Session FB22 - SCIENCE, JUNK SCIENCE, AND PSEUDO-SCIENCE.** Three presentations:

**[FB22.01] Never Get in the Way of a Collapsing Wave Function,** Robert L. Park (Department of Physics, University of Maryland)

A best-selling health guru explains that his brand of spiritual healing is firmly grounded in quantum mechanics; power companies have invested millions in a device that generates energy by shrinking hydrogen atoms into a state below the ground state [Editor's note: Park is referring to BlackLight Power Corp.—see *IE* No. 17 pp. 21-35 and *IE* No. 24 pp 36-39]; half the population believes Earth is being visited by space aliens who have mastered faster-than-light travel; and chaos theory is offered as the basis of homeopathic remedies that are so dilute that not a single molecule of the medicine remains. People are eager to believe that modern physics validates quack claims. Unfortunately, they are encouraged in this belief by physicists who pander to the public's appetite for the weird.

**[FB22.02] Shaping Public Ideas on Science: A View from the House,** Hon. Rush Holt (Member of Congress) [Editor's note: A hot fusion physicist who was elected to Congress in 1998 (see *IE* No. 21, pg. 36). He was replaced by Peter Zimmerman]. This abstract not available.

**[FB22.03] Things to Fall Down Laughing About,** James Randi (James Randi Educational Foundation). This abstract not available.

Jed Rothwell continued his on-site report from the APS meeting: "Cold fusion was not the only subject discussed in this session. I think Zimmerman devoted much of his time to it, but Park and Randi spoke mainly about other things including psychokinesis, astrology, ESP, facilitated learning, and magnet therapy to

relieve pain. Randi discussed Jacques Benveniste in detail, and he described a visit to Joe Newman, who seems to have a talent for making a bad impression on people (including me). Most of the discussions were devoted to outlandish fraud and ignorant scientific mistakes made by superstitious people.

"None of the speakers has contributed to the cold fusion literature. As far as I could tell, none of them has read the peer reviewed experimental literature. Hostility toward new ideas is inversely proportional to knowledge. Zimmerman has read some articles in *Infinite Energy* magazine. He showed a schematic from Dr. Paulo Correa's device (Editor's note: Perhaps from *IE* No. 7 or No. 8, but who knows.); he briefly described the Mills theory, and he said that Paul Brown's nuclear battery would require impossibly large amounts of Strontium-90 if all of the energy comes from conventional nuclear reactions. This is obvious, and it is why we ran the article in *Infinite Energy* (*IE* No. 13/14, pp. 52-53).

"Zimmerman did not say anything technical about conventional palladium cold fusion. He glanced at a list of speakers from the canceled State Department meeting and said that he has never heard of Drs. Ed Storms and Michael McKubre, which means he has not read the literature. I asked Robert Park whether he has read McKubre's papers, which I had mailed him and so had Gene Mallove independently. He said, 'No, why should I? It is the same old thing, and none of it has been replicated.' The fact that McKubre is a replication of Pons and Fleischmann has not occurred to him. To him, every cold fusion claim stands alone; none reinforces any other.

"The speakers recognize no shades of grey, no spectrum of probability. As I see it, the spectrum runs from zero probability (astrology) to 100% certain (Newton's laws), with most things falling in the middle. ESP is so unlikely I would not bother investigating it [Editor's note: Gene Mallove strongly disagrees with Jed here, based on the experimental work of Prof. Robert Jahn *et al.* at Princeton], but astounding as it might seem, there is some clinical evidence that magnets may alleviate pain in post-polio cases, so I would place it low on the believability scale, but I hope someone takes the trouble to investigate it. (See *The New York Times*, December 9, 1997, "Study on Using Magnets to Treat Pain Surprises Skeptics.") Randi asked one of the magnets healers why he thought the therapy worked. The person replied that magnets might attract hemoglobin. Randi ridiculed this hypothesis at length, and showed that a living body is slightly repelled by a powerful magnet.

"It did not occur to him that a hypothesis may be wrong, but the treatment might be effective anyway. Like many skeptics, he confuses observations and hypotheses, and he rejects observations when the person reporting them has no scientific training or reasonable hypothesis. On this basis we would reject all knowledge from the prescientific era. We would assume that our ancestors must have been incapable of cooking or metallurgy because they no idea how combustion works. It also did not occur to Randi that nerves work by transmitting minute electric currents, which might conceivably be affected by mild magnetic fields. He rejected a naive and obviously mistaken hypothesis, as I would have, but he did not take the trouble to think for a moment to discover another on his own.

"After the meeting I suggested to Park that perhaps the Mills theory is wrong but the technology may be valid, because it seems unlikely that power companies would invest \$10 million without first independently testing the devices. He would hear none of this. He said the power companies have been duped—they never tested anything. He said, 'I know about that, I was involved in it,' evidently as a consultant. If Park was involved and yet the power

company engineers and executives went ahead with the investment anyway, they must be very confident of their results. This is the best endorsement of Mills I have heard!

"The speakers and members of the audience expressed no skeptical self doubts. They are more certain of everything than I am of anything. No one said, for example, 'Scientists can make honest mistakes.' Not one word was uttered in defense of academic freedom. Instead, they said cold fusion is fraud and it must be stamped out. Every mention of cold fusion was met with gales of derisive laughter. One person told me Julian Schwinger was either insane or senile at the end of his life. Apparently, this attitude is pervasive throughout the APS. (Schwinger quit the APS to protest its treatment of cold fusion.) One of the speakers said that a few years ago the APS gave an award to Randi. The president was initially opposed to giving the award to a magician, because he did not think science needed someone like Randi to clean house, but when he presented the award he said that Pons and Fleischmann convinced him that scientists are vulnerable and they need Randi after all.

"I did not expect a scientific presentation from James Randi, but I did go to this meeting expecting to hear the professionals say something like: 'Bad ideas in science range from outright fraud and quackery, to things like cold fusion, which died quickly in 1989.' Instead, the clock was turned back to the raucous meetings at MIT in 1989. The anger was palpable, and the audience cheered as speakers lambasted cold fusion. Many people who have worked on cold fusion and other unconventional energy were attacked. The speakers seem to have it in for Dr. Hal Puthoff and Pons and Fleischmann in particular.

"An older scientist told me he knew and once respected Ed Storms, 'but Ed knows nothing about measuring tritium.' I asked whether he thought Claytor (LANL) and Srinivasan (Bhabha Atomic Research Center) also know nothing, but he turned away and would not answer. I expected some degree of academic civility, but I saw none. I knew that Zimmerman canceled the Conference on Free Energy meeting at the State Department. I expected he would say, 'I felt this meeting was inappropriate for the State Department and should be moved to the DOE or some other agency involved with energy.' Instead, he vowed to stop the meeting at any other department. He said that he and Park would work to expose and purge anyone at the patent office who sympathizes with cold fusion. 'Bob Park will sink his teeth into that one,' as he put it." [End of Jed's report.]

Zimmerman introduced Robert Park, making a few prefatory remarks including, "The genesis of this session is when I began to notice, close to a year ago, that 'junk science' had become all pervasive in places where I was very much afraid to see it. On public broadcasting systems—NPR—masquerading as news on various networks every day of the week." Later, "I will shamelessly show how the First International Conference on Free Energy, now ain't gonna be held, and that's one of the accomplishments I'm proud of stopping." [applause]

"The first speaker today will be Bob Park with his witty, irreverent and almost always very accurate 'What's New' available on the web, then I'll come on after that and then we'll have James Randi, who will also be talking on pseudoscience and junk science and the like."

Robert Park touched on several topics, especially the Jacques Benveniste 'memory of water' studies and other claims of homeopathic effectiveness. Though his abstract promised a public denunciation of Mills's theory of sub-ground state hydrogen atoms, this did not happen, but he threw in what he thought was a cheap shot against cold fusion. Being a fast-talking 'smart alec' is Park's stock-in-trade:

"It's a pleasure to be here to talk about this. James Randi and I shared a platform a few years ago in San Jose. This is an important day, this is the eve of a double anniversary, I thought I'd point that out. This is the tenth anniversary of the announcement of cold fusion at the University of Utah, but it is also the 16th anniversary of another important announcement. . . [Star Wars]. . . I calculated the odds that this was by chance.."

One realizes that Park probably understands that he is no longer capable of even beginning to address the experimental evidence in the cold fusion and new energy fields, so he resorts to cheap *ad hominem*s and ludicrous, irrelevant comparisons with President Reagan's missile defense announcement.

As for having James Randi as a guest of honor at the APS Centennial meeting, following Park around from San Jose to Atlanta, what a joke that is—on the APS. When the APS has to start holding revival meetings to convince itself that cold fusion is false, then they've just about lost the battle. We must admit to feeling a bit of merriment at the antics of the APS clowns. They don't even deserve derision—they're just pathetic. The state of affairs in physics today is sorry, indeed, when physicists have to turn to tiresome magicians to mock experiments that they can't themselves disprove.

### The Canceled Meeting

What got the APS pseudoscientists so riled up was the impending meeting in Washington, "COFE"—now called the Conference on Future Energy, to be held at the Holiday Inn, Bethesda, Maryland. Our scientific colleague, engineer Tom Valone of the non-profit Integrity Research Institute in Washington, DC had arranged with a State Department person for a scientific meeting to be held at the U.S. State Department on April 29-30, 1999. This meeting was to be part of a series called the "Secretary of State Open Forum." The meeting planned for the State Department was to feature a variety of scientists, engineers, and entrepreneurs who would be talking about various proposed advanced energy systems, including cold fusion, which have virtually no associated fuel costs. Other technologies to be discussed were of a more conventional nature, such as solar and wind power—also having virtually no fuel costs. Hence, the conference was called "Conference on Free Energy." Workshops were to be held May 1, 1999 at the nearby State Plaza Hotel.

Within a week of his recently joining the U.S. State Department as an advisor to the Arms Control Agency, Peter Zimmerman had apparently become intellectually offended by the content of the proposed meeting and took action to make sure that it did not occur. He quickly succeeded in getting it canceled. Later, he boasted about this in a misdirected e-mail which fell into our possession!:

Message-ID: <s6f9fcb1.092@acda.gov>  
From: Zimmermanpe@acda.gov  
To: iri@erols.com  
Subject: [Fwd: Re: CONFERENCE] -Reply  
Date: Thu, 25 Mar 1999 09:06:30 -0500

Oh the shame of it all. How dastardly we were to poor Mr. Valone. He and his Aussie friend are embarrassed and it's all our fault. How can they ever forgive us? How can we ever cleanse our souls of this black mark?



Dr. Peter Zimmerman  
Photo by J.Rothwell

I had a wonderful time at the Physical Society meeting in Atlanta, and you and I were hailed as heroine/hero for getting the conference moved out of State. I have reason to believe that a "Higher Power" will get them evicted from Commerce too. I will probably take a direct hit in "Infinite Energy" magazine because they sent somebody to cover the session on Pseudo-science and I was pretty scathing.

Obviously, I'm back at work.  
Cheers, pete

### Here are some excerpts from Zimmerman's remarks at the APS meeting:

"Let me take a few minutes to tell you about the Conference on Free Energy. Free means zero cost, it doesn't mean gives free energy. You'll notice that seminar is sponsored by the Secretary of State Open Forum and that's why I had an in to this.

"About a month ago, I took on a job as the Science Advisor, or Chief Scientist to the Arms Control and Disarmament Agency, which had been independent but will shortly be an arm of the State Department. So I'm housed in that building.

"The week before I was to start, Bob [Park] sends me an e-mail, he tells me in some detail about the content of the Free Energy under the sponsorship of the Secretary of State's Open Forum. It says, "Pete, if you can't get that killed, what's the point of having a State Department?"

"I like challenge and here was a chance to influence an event which had already taken place. A decision had been made. But, you know, I work in Washington and those of us who work in Washington are quite aware that nothing's ever finally decided until the day for it to occur has passed.

"First I should tell you that the program was sponsored by the Integrity Research Institute of Washington and here are just a few of IRI's publications.

"Free Energy: The Race to Zero Point' a video film on VHS. This is an introductory documentary on Free Energy the race to zero point by Thomas Valone who in real life is a Master of Arts, a professional engineer and patent examiner. This should frighten you. He has a selection of energy patents, earthquake prevention and nuclear test [. . .] You know that should add some sense to it, but probably not.

"The first day I was in my new job I went to see the lady who was the current Director of the Secretary of State's Open Forum. A very nice and very sharp woman by the name of Cora [. . .]. I said, 'Cora you have a problem.' Her answer to me was, 'Do you know somebody named Richard Garwin.' [Editor's note: A DOE cold fusion panel member in 1989.] I said, 'Yeah I know Dick, why?' She said, 'Because fifteen minutes ago he put a message on my voice mail which said, Miss [. . .] you have a problem.'

"It didn't take a great deal of effort as a physicist to show that in all probability a conference on free energy was not something that the Secretary of State wished to endorse. I don't know why. . .

"They will tell you they're not theorists, we're engineers and [. . .] we do what works. We're not always sure we can explain, but we try to do what works. Well if a megacurie for 10 milliamps is what works. If you know how to do one over 10 squared.

"I got to show you this picture anyway. This is a Correa machine. . . the discharge passes between two. . . and the electrodes at the end are from information in *Infinite Energy* magazine, this is one of the sources of new energy. Apparently there is an abnormal glow discharge, in other words the system starts pulsing. Well, of course, once it starts pulsing you know what it produces - cold fusion.

"That's the answer. They call it table top nuclear transmutation, they have all kinds of names for it. So far as I have been able to tell from everything Tom Valone has sent me I couldn't find except one paper which discussed accelerator-based transmutation as a way to get rid of radioactive waste that made any sense. It may not be economical, it may not work, but it is certainly a piece of modern physics that passes the snicker test and that's one of the problems. They always manage to mix in a few things which do pass the snicker test and they shelter it in the harbor of the few things like wind power and accelerator transmutations. They use that as cover.

"So you see, they're legitimate, you agree they're legitimate. They're fringe, nobody's demonstrated that yet so we're legitimate. I am appalled to think that as the 20th century draws to its end two years from now that we are still seeing nonsense like that and we have very little defense. And we, as scientists, don't do a damn thing very often to stop it. Well, I decided that it stops as far as I can help it with me. The Physics in Society is going to be putting out, in the next couple of months, a web page on this. We're going to try to do a project in which we collect information about junk science funded one way or another, either for publicity purposes or anything else and we're trying to go after it whatever way we can. I hope that all of you will help.

"And now I have to admit that all the work I did to get this conference killed at the State Department is probably [. . .] because you see Mr. Valone works at the Patent Office and has failed to [. . .] every schedule of the Commerce department. I don't know anybody in Commerce to get burned yet, but many people I talk to do. And I'm hoping that Commerce will give them as warm a reception as the Department of State did.

"I'll take a few questions if there are any . . ."

