FOREWORD

1. The conference

The Tenth International Conference on Cold Fusion was held at the Royal Sonesta Hotel in Cambridge, about a mile from the Massachusetts Institute of Technology, August 24-29, 2003. More than 150 people registered for the conference. There were 113 abstracts submitted prior to the conference, and several talks were added during the conference. About 60 oral presentations were scheduled with 25 minutes allowed for most talks. All oral presentations were given in the main hall, and there were no parallel sessions. Abstracts were submitted for talks on excess heat and related topics, tritium, transmutation, nuclear emissions, theory, and a small number of other topics. Recommendations from the local organizing committee suggested that sessions on the different topics be mixed. This was done (as can be seen in Table 2 on the next page), and it seemed to work quite well.

2. Short course

George Miley proposed that a 1-day short course be developed in order to bring people up to speed on topics of interest to the community. On Sunday, a 1-day short course was presented, with talks by experimentalists and theorists as can be seen in Table I. This was well-attended, and provided a forum for much give-and-take between members of the community.

Table 1. ICCF10 Short course given on Sunday, August 24, 2003.

times	title	speaker(s)
9:00-9:15	Introduction and course objectives	George Miley
9:15-10:00	Introduction to LENR	Ed Storms
10:00-11:00	Review of experimental measurements involving DD reactions	Mike McKubre
11:30-12:30	Review of experimental measurements involving transmutation reactions	John Dash
12:30-1:30	Working lunch discussion session	George Miley
1:30-2:30	Theoretical background for reactions	Peter Hagelstein
2:30-3:30	Theoretical background for transmutation reactions	Akito Takahashi
4:00-5:00	Diagnostics for measurements: calorimetery, ^{4}He, transmutation products/isotopes, radiation, metallurgical analysis	George Miley, Mike McKubre, Ed Storms, and John Dash
5:00-5:30	Summary and discussion	G. Miley and lecturers

Table 2. ICCF10 Program.

MONDAY	Welcome Nuclear emissions Intense laser irradiation Tunneling and associated issues Excess heat Heat and helium On Theory and experiment Heat absorption Posters The public comes to ICCF10
TUESDAY	Letts effect Phonon-exchange theory Defects Superconductivity Preparata theory Iwamura effect Electronic, ionic transport Many-particle cluster theory Case experiment Bose-Einstein condensate approach Posters Demos
WEDNESDAY	Kasagi effect Molten salt approach Ion band models Heat systems and applications Tour and banquet
THURSDAY	Search for ash Transmutation Calorimetry and associated issues Loading and phase Other models Plasma loading approach Modification of radioactivity Resonant tunneling approach Other topics Posters Cold fusion and society
FRIDAY	Slow tritium production Poly-neutron theory and experiment Cavitation approach Website and journal Highlights and closing remarks

3. Topics

One can see from Table 2 the range of topics discussed at ICCF10. In response to the often-asked question, "*What is cold fusion*?", we might respond that cold fusion is made up of the topics studied by people in the field, which includes those listed in Table 2. We will take the opportunity to discuss some of the topics and interesting results presented at ICCF10 in what follows here.

3.1. *Excess heat*

From the inception of the field in 1989, the phenomenon of excess heat production has been central to the field. At previous conferences, we have seen heated discussions of calorimetric approaches and issues, which played a central role at a time when there was some uncertainty within the field about the existence of an excess heat effect. We have also seen a variety of advances in the area, including:

(1) codeposited Pd
(2) excess heat in molten salt systems
(3) correlation of heat and helium
(4) positive feedback
(5) heat after death
(6) excess heat production with metals other than Pd
(7) correlation between excess heat and deuterium flux
(8) Coehn effect stimulation
(9) improvements in the area of technique and reproducibility

At ICCF10, there were several papers on the response of the excess heat effect to laser stimulation, which is new for the ICCF series. It was nice to see a new US/Israeli enterprise contribute, and their excess heat results in glow discharge experiments were very nice. The question of reproducibility was raised at the conference on a number of occasions, with good reproducibility being claimed by several experimentalists (Storms, Swartz, Case, and others). There was little discussion of excess heat in light water systems at ICCF10, although there has been at previous conference.

3.2. *Tritium*

Tritium production was claimed to have been observed very early on in the field, and seemed to be related to helium production associated with excess heat. For example, the helium appears to be born with little kinetic energy – certainly very much less than 24 MeV. Early observations of an absence of neutron emission associated with tritium production indicated that the kinetic energy of the triton was limited to less than 10 keV (otherwise d+t reactions would have led to readily observable 14 MeV neutrons). In this sense, helium production and tritium production seem to be similar. Tritium production was studied in years past by groups including Bockris,

Srinivasan, Storms and Talcott, Cedzynska, Gozzi, Claytor, Celani, Romodanov, Clarke/SRI and others. In this proceedings, the paper by Romodanov on tritium production is an important contribution in the area of experiment, and that of Afonichev is intriguing. Tritium production was also discussed by Violante and colleagues, but this was included in the Transmutation section since the focus of the work seemed to be on this topic.

3.3. *Transmutation*

Early claims of observations of transmutation effects were greeted within the community with great skepticism. It was one thing to think that low-level nuclear emissions could occur, and quite another to contemplate the existence of an excess heat effect. But to imagine that new elements and isotopes could appear was more than most could swallow. Several years and many more experiments later, the case for transmutation is much stronger, and the results quite interesting. The collection of strong papers in this volume on transmutation that appear in this proceedings are indicative of the growing importance of the effect within the field.

In one view of transmutation, the different effects are divided into the following:

(1) modification of isotopic distributions near the surface in Fleischmann-Pons cells (Passell, others)

(2) elemental and isotopic anomalies that appear to be connected to local hot spots (Dash, others)

(3) massive transmutations to both lower and higher mass nuclei commensurate with energy production (Mizuno, Miley, others)

(4) mass 8 and charge 4 transmutation of impurities in a multilayer sample with deuterium flow (Iwamura, others)

(5) massive production of radioactive isotopes (Wolf)

(6) modification of amounts of radioactive isotopes in a sample

At ICCF10, papers on several of these topics were presented. The Iwamura effect was introduced at ICCF9, and is an area of much excitement at the moment, due to the hope that a clear example of a selective transmutation effect will emerge. The appearance of isotopic anomalies generally is attracting much interest in the field at present.

3.4. *Nuclear emission*

The first report of nuclear emissions from metal deuterides was due to Jones and his colleagues at BYU, where evidence for low-level dd-fusion was presented. Since that time, the range of effects claimed has increased to include:

(1) low-level deuteron-deuteron fusion products (Jones, Scaramuzzi, Menlove, others)

(2) low-level energetic alpha ejection (Cecil, Lipson)

(3) low-level ion emission, not due to dd-fusion (Cecil)

(4) penetrating radiation that results in charged particles (Oriani)

We were fortunate to have strong papers at ICCF10 on all of these topics. Observations presented at ICCF10 by Ademenko and Vysostskii appear to suggest that some kind of radiation is produced in the sample undergoing irradiation, and causes massive transmutation on a remote foil. It would be nice to determine precisely experimentally what kind of radiation is involved.

3.5. *Beam experiments*

There appear to be two interesting areas of interest in beam experiments. Numerous experiments have been reported over the years that show an enhancement in the deuteron-deuteron fusion rate at low energy in metal deuterides and in other deuterated materials. As yet, there has been no agreed upon explanation for this, other than it seems to be due to some kind of anomalous screening effect. This effect is illustrated in the paper by Kitamura and colleagues. Lipson and coworkers have argued that the glow discharge can be thought of as a high-flux beam experiment, and present some very interesting results suggesting that the experiments demonstrating the enhancement in cross section can be extended to much lower energy in this way.

The other interesting area that relate to beam experiments has to do with an effect discovered some years ago by Kasagi, in which very broad signals of fast protons and fast alphas are observed in beam experiments where deuterons at 70-100 keV are incident on TiD and PdD. It was proposed that these signals are due to a three-deuteron reaction, as such a reaction is the only candidate that can match end-point energies with a very broad distribution. This was discussed briefly by Kasagi at ICCF10 in his oral presentation. A replication effort carried out at NRL was discussed by Hubler, but unfortunately no proceedings paper was submitted. The paper by Takahashi and coworkers discusses work done at Osaka on this problem.

3.6. *Theory*

There have been a wide variety of theoretical approaches discussed over the years, including anomalous screening effects, weakly-interacting massive particles, black holes, and many other speculative mechanisms. In recent years, theory contributions have been tending to focus on a reduced set of models, reflecting the interests of those still active in the field. Motivated by the low-energy enhancement seen in the deuteron-deuteron fusion yield, and by the observation of low-level fusion products, many theorists are interested in models for screening in metal deuterides (Luo, Frisone, and others). Such studies tend to be more conventional, in the sense that no additional mechanisms are required to account for other anomalies.

Theorists that focus on the more general problem posed by the experimental observations face much more difficult problems. The contributions at ICCF10 can largely be divided into a small number of catagories, including:

(1) resonant tunneling (Li)
(2) ion band states (S. Chubb, T. Chubb)
(3) Bose-Einstein condensates (Kim)
(4) multi-body fusion (Takahashi)
(5) neutron cluster (Fisher, Kozima)
(6) Preparata theory (Preparata, Del Giudice)
(7) phonon-exchange theory (Hagelstein)

Resonant tunneling models postulate the presence of a long-lived state roughly resonant with the that of two deuterons, and proceeds with otherwise conventional physics (which predicts enhanced reaction rates). In ion band state models and Bose-Einstein condensate models, the proponents argue that the effects of Coulomb repulsion are reduced or eliminated, leading to enhancements in reaction rates. Scott Chubb has extended his approach to begin addressing phonon coupling and energy exchange. In Takahashi's model, several deuterons are assumed to tunnel together at the same time. Fisher, and Kozima, have been interested in models involving neutron clusters (neutral particles made up of several neutrons), which have the feature that the Coulomb barrier is not present in interactions with other nuclei. Preparata proposed Dicke-enhanced transitions from two-deuteron states to ^{4}He states, mediated by electromagnetic coupling to plasmons. In the phonon exchange model, a highly-excited phonon mode is assumed, which couples to reactions at different sites, leading to new site-other-site reactions.

4. Demonstrations

Two demonstrations of excess heat production were given at MIT on Tuesday night. One was presented by John Dash and his students Abhay Ambadkar (graduate student); and Corrissa Lee, Shelsea Pedersen, and Ben Zimmerman (high school summer interns). The cells are illustrated in Figure 1. Another was presented by Mitchell Swartz, shown in Figure 2. Transportation from the conference to MIT was provided, and most of the attendees were treated to a viewing and discussions of the experiments. There had been concern about whether the demonstrations would be working during the time allotted for viewing, and we were fortunate in that both cells appeared to show excess heat during this time.

There was in addition a demonstration of excess heat and laser stimulation done remotely over the Internet by Dennis Cravens and Dennis Letts. A photograph of their experiment is shown in Figure 3.

5. The public comes to ICCF10

We invited the public to come to the conference on Monday night to see the poster presentations, and to meet with researchers in the field. Dave Nagel gave an overview of cold fusion research, and delighted the audience during the question and answer period following his talk.

Figure 1. Dash group demonstration at ICCF10, with Corissa Lee. Photograph provided courtesy of Steve Krivit.

6. A typeset conference proceedings

New for this conference are the nice looking typeset manuscripts in the pages that follow. We have been interested in moving toward developing an electronic journal for the field, which would require the development of a typesetting capability. So, it seemed perhaps to be reasonable to attempt a typesetting of the ICCF10 conference proceedings papers.

There are many reasons why this seemed to be a good idea. The International Conference series has provided the primary outlet for publication for papers in the cold fusion field. These papers are being read by an increasing audience. As it is common for scientists to judge the quality of the science reported in a paper by how the paper looks or reads, it seems perhaps to be important to make the papers look more professional. After all, much work typically goes into the research, as well as into the writing. These proceedings papers are in many cases the only publication of work that is done in the area. So we probably should treat these papers more or less on par with journal publications until such time as journal publications in general are allowed.

It was found that in the process of typesetting the papers, and in working with the authors, that the quality of the papers in many cases tended to improve. In some cases, simply typesetting the papers seemed to make them much more accessible and understandable. In other cases, authors took the time to improve their papers when they saw the effort that was going into the typesetting.

Figure 2. Mitchell Swartz demonstrating his cell for ICCF10 attendees. Photograph provided courtesy of Dave Nagel.

The typesetting was done initially by Dr. Kumar's team at Elim Pre-press Services of Velachery, Chennai, India. In most cases, relatively minor revisions of the papers were required, such as corrections of the figure sizing and placement, and these were done by the author.

7. Language revisions

Some of the papers submitted by authors for which English is a foreign language were not easy to understand because of language issues. In this proceedings, a significant revision of the wording was done in order to improve readability. The most significant revisions of this type were done (by P. L. Hagelstein) on papers by Romodanov et al., Lipson et al., Karabut et al., and Vysostkii et al. The English associated with the paper by Mizuno et al. was greatly improved by Jed Rothwell from the as-submitted version, to the LENR-CANR version that we typeset.

8. Videotaping

The oral presentations at ICCF10 were videotaped by Gene Mallove, and can be purchased as a collection of DVDs through *Infinite Energy* magazine. The video resolution is not great, so in presentations where the lettering size is large the

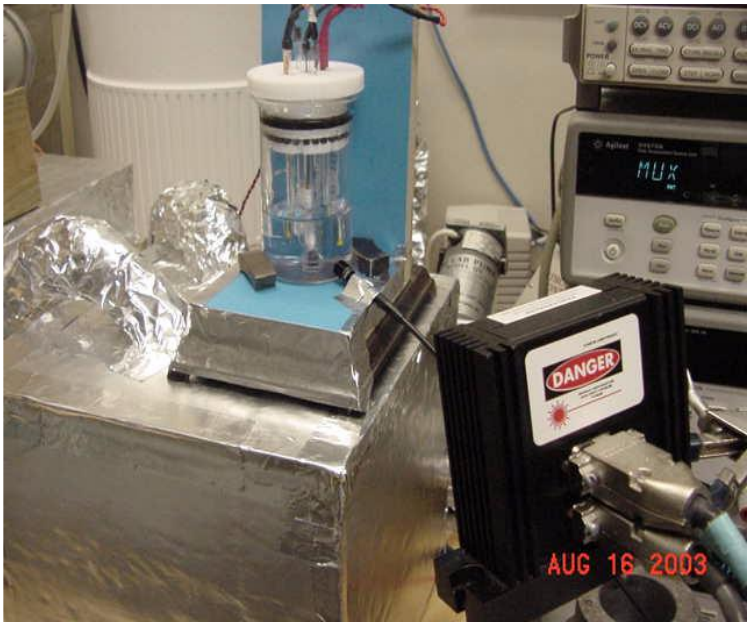

Figure 3. The laser excess heat experiment used for the remote demonstration given by Letts and Cravens during ICCF10. Photograph provided courtesy of Dennis Letts.

viewgraphs can be read, but in other presentations it is difficult to see what is being presented.

9. Absence of skeptics

Researchers in cold fusion have not had very good luck interacting with skeptics over the years. This has been true of the ICCF conference series. Douglas Morrison attended many of the ICCF conferences before he passed away. While he did provide some input as a skeptic, many found his questions and comments to be uninteresting (the answers usually had been discussed previously, or else concerned points that seemed more political than scientific). It is not clear how many in the field saw the reviews of the conferences that he distributed widely. For example, at ICCF3 the SRI team discussed observations of excess heat from electrochemical cells in a flow calorimeter, where the associated experimental errors were quite small and well-studied. The results were very impressive, and answered basic questions about the magnitude of the effect, signal to noise, dynamics, reproducibility, and dependence on loading and current density. Morrison's discussion in his review left out nearly all technical details of the presentation, but did broadcast his nearly universal view that the results were not convincing. What the physics community learned of research in the cold fusion field in general came through Morrison's filter.

Skeptics have often said that negative papers are not allowed at the conference. At ICCF10, some effort was made to encourage skeptics to attend. Gene Mallove

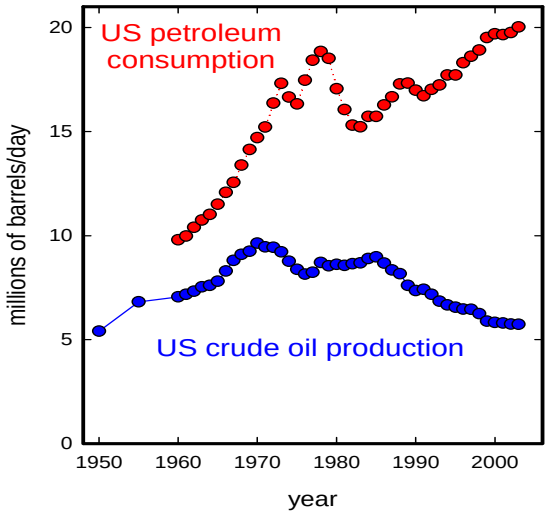

Figure 4. US oil production and petroleum consumption.

posted more than 100 conference posters around MIT several months prior to the conference (some of which remain posted two years later), in the hope that people from MIT would come to the conference and see what was happening. No MIT students or faculty attended, outside of those presenting at the conference. The cold fusion demonstrations presented at MIT were likewise ignored by the MIT community.

To encourage skeptics to attend, invitations were issued to Robert Park, Peter Zimmermann, Frank Close, Steve Koonin, John Holzrichter, and others. All declined, or else did not respond. In the case of Peter Zimmermann, financial issues initially prevented his acceptance, following which full support (travel, lodging, and registration) was offered. Unfortunately his schedule then did not permit his participation. Henceforth, let it be known that it was the policy at ICCF10 to actively encourage the participation of skeptics, and that many such skeptics chose not to participate.

10. Energy Issues

There has been concern about the world-wide energy supply for some time, specifically in the area of oil production. It was suggested in the 1950s by M. King Hubbert that oil production in the US would peak once the available oil was depleted by half, which Hubbert calculated should occur around 1970. This suggestion was not initially well-received. One can see in Figure 4 the history of U.S. oil production, which in fact peaked in 1970 and has subsequently fallen. In the simplest interpretation of this, it becomes increasingly expensive to remove oil from deposits the more they become depleted. Also shown in Figure 4 is the total U.S. petroleum consumption, which shows that there is plenty of demand but not enough oil production to meet

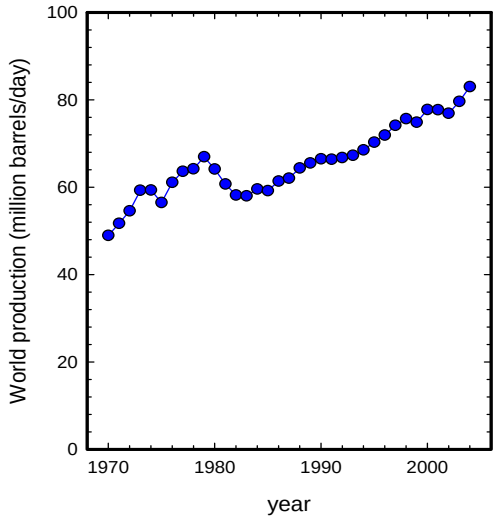

Figure 5. World oil production.

this demand. At present the U.S. imports significant amounts of oil to meet the demand.

It is expected that oil production world-wide will peak once the available oil is depleted by half, and there is considerable discussion at present as to precisely when this will occur. From the data shown in Figure 5, it appears that this had not happened as of 2004. There exist projections as to when this will occur which range between 2005 and 2020. When world-wide oil production falls short of world-wide

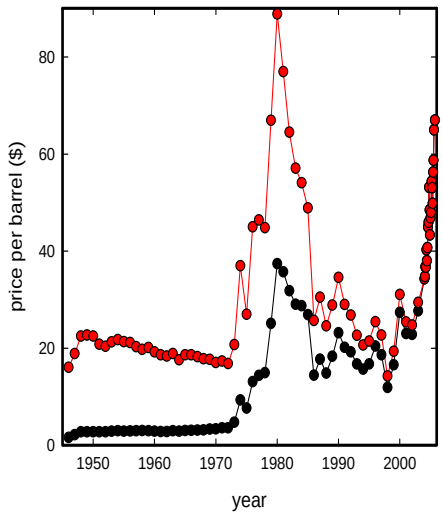

Figure 6. Oil price per barrel. Price in US dollars (bottom); price in constant value dollars referenced to 2005 (top). Prices are given yearly up to 2003, and monthly starting in 2004.

demand, then the laws of economics dictate that the price will begin to rise. As the demand for oil internationally continues to increase at the rate of a few per cent per year, it is only a matter of time before the price begins to rise. The recent price history is shown in Figure 6. For many before 1970, the price in constant value dollars was relatively constant. In the 1970s and 1980s, prices rose due to artificial constraints put on the supply by oil producers. There is concern that the most recent price increases may be due to an inability of production to keep up with demand.

From this discussion it is apparent that the world faces tough problems in the area of energy supply, specifically in the area of oil. Some of those working on excess heat production have wondered why there is not more interest in cold fusion research, especially since laboratory results appear to indicate that energy is being produced, that it has a nuclear origin, and that it is clean.

11. DoE review

One of the reasons that research in the cold fusion field does not attract more interest is because of the events of 1989. Following the initial announcements in March 1989, there was great interest for a while. However, initial efforts to replicate the experiments were generally not successful, and no one had a good explanation why there should be any effects at all.

The Department of Energy conducted a review of cold fusion in 1989. There were five conclusions of this review: that the claims of excess heat were not convincing; that the excess heat was not shown to be associated with a nuclear process; that the neutron emission reported was not persuasive; that there was no reason based on what was known about nuclear and solid-state physics to expect such effects; and that the effects claimed would require the invention of a new physical process different from what had been studied in nuclear physics. Many in the scientific community came away with the opinion that the DoE review had shown conclusively that there was nothing to any of the claims, hence nothing to have any interest in. Huizenga, a co-chair of the review panel, discussed the review and his perspective on it in *Cold fusion, the scientific fiasco of the century.*

Now, it is one thing for the 1989 work to appear to a hard-nosed review panel to be less than convincing, and quite another for there to be no new effects. For example, a perusal of the pages that follow stand witness to some of what people in the field have done and seen recently.

ICCF10 was considered to be very strong scientifically by many who attended. Following this, there was much discussion about re-engaging the scientific community, since it was felt that the results were strong enough so that the field should rejoin with mainstream science. One of the suggestions that was made concerned requesting a new review of cold fusion from the Department of Energy, in the hope that some of the damage done in 1989 might be rectified. In the Fall, 2003, following ICCF10, we requested a new review of cold fusion. Discussions were held at DoE, during which it was proposed that members of the cold fusion community might

work with DoE to assist in a review of the field, with the focus on excess energy production. Some months later, it was announced that DoE would conduct a new review of cold fusion.

We proposed a review that would focus on energy production, as this had been most studied within the field, and as discussed above is potentially important given the tough energy problems that the U.S. and the rest of the world faces. We also proposed to cover material that was most solid within the field in the sense that more than one group had been involved, that we were familiar with, and that there had been time to think about the results.

The DoE charge to the reviewers included three tasks:

(1) Examine and evaluate the experimental evidences for the occurences of nuclear reactions in condensed matter at low energies (less than a few electron volts).

(2) Determine whether the evidence is sufficiently conclusive to demonstrate that such nuclear reactions occur.

(3) Determine whether there is a scientific case for continued efforts in these studies and, if so, identify the most promising areas to be pursued.

In essence, we had proposed to make the case that the experimental evidence supported the existence of an excess heat effect that merited further study. DoE seemed more interested in a demonstration of new nuclear reactions. The existence of an excess heat effect at levels far exceeding any available chemical energy is thought by many to imply the existence of new nuclear reactions, and this is supported by observations of ^{4}He that correlated with energy production. However, the charge to the reviewers implies a focus on specific new nuclear reactions, for which there is not consensus among the different groups in the field at present, and hence was not part of the primary review. Particle emission was discussed as a secondary topic in the review. Although the evidence seemed strong, there was much criticism of the measurements, interpretation, and the results in general.

DoE requested a 15 page summary, and proposed that a few oral presentations be given during a one day session (which was held in August, 2004). The review document that we submitted will appear in the ICCF11 proceedings. The conclusions of the DoE review were posted by DoE, and the specific comments of the reviewers were made available.

Given the very skeptical attitude that prevails among the scientific community, and that also was reflected initially among the majority of the reviewers, it would have been an easy matter for them to conclude simply that: "the evidence does not demonstrate that a new effect is occuring," and that they "do not see a scientific case for continuing these studies under federal sponsorship," as was written by one of the referees. However, this was not what happened. Instead, the DoE summary tells us:

> *"The nearly unanimous opinion of the reviewers was that funding agencies should entertain individual, well-designed proposals for experiments that address specific scientific issues relevant to the question of whether or not there is anomalous energy production in Pd/D systems, or whether or not D-D fusion reactions occur at energies on the order of a few eV."*

The reviewers also indicated two areas that could be helpful in resolving some of the controversies in the field:

(1) *materials science aspects of deuterated materials using modern characterization techniques;*

(2) *the study of particles reportedly emitted from deuterated foils using state-of-the-art apparatus and methods.*

Many more issues were discussed by the reviewers, and in the review summary, which are posted on the LENR-CANR website, and readers are encouraged to look them over.

In regard to the question of whether there is an excess heat effect, which was a major point under discussion, the summary document provided by DoE said:

> *"The excess power observed in some experiments is reported to be beyond that attributable to ordinary chemical or solid state source; this excess power is attributed by proponents to nuclear fusion reactions. Evaluations by the reviewers ranged from: 1) the evidence for excess power is compelling, to 2) there is no convincing evidence that excess power is produced when integrated over the life of an experiment. The reviwers were split approximately evenly on this topic. The reviewers who accepted the production of excess power typically suggest that this effect is seen often, and under some understood conditions, is compelling. The reviewers who did not find the production of excess power convincing cite a number of issues including: excess power in the short term is not the same as net energy production over the entire time of the experiment; all possible chemical and solid state causes of excess heat have not been investigated and eliminated as an explanation; and the production of power over a period of time is a few per cent of the external power external power applied and hence calibration and systematic effects could account for the purported net effect. Most reviewers, including those who accepted the evidence and those who did not, stated that the effects are not repeatable, the magnitude of the effect has not increased in over a decade, and that many of the experiments are not well documented.*

Many of these issues were stated clearly in the review document, and discussed at length in the oral presentations, and it is hard to understand why they are even issues any longer. The amount of energy under consideration is so great that even if it were somehow stored, the resulting energy storage density greatly exceeds any chemical or solid state capability. Power excesses well in excess of a few per cent were presented and discussed. With respect to the last point about reproducibility and magnitude, these conclusions are not consistent with what was presented. Reproducibility has improved, and the ratio of output power to input power has been increasing over the years, as we presented. We continue to be haunted by the ghosts of 1989.

The 2004 DoE review did not produce the definitive vindication that some had

hoped for. But there have been a number of tangible results:

(1) In the review process, we met a harsh panel of reviewers, who expected to make short work of poor science. Instead, when they were presented with research results, attitudes began to change in several cases.

(2) It is now possible to get cold fusion research funded in the U.S. – some very skeptical reviewers have recommended that strong proposals in the field be funded, and we should take advantage of this.

(3) There are cold fusion papers that are being considered for publication in more mainstream journals, and some have now appeared in print.

(4) There is increased interest in the area on the part of the scientific community, as measured by the large number of papers being downloaded from the LENR-CANR website, and by the larger audiences that attend presentations in the field.

(5) Commercial opportunities have increased, as measured by the number of new commercial ventures that are working in the area.

After many years, the situation is beginning to improve. With our continued efforts, we can and we will accomplish more.

12. Gene Mallove

We note with great regret the passing of our friend Gene Mallove on May 14, 2004. Gene (shown in Figure 7) was an early enthusiast and advocate of all things cold fusion from the beginning of the field, and subsequently became an advocate for many people and causes who had been cast out of the mainstream of the scientific community. He wrote *Fire from Ice*, which provided a clear account of the events surrounding and following the 1989 announcements of Jones, and of Fleischmann and Pons. He started *Infinite Energy* magazine, which provided a forum in which those with nontraditional ideas and opinions could have their say. Although we have often not agreed with Gene's views and opinions, to honor Gene we have provided a place for his contribution so that he may have his say.

Acknowledgments

This conference would not have been possible without financial support from the New York Community Trust, from P. L. Hagelstein and Associates, and from the New Energy Foundation. Scott Chubb's personal efforts, and efforts as conference technical co-chair, in helping to make the conference happen in so many ways is acknowledged and greatly appreciated. Also greatly appreciated were the contributions of the local organizing committee, who provided input on all decisions, from where to hold the conference, to which papers should be presented in what order, and many other matters. Larissa Winey deserves special recognition for her outstanding contributions during the conference, including the many runs to Kinko's and other efforts. Jessica Hagelstein and Diego Diaz also helped in the running of the conference, and their efforts were much appreciated. Many thanks for the very capable contributions of the good people at MIT Conference services, who handled

Figure 7. Gene Mallove. Photograph provided courtesy of Mitchell Swartz.

registration and manned the desk during the conference. Gene Mallove and staff at *Infinite Energy* magazine assisted with the preparation of posters, and artwork for the painting Bravery Misplaced was approved by Ed Beard, Jr. Jed Rothwell developed the ICCF10 website. He also worked with the authors to collect most of the manuscripts included in this proceedings. Thanks to Tim Morse who took a picture of the conference participants. The assistance of the wonderful people at RLE Headquarters, without whom the conference simply never would have happened at all. We commend the staff of the Royal Sonesta Hotel for their constant help over the course of the year with preparations, and their competent assistance with the conference itself. Most importantly, we are indebted to those in the cold fusion community who came and participated in the conference.

Peter L. Hagelstein
Massachusetts Institute of Technology
Cambridge, MA
September, 2005