

COLD FUSION EXPERIMENTS AND THEORY DEVELOPMENT

***DOCUMENTATION OF DR. EDMUND STORMS’
LENR RESEARCH CAREER***

SANTA FE, NEW MEXICO

Stage 2 (Organization) Report
Second Draft

Thomas Grimshaw, Ph.D.
Energy Institute
The University of Texas at Austin

Edmund Storms, Ph.D.
Santa Fe, NM



June 3, 2017

Contents

Summary	5
1 Introduction	7
2 Stage 1 Findings	11
3 Research Timeline	13
3.1 1989 Activities and Events	14
3.2 1990 Activities and Events	16
3.3 1991 Activities and Events	17
3.4 1992 Activities and Events	18
3.5 1993 Activities and Events	19
3.6 1994 Activities and Events	21
3.7 1995 Activities and Events	22
3.8 1996 Activities and Events	24
3.9 1997 Activities and Events	26
3.10 1998 Activities and Events	28
3.11 1999 Activities and Events	30
3.12 2000 Activities and Events	32
3.13 2001 Activities and Events	35
3.14 2002 Activities and Events	37
3.15 2003 Activities and Events	40
3.16 2004 Activities and Events	45
3.17 2005 Activities and Events	49
3.18 2006 Activities and Events	52
3.19 2007 Activities and Events	55
3.20 2008 Activities and Events	57
3.21 2009 Activities and Events	60
3.22 2010 Activities and Events	63
3.23 2011 Activities and Events	66
3.24 2012 Activities and Events	69
3.25 2013 Activities and Events	73
3.26 2014 Activities and Events	75
3.27 2015 Activities and Events	77
4 LENR Career Highlights	81
4.1 Pre-LENR Career at Los Alamos National Laboratory	81
4.2 LENR Research at LANL	82
4.3 Research in Private Laboratory	82
4.4 Publications and Conferences	84
4.5 LENR Library	84
4.6 Professional Awards	85
5 Stage 3 Plan	86
Appendix A. Project Methods	87
Appendix B. Stage 1 Summary	91
Appendix C. Pre-LENR Research at Los Alamos National Laboratory	99
Appendix D. Integrated Timeline: Project Components (Except Work History)	103
Appendix E. Integrated Timeline: Work History	143

Summary

Dr. Edmund Storms was one of the first researchers to follow up on the cold fusion claims of Martin Fleishman and Stanley Pons in March 1989. He has continued his cold fusion (now widely referred to as low-energy nuclear reactions, LENR) research in the years since, first in his position at Los Alamos National Laboratory (LANL) and then in his home laboratory in Santa Fe, New Mexico. His work has included both laboratory experiments and development of a theory to explain the LENR phenomenon.

During his 27 years of investigations, Dr. Storms has developed one of the most extensive LENR research records in existence. Much of this work is available in the public realm through his publication of papers and presentations at conferences. There is in addition an extensive body of research results that are in Dr. Storms' private files. A project has been undertaken to compile the publicly-available documents and to capture, organize, and store the private records. The initiative, termed the "Storms LENR Research Development Project" is being performed by Dr. Storms and Dr. Thomas Grimshaw, who also has LENR interest in the area of public policy.

The Project is being accomplished in three stages – information collection, organization, and documentation. Stage 1 began in August 2015. Most of the work was performed onsite in Dr. Storms' home laboratory, with much of the recording and reporting of incremental steps taking place at the Energy Institute at The University of Texas at Austin. The accumulated records are stored in electronic form in the Cloud (Dropbox) and in hard-copy files in hanging folder tubs at Dr. Storms home lab. The records and descriptions obtained in the Project are in seven categories:

Publications	Hard Copy Records
Unpublished Progress Reports	Research Laboratory
Lab Notebooks (Work History)	LENR Library
Electronic Data Files	

The Electronic Data Files Component consists of subcomponents defined on the basis of their origin – Dr. Storms' current computer, ZIP discs, CDs, DVDs, VHS tapes, 3-1/2 inch floppy disks, and an external hard drive. LENR conferences in which Dr. Storms gave presentations and papers have been established as an eighth Component. Records were accumulated for the project during nine on site visits from August 2015 to April 2017. The second draft of the Stage 1 report was submitted on April 18, 2017.

In this Stage 2 report, the records collected in Stage 1 are organized in an Integrated Timeline of the Project Components. The Timeline has been sorted by year and month to prepare the records for additional analysis for the various phases of Dr. Storms' LENR research career. The results of the analysis – and associated narrative – are planned for Stage 3.

Introduction

Cold fusion was announced by Dr. Martin Fleischmann and Dr. Stanley Pons at a press conference at the University of Utah in March 1989. The potential benefits of cold fusion (now widely referred to as low energy nuclear reactions, LENR) as a new source of energy were quickly realized. Numerous attempts have been made worldwide to confirm the LENR claim. Dr. Edmund Storms, one of the earliest researchers to follow up, has continued to conduct research and develop explanations in the 28 years since the announcement. As a consequence, he has created one of the most extensive LENR research records in existence.

Dr. Storms began his career at Los Alamos National Laboratory (LANL) in the mid-1950s. His work was primarily on high temperature refractory materials. LANL was one of the preeminent research organizations where early attempts were made to replicate LENR. Investigations began soon after the 1989 announcement. Dr. Storms led one of the research teams that had success, as indicated by production of tritium and anomalous heat as the unambiguous signatures. He continued his LENR research at LANL until his retirement in August 1991.

After a break in his LENR research activities, Dr. Storms began experiments at his private laboratory in Santa Fe, New Mexico in about June 1995. This experimental work has continued up to the present day. During this timeframe, he has also made contributions to explanation of the LENR phenomenon. His preeminent LENR publications are two books, one published in 2007¹ and the other in 2014². An overview of Dr. Storms' LENR research career appears in Section 4 below.

Storms LENR Research Documentation Project

During his many years of LENR research, Dr. Storms published many reports and has developed a large body of experimental data and unpublished reports. The data and reports currently exist in Dr. Storms' private collection of electronic and hard-copy files. A project has been undertaken

¹ Storms, E., 2007, *The Science of Low Energy Nuclear Reaction*. Singapore: World Scientific.

² Storms, E., 2014. *The Evaluation of Low Energy Nuclear Reaction: An Explanation of the Relationship between Observation and Explanation*. Concord, NH. Infinite Energy Press.

with the assistance of Dr. Thomas Grimshaw to collect and organize Dr. Storms' research files and make them more readily accessible. The initiative is referred to as the "Storms LENR Research Documentation Project" or "Project". It is being conducted in three stages – information collection, organization, and documentation (LENR career summary). A report is being prepared for each stage. Work began in August 2015³ when Dr. Grimshaw made his first onsite visit for information collection. The "cutoff date" for the Project is December 31, 2015.

Information has been collected from more than a dozen sources, referred to as Project Components, in Stage 1. The current draft of the Stage 1 report was submitted to Dr. Storms on April 18, 2017⁴. Additional information on the Project is provided in Appendix A of this report and in the Stage 1 report.

The objective of Stage 2 is to organize the LENR research information collected in Stage 1. The organization is being accomplished by developing a research career timeline. Events, milestones, and other items were identified for each Component, and individual timelines were prepared in Stage 1. After the individual timelines were completed, they were assembled in an Integrated Timeline in Stage 2. The Integrated Timeline has been sorted by year and month to provide insight into the research activities that were taking place year by year. The Timeline has been reviewed and organized for analysis and interpretation for Stage 3, in which a narrative is planned for the various phases of Dr. Storms' LENR research career.

Section 2 of this report provides a brief summary of the findings of Stage 1. The main items of the Integrated Timeline are presented in Section 3. Section 4 contains a highlights of Dr. Storms' LENR research career, and Section 5 outlines plans for Stage 3. Appendices A, B, and C include descriptions of methods used in the project, a more detailed summary of the Stage 1 report, and an overview of Dr. Storms' research prior to his involvement with LENR. Appendices D and E contain the Integrated Timeline in two parts, which are described below.

³ The Project was actually initiated in the Spring 2015 ("Professional Biography Initiative: Next Step". Memo to Ed Storms from Tom Grimshaw, June 10, 2015), but substantive effort began in August.

⁴ Grimshaw, T.W., and Storms, E.K., 2017. Cold Fusion Experiments and Theory Development: Documentation of Dr. Edmund Storms' LENR Research Career, Stage 1 (Information Collection) Report, Second Draft. April.

Conclusions

The future of humankind may well depend on achieving LENR and realizing its benefits as a clean, abundant, and inexpensive source of energy. Dr. Storms has played a key role in advancing understanding of the LENR phenomenon. Society will owe a great debt to Dr. Storms when LENR becomes a reality and is widely deployed as a source of energy.

Acknowledgments

The authors wish to extend their gratitude particularly to their spouses, Carol Storms and JoAnne Grimshaw. Carol participated in the pursuit of LENR with Dr. Storms in the early days of the field. For this Project, she was not only a gracious hostess for the onsite visits, but was also a valuable source of information and perspectives from her early experience in LENR research. JoAnne Grimshaw also provided support both on-site during the visits and in the Austin-based part of the Project. She also reviewed many of the Project reports.

Tom Claytor and Malcolm Fowler, both participants in preparation of proposals that preceded the Project, were also valuable resources for information about LENR development, particularly for the early efforts at LANL^{5,6,7}. Acknowledgment is also given to the managers of the Energy Institute for supporting a LENR initiative within the organization. Thanks especially go to Fred Beach, Assistant Director, for his interest in LENR and for serving as "mentor" for the Project and other activities at the Energy Institute such as energy policy toward LENR.

⁵ The Project was preceded by initiatives by Dr. Storms and Dr. Grimshaw to establish a new laboratory in Santa Fe separate from Dr. Storms' home lab. These initiatives resulted in two versions of a proposal (see next two footnotes), both in collaboration with Dr. Tom Claytor. Dr. Claytor, like Dr. Storms, is a retiree from Los Alamos National Laboratory who operates his own private LENR lab. It is located in White Rock, NM. Funding for the two initiatives has not yet been acquired.

⁶ Storms, E., T. Grimshaw, and T. Claytor, 2013. Proposal for a Santa Fe LENR Research Laboratory, Los Alamos and Santa Fe, New Mexico. December.

⁷ Claytor, T., E. Storms, M. Fowler, and T. Grimshaw (LENRGY Collaboration), 2015. Investigation of LENR for Energy Production. March.

1 **Stage 1 Findings**

The records collected for Dr. Storms' LENR research during Stage 1 include both publicly available publications and unpublished data and reports. As noted in Section 1, information was collected from a number of sources in his home laboratory. The sources have been organized in the following Components:

- Publications
- Unpublished Progress Reports
- Work History
- Electronic Data Files
 - Storms Computer Files (Round 1)
 - Storms Computer Files (Round 2)
 - ZIP and Round 1 CD Files
 - Round 2 CDs, DVD Files and VHS Tapes
 - External Hard Drive Files
 - 3-1/2 Inch Floppy Disk Files
- Hard Copy Records
- Research Laboratory
- LENR Library
- Conferences
- 2007 Book

Brief descriptions of these Components are summarized in this section. More detail is presented in Appendix B. Complete descriptions may be found in the Stage 1 report.

The Publications Component includes about 125 publicly available papers that were prepared from 1989 to 2015. In the Unpublished Progress Reports Component, approximately 111 items were found, many of them prepared to show results of Dr. Storms' work to sponsors. Ten laboratory notebooks were incorporated in the Project, covering the period from June 1995 to November 2015. The notebooks were carefully reviewed and annotated by Dr. Storms, resulting in a spreadsheet with more than 2750 entries. This "Work History" constitutes an a principal Component of the Project.

Electronic data files were obtained from six different sources, which are designated as Subcomponents. Two Subcomponents include files that were obtained from Dr. Storms' current computer on two different onsite visits. Legacy media were another source of electronic files,

including ZIP disks, CDs, DVDs, VHS tapes, an external hard drive, and 3-1/2 inch floppy disks. Each of these media comprises a Subcomponent of the Project.

Hard-copy records, another Component, were found in Dr. Storms' office and in storage areas of his home laboratory. These files, along with the legacy storage media, have been placed in storage tubs in Dr. Storms' home laboratory. The LENR library, also located in Dr. Storms' office, is another important Component; it contains many publications by him and many other LENR investigators. Component descriptions are also provided for Dr. Storms' research laboratory and for the 15 ICCF conferences he attended (of 18 held) from 1989 to 2013, and for a chapter of his 2007 book that is particularly significant for the Project.

2 *Research Timeline*

The elements of information obtained in each Component (and Subcomponent) were reviewed, and dates (month and year) were assigned to the elements where possible. Timelines were then prepared for each Component in Stage 1 using spreadsheets in which the elements were sorted by year and month.

In Stage 2 the timelines for the Components were combined into an Integrated Timeline. This Timeline was also sorted by year and month. The Timeline (excluding Work History) is in Appendix D. The Work History Timeline is in Appendix E. It was prepared separately from the other Components because of the importance of the experiment descriptions to the Project and because it has many more entries in the spreadsheet than all the other Components combined.

The Timelines in Appendices D and E have been further analyzed in this Section, and redundant entries have been consolidated. The entries are also rearranged in the following order: a) work history (lab notebook entries), b) information on experiment and results, c) publications and unpublished reports, d), other information found in the Project, and e) other relevant external (to Dr. Storms' research) items and events in the LENR field. The entries are shown below for each year. This year-by-year presentation provides the basis for defining and describing the various phases of Dr. Storms' LENR research career in Stage 3.

2.1 1989 Activities and Events

March

46FLD Set 1: Star C. Cold Fusion Text Archives
 50HCR Start of LENR memos by Storms while at LANL
 50HCR Start of lab-wide CF-related memos. (REV)
 90BOK First LANL Cold Fusion meeting, Electrochemical fusion, 3/27
 90BOK First LANL Cold Fusion work by Shimson Gottesfeld (MEE-11), 3-28

April

46FLD Set 1: progress. Cold Fusion. Progress & memos & proposal
 50HCR Storms presentation: "Cold Fusion, Present Status As a Significant Phenomenon".
 LANL, Nuclear Materials Division.
 50HCR Hard copy materials (newspapers, etc.) (REV)
 50HCR CF memos at LANL
 90BOK Multiple programs underway at LANL and seven other National Labs, 4/19
 90BOK Energy Research Advisory Board (ERAB) Panel formed by Secretary of Energy
 James Watkins, 4/24
 50HCR LANL Report to the ERAB prior to on-site visit. Tub I, Set 1G
 44CVD, 90BOK "Cold Fusion" by Stanley Pons. April 18, 1989. National Lab
 Colloquium. James Keele. T-120 Copy
 90BOK American Chemical Society meeting in early April. Addressed by Fleishman and
 Pons.
 90BOK Materials Research Society meeting, 4/26

May

46FLD Set 2: backup. Physical Study. Data Index 1990
 50HCR Data from LANL LENR tritium work by Ed Storms. Palladium analysis -
 micrographs, x-ray results.
 46FLD LENR work by Ed Storms: Physical Study. Set 2: back up
 50HCR LENR work by Ed Storms: Cold Fusion Micrographs. Manila envelope. From
 LANL Experiments. "CPM. Chemical and other analyses. Tub II, Set 6B
 50HCR Hard copy materials (newspapers, etc.) (REV)
 50HCR LENR reports by other DOE labs. Livermore, others?
 90BOK Two teams report cold fusion success at LANL, late May
 50HCR Eugene Mallove Media Advisory with attached papers
 90BOK Los Alamos National Laboratory and the US Department of Energy. Workshop
 on Cold Fusion Phenomenal. Santa Fe, New Mexico, 5/23 to 25, 1989.
 90BOK American Physical Society Special Section on Cold Fusion, 5/1.
 90BOK Electrochemical Society Meeting, with presentation by Fleishman and Pons, 5/5
 or 5/7/1989.

June

46FLD Set 1: CF data. cold fusion data folder. 1991 Tritium Production

50HCR Two LANL memos: 6/2/89, 6/9/89 (REV)
50HCR 32 Newspaper coverage of CF (REV)

August

50HCR LANL proposal to DOE for funding CF studies

October

46FLD Archive ARTICLES Part 5 of 5. Archive ARTICLES spanned. Disk label: .
EndNote spanned. Calorimeter studies 2004 spanned. CURRENT ARTICLES.
Developer. Documents. DOE talk

46FLD Cold fusion letters. Set 1.

46FLD Cold fusion text archives. Set 1.

November

46FLD Effect of Hydrating: Paper and data

46FLD Electrolytic Tritium: Paper and data

90BOK ERAB report released

December

46FLD Set 2: Cold Fusion. Cold Fusion archive data

No Month (13)

90BOK Tritium studies with more than 250 cells by Storms and Talcott (late 1989 to 1990)

10PUB, 90BOK Tritium detection in cold fusion experiments by Tom Claytor (late 1989 to 1990)

50HCR LANL experiment data. "Historical data for Twitty homework". Data from earliest tritium work at LANL. "To Sample 203".

10PUB Tritium studies with more than 250 cells by Storms and Talcott, late 1989 to 1990.

10PUB Talcott, CL et al., Tritium Measurements: Methods, Pitfalls, and Results. in EPRI/NSF Workshop. 1989. Washington, DC

10PUB Storms, E., in C Talcott, Attempts to Understand and Reproduce Called Fusion. Workshop on Cold Fusion Phenomenal. Santa Fe. Abstracts. May 1989.

10PUB Storms, E., and C. Talcott. Electrolytic Charging a Palladium with Deuterium Too High Stoichiometry. P. Report, Editor.

10PUB Storms, E., A New Method for Initiating Nuclear Reactions. In First International Conference on Future Energy. Washington DC. Unpublished.

10PUB Storms, E., C. Talcott, and M. David., Recent results for electrolytic tritium production at Los Alamos. 1989.

2.2 1990 Activities and Events

January

50HCR Reports in Italian

February

46FLD Various CF talks. Set 1. (REV)

50HCR "Cold Fusion Data". Manila envelope, Chemical Analysis Reports. Data from earliest tritium work at LANL

90BOK Visit to LANL by Martin Fleischmann

March

43ZCD 103. TRITIUM STUDY. ZIP 4? (REV)

10PUB, 90BOK Storms, E.K. and C.L. Talcott. A study of electrolytic tritium production. in The First Annual Conference on Cold Fusion. 1990. University of Utah Research Park, Salt Lake City, Utah: National Cold Fusion Institute. p. 149.

70LLB, 90BOK 1st Annual Conference on Cold Fusion Conference (ICCF-1), Salt Lake City, Utah (3/28-31/90)

June

50HCR Progress Report for the Period 1/90 – 6/90 (for) Work Supported by USDOE/OBES. TRITIUM PRODUCTION IN ELECTROLYTIC CELLS.

July

70LLB, 90BOK Cold Fusion. World Hydrogen Energy Conference #8. Hawaii Hydrogen 90 (7/22-27/90)

August

46FLD Tritium Data. Set 1: tritium study

October

90BOK Meeting at Brigham Young University hosted by Steve Jones

December

70LLB Anomalous Nuclear Effects in Deuterium/Solid Systems, Provo, Utah. Institute of Physics, AIP Conference Proceedings 228.

No Month (13)

50HCR Miscellaneous transparencies.

10PUB Storms, E.K., Letter to Science. 1990.

10PUB Talcott, C.L. and E. Storms. An overview of "cold fusion". in JOWOG-12 Meeting, Atomic Weapons Estab. 1990. Aldermaston, England. p.

10PUB, 50HCR Storms, E. and C.L. Talcott, Electrolytic tritium production. Fusion Technol., 1990. 17: p. 680.

90BOK Cold Fusion Institute formed in Salt Lake City, directed by Fritz Will (1990-1991)

2.3 1991 Activities and Events

February

46FLD Set 1: papers 2. 28th Intersociety CANR-Paper. ICCF-4. Minsk conf. Review – 1991. Electrolytic heat

March

50HCR Correspondence. Letter stopping LENR work at LANL. McKubre, Rothwell, Entenmann, Biberian, Larsen. Storms “Pile 2”. Miscellaneous materials. Tub VI. Set 19C.

June

50HCR LANL CF memos and related material. Scanned.
44CVD, 70LLB, 80CON 2nd Annual Conference on Cold Fusion (ICCF-2). The Science of Cold Fusion, Como, Italy (6/29/91 – 6/4/91). ICCF2. Lake Como, Italy. Proceedings. Tapes 1 & 2.

July

50HCR Micrographs and Miscellaneous. Includes LANL CF Memos. Set 7A: Photo Micrographs. Data from earliest tritium work at LANL.

December

90BOK Storms receives funding from LANL division leader
46FLD Set 1: calorimeter. Calorimeter drawings, calorimeter graphs
90BOK Palladium samples from Takahashi in Japan analyzed
90BOK "Fire from Ice" by Eugene Mallove
90BOK "Too Hot to Handle" by Frank Close

No Month (13)

90BOK Comprehensive review of LENR up to May 1991 by Storms
90BOK Storms retired (as staff member) from LANL; continued as consultant, worked on cold fusion periodically
10PUB Storms, E., Review of experimental observations about the cold fusion effect. Fusion Technol., 1991. 20: p. 433.
10PUB Storms, E.K. and C. Talcott-Storms, The effect of hydriding on the physical structure of palladium and on the release of contained tritium. Fusion Technol., 1991. 20: p. 246.

2.4 1992 Activities and Events

January

50HCR Cold Fusion Papers. Scanned. Tub II. Set 4B2.

February

50HCR Correspondence: Entenmann, Leitz, Kozima, Little, Fleischmann, Shanahan, Swartz, Rothwell, Dash, Beaudette, Miley, Jones, Srinivasan, T Chubb, Letts, McConnell, McKubre, Polansky, Britz. Scanned. Storms "Pile 1".
Correspondence. Early period – 1990s. Many letters to CF early "major players". 8 folders, in original order of pile. Tub V. Set 18E.

March

50HCR Correspondence: Letts, etc. Scanned. Tub II. Set 4B1.

April

46FLD Set 1: calorimeter data. Excel. Calibration. Pt Test #1-19 + Summary

May

46FLD Set 1: Pd #24-12c. Excell data. Pd #24 to 12c. Excess volume
46FLD Set 1: Pd charging #1-10. Excell data. Pd charging Pd #1 - #10.

July

46FLD Set 1: 1d to now. Pd #1d to now
46FLD Set 1: Calibration. Calibration. Test #1-22
50HCR Correspondence. Scanned.

October

50HCR Lagowski proposal, Swett Committee. Scanned.
10PUB, 80CON Storms, E. Measurement of excess heat from a Pons-Fleischmann type electrolytic cell. in Third International Conference on Cold Fusion, "Frontiers of Cold Fusion". 1992. Nagoya Japan: Universal Academy Press, Inc., Tokyo, Japan. p. 21.
70LLB 3rd International Conference on Cold Fusion (ICCF-3). Frontiers of Cold Fusion (10/21-25/92)

December

43ZCD 5. Archive ARTICLES. ZIP4. Attachment A for expanded description. Incl. ICCF 1, 3-7.

No Month (13)

10PUB Talcott, C.L., et al., Effects on the palladium deuteride lattice constant upon alloying with lithium, draft, Editor. 1992.

2.5 1993 Activities and Events

January

- 46FLD Set 1: Cold fusion talk.
- 44CVD Archive ARTICLES Part 1 of 5. OCCDF-10 + 10 additional folders & files. Disk label: CALORIMETER STUDY spanned
- 44CVD Documents – Part 1 of 15. Archive ARTICLES. Austin talk. BOOK. Calculations. Calorimeter studies 2004. spanned. Disk label: . Archive ARTICLES. Calorimeter studies 2004. spanned.
- 46FLD Set 1: Cold fusion talk
- 50HCR Correspondence: Bockris, Rothwell, Little, Fox, Malllove, Passell, Patterson, Collis, others. Scanned. Storms “Pile 1”. Correspondence. Early period – 1990s. Many letters to CF early “major players”. 8 folders, in original order of pile. Tub V. Set 18A.
- 50HCR Correspondence. Scanned. Most related to manuscripts. 2 folders. Moved to Set 18, Correspondence. Storms “Pile 2”. Miscellaneous materials. Tub VI. Set 19V.

March

- 46FLD Set 1: J#4. 2/29 – 9/5.

April

- 46FLD Set 1: J#4-2. J#4. 3/29 – . graphs & summary

May

- 44CVD DRW1000 Disk 1 of 2. Hearing before Subcommittee on Energy. May 5, 1993. Disk #1. Copied.
- 44CVD DRW1000 Disk 1 of 2. Hearing before Subcommittee on Energy. May 5, 1993. Disk #1. Copied.
- 50HCR, 70LLB, 90BOK Statement of Dr Edmund Storms (Los Alamos National Laboratory, ret.) before the House Committee on Science, Space, and Technology, Subcommittee on Energy, May 5, 1993. Scanned.

July

- 70LLB 4th International Conference on Cold Fusion (ICCF-4). Electric Power Research Institute. EPRI TR-104188-V1 (2,3,4). Project 3170. Lahaina, Hawaii (12/6-9/93). Proceedings Volumes 1 to 4.

August

- 50HCR Papers, Presentations, Miley Experiments. Scanned. Tub VIII. Set 22B.

December

- 10PUB, 80CON Storms, E. Some characteristics of heat production using the "cold fusion" effect. in Fourth International Conference on Cold Fusion. 1993. Lahaina, Maui: Electric Power Research Institute 3412 Hillview Ave., Palo Alto, CA 94304. p. 4. PB15. ICCF4. Lahaina, Maui, USA. Notebook Vol 1, Notebook Vol 2, Proceedings, (4 EPRI volumes), Transactions
- 70LLB 4th International Conference on Cold Fusion (ICCF-4), Lahaina, Hawaii. Notebook, Volume 1.

No Month (13)

- 46FLD Set 2: (Not readable). How to produce P-F effect. FP Award. When to listen. ICCF-4 photocopy
- 90BOK Publication of results of Takahashi analyses
- 10PUB Storms, E.K., Measurements of excess heat from a Pons-Fleischmann-type electrolytic cell using palladium sheet. Fusion Technol., 1993. 23: p. 230.
- 10PUB Storms, E. The status of "cold fusion". in 28th Intersociety Energy Conversion Engineering Conference. 1993. Atlanta, GA,. P.
- 90BOK "Bad Science: the Life and Times of Cold Fusion" by Gary
- 90BOK "Cold Fusion, Scientific Fiasco of the Century" by John Huizenga
- 90BOK Storms final retirement from LANL

2.6 1994 Activities and Events

January

46FLD Set 2: Letters. Cold Fusion Letters. 1984- .patterson data

April

50HCR Correspondence: Breed, Rothwell, Srinivasan, Patterson, Fleischman, Swartz, Little, Cravens, Letts, Miley, Bockris, Beaudette, Claytor, Fox. Scanned. Storms "Pile 1". Correspondence. Early period – 1990s. Many letters to CF early "major players". 8 folders, in original order of pile. Tub V. Set 18G.

May

50HCR ENECO. Scanned. Tub VI. Set 20D1.

June

44CVD Utah's News Team. Cold Fusion. June 1994. Not copied.

August

70LLB Development of Advanced Concepts for Nuclear Processes in Deuterated Metals. Electric Power Research Institute. Project 3170-01, EPRI TR-104195

September

50HCR Correspondence: Jones, Kozima, Beaudette, Valone, T Chubb, Rothwell. Scanned. Storms "Pile 1". Correspondence. Early period – 1990s. Many letters to CF early "major players". 8 folders, in original order of pile. Tub V. Set 18C.

No Month (13)

10PUB Storms, E.K., Walt Polansky DOE Briefing. 1994.

90BOK Storms joined Board of Directors of ENECO by request of Charles Becker

10PUB Storms, E., Chemically-assisted nuclear reactions. Cold Fusion, 1994. 1(3): p. 42.

10PUB Storms, E. Methods required for the production of excess energy using the electrolysis of palladium in D2O-based electrolyte. in International Symposium, "Cold Fusion and Advanced Energy Sources". 1994. Belarusian State University, Minsk, Belarus. p.

10PUB Storms, E.K., Some characteristics of heat production using the "cold fusion" effect. Trans. Fusion Technol., 1994. 26(4T): p. 96.

44CVD Good Morning America. 1994 Cold Fusion. Water-stained. Interview with Ed. Ed provided a copy.

10PUB, 90BOK Hansen, L.D., et al., Cooperative investigation of anomalous effects in Pd/LiOD electrolytic cells. 1994, A proposal submitted to the Department of Energy (1994).

2.7 1995 Activities and Events

March

46FLD Set 2: Hypercard. Backup
 50HCR “Nondisclosure Agreements” Various entities. Scanned. Clasp envelope. Storms
 “Pile 2”. Miscellaneous materials. Tub VI. Set 19J.
 50HCR Kiva Labs: 2010. (Scanlan). Scanned.

April

50HCR Nova Resources Scanned. Tub VIII. Set 32.
 10PUB, 80CON Storms, E. Status of "cold fusion". in 5th International Conference on Cold
 Fusion. 1995. Monte-Carlo, Monaco. p. 1.
 70LLB 5th International Conference on Cold Fusion (ICCF-5), Monte Carlo, Monaco
 (4/9-13/95). Book of Abstracts, Proceedings, List of Participants

May

46FLD Set 2: LABS PROPOSAL. → Ed Storms. from Steve Jones. PROPOSAL. LABS

June

30WRK A1-B4#43, 91, 93, 44, 94, 45, 95, 40, 30, 1, 2
 30WRK A1-B1#1, 3, 4, 6, 5

July

30WRK A1-B4#43, 91, 93, 44, 94, 45, 95, 40, 30, 1, 2
 30WRK A1-B1#1, 3, 4, 6, 5
 20UPR (7/3/1995). Update of activity, 7/3/95

August

30WRK A1-B4#93, 91, 41, 43
 20UPR (8/17/1995). progress report 8/17/95

September

30WRK A1-B4#91, 42
 50HCR “Review of Papers”. ~2009-2014. Scanned. White envelope. Storms “Pile 2”.
 Miscellaneous materials. Tub VI. Set 19U2.

October

30WRK A1-B4#90
 30WRK A1-B1#39, 42
 70LLB Symposium on Fusion Engineering (SOFE '95): Seeking a New Energy Era, 16th
 IEEE/NPSS, Champaign, Illinois (10/1-5/95). Book of Abstracts. Final Program.
 Symposium Timetable and General Information.

December

30WRK A1-B1#42

No Month (13)

- 10PUB Storms, E., Cold Fusion: From reasons to doubt to reasons to believe. Infinite Energy, 1995. 1(1): p. 23.
- 10PUB Storms, E.K., Cold fusion, a challenge to modern science. J. Sci. Expl., 1995. 9: p. 585.
- 10PUB Storms, E. The nature of the energy-active state in Pd-D. in II Workshop on the Loading of Hydrogen/Deuterium in Metals, Characterization of Materials and Related Phenomena. 1995. Asti, Italy. p.
- 10PUB Storms, E.K. Reaction of Pd with D. in ASTI. 1995. Asti, Italy. p.
- 10PUB Storms, E.K., The nature of the energy-active state in Pd-D. Infinite Energy, 1995(#5 and #6): p. 77.
- 50HCR How to Produce the Pons-Fleischmann Effect. Scanned. (4 copies). Tub VIII. Set 22D.

2.8 1996 Activities and Events

January

30WRK Pd#89, 67, 84, 88, 35, 87, 86, 33, 85, 81, 38, 64, 68, 69, 65, 70, 73, 37, 30
30WRK NI(Fiberex)

February

30WRK Pd#71, 72, 51, 53, 55, 74, 75, 76, 62, 77, 66, 59, 9, 80, 58, 38

March

30WRK Pd#57, 82, 56, 71, 58, 64, 62, 44, 43, 42
50HCR "Bankruptcy". 2003? Scanned. Tub VI. Set 20D2.

April

30WRK Pd\$42
50HCR Correspondence: Entenmann, Rothwell, Britz, Park, T Chubb, Behrend, S Chubb. Scanned. Storms "Pile 1". Correspondence. Early period – 1990s. Many letters to CF early "major players". 8 folders, in original order of pile. Tub V. Set 18D.

May

30WRK Pd#79, 23, 54, 52, 27, 61, 26, 19, 78, 34, 7, 10, 13, 60, 14
50HCR Correspondence. Early period – 1990s. Many letters to CF early "major players". 8 folders, in original order of pile. Tub V. Set 18E.

June

30WRK Pd#83, 20, 16, 10, 8, 27, 89

July

30WRK Pd#10, 27, 44, 57

August

30WRK Pd#57 88, 45, 24, 25

September

30WRK Pd#25, 12
30WRK Pd-Au#3
50HCR Miscellaneous mixed materials. Scanned. Various dates. Souther agreements, cFAR business plan, ICCF-2, ISCMNS. Tub VI. Set 20A.

October

30WRK Pd#12, 18
70LLB 2nd Conference on Low-Energy Nuclear Reactions College Station, Texas (9/13-14/96). Proceedings. Journal of New Energy Volume 1, No. 3, 1996

70LLB 6th International Conference on Cold Fusion: Progress in New Hydrogen Energy. New Energy and Industrial Technology Development Organization. The Institute of Applied Energy. Program, Abstracts, Participants, Proceedings (2 Volumes)
10, 80CON Storms, E. Some thoughts on the nature of the nuclear-active regions in palladium. in Sixth International Conference on Cold Fusion, Progress in New Hydrogen Energy. 1996. Lake Toya, Hokkaido, Japan: New Energy and Industrial Technology Development Organization, Tokyo Institute of Technology, Tokyo, Japan. p. 105.

November

30WRK Pd#39
43ZCD 21. MILEY data. ZIP1. Goes with #23.

December

30WRK Pd#17, 15, 1, 11, 36

No Month (13)

10PUB Storms, E., 1996. The Nature of the Nuclear Active Environment For LENR. Lattice Energy Unpublished Paper
10PUB Storms, E., A review of the cold fusion effect. J. Sci. Exploration, 1996. 10(2): p. 185.
10PUB Storms, E., How to produce the Pons-Fleischmann effect. Fusion Technol., 1996. 29: p. 261.
10PUB Storms, E.K., A study of those properties of palladium that influence excess energy production by the Pons-Fleischmann effect. Infinite Energy, 1996. 2(8): p. 50.
90BOK New Hydrogen Energy (NHE) Laboratory created by Japanese government

2.9 1997 Activities and Events

January

30WRK Pd#3, 20, 32, 43, 21, 22, 5, 36, 24, 60, 56
30WRK Plate #2

February

30WRK Pd#13, 69, 33, 40, 7
30WRK Plate #3
20UPR INITIAL LOADING VALUES (1/3/1997). Summary of calorimeter studies

March

43ZCD 6. Archive, GENERAL. ZIP4. Attachment B for expanded description. Incl EKS bio.

April

30WRK PdTKK0088#1

May

30WRK PdTKK0088#2, 4, 5, 6
30WRK NEW CALORIMETER
70LLB Academy for New Energy The Fourth International Symposium on New Energy. Sponsored by the Academy for New Energy, Denver, Colorado (May 23-26, 1997). Edmund Storms, A God's Eye View of Cold Fusion

June

30WRK PdTKK0088#7, 8
30WRK Pd#8, 9

July

30WRK Pd#10, 9, 42, 38, 61, 57
30WRK PDJD#11TKK

August

30WRK Pure Ni
30WRK PD and Ag sandwich
30WRK Pd6Ra
50HCR Talk by EKS to NHE, Japan: "Some Problems with Palladium and How to Solve Them". Scanned. Transparencies. Tub VIII. Set 22C.

September

30WRK No samples specified
46FLD Set 2: 21 Century. Cold Fusion, An Outcast of Science. E. Storms 9/97. 97401 DC _ 001. Mac disc. FullWrite, Text only. MacWrite 5.0. II

October

30WRK Pd-W1.1, Pd-VFTP 3.1, Pd-A13.1, Pd-W3.1, Pd-W2.1, Pd-A12.1, Pd-W3.1, Pd-GFTP2.1, Pd-GFTP3.1, Pd-W3.2, Pd-GFTP1.1, Pd-A11.1, Pd-VFTP2.1, VFTP1.1

November

30WRK Pd-GFTP3.2, Pd-VFTP3.2, Pd-A11.3, Pd GFTP 2.2, Pd-W3.3, Pd-A12.2, Pd-A12.3, Pd-A1 3.2, Pd-GFTP 2.3, Pd-VFTP 1.2, Pd-A1 1.3, Pd GFTP1.2, Pd-A12.4, Pd-W1.3, Pd-GFTP 1.3, Pd-A12.4, Pd-W1.2, Pd-W2.2

70LLB Asti Workshop on Anomalies in Hydrogen/Deuterium Loaded Metals, Bologna, Italy (11/27-30/97).

December

30WRK Pd-W2.2

43ZCD 35. Pd STUDY. ZIP1. Attachment E for expanded description.

45EHD Pd STUDY. 1777 Files. Storms "Pile 1". Correspondence. Early period – 1990s. Many letters to CF early "major players". 8 folders, in original order of pile. Tub V. Set 18F.

No Month (13)

10PUB Storms, E.K., Some problems with palladium and how to solve them. 1997: NHE Japan.

2.10 1998 Activities and Events

January

30WRK Pd-W2.3, Pd-A12.5, Pd-Ag#7

February

30WRK Pd-Pt#9

30WRK Pd#58

April

10PUB, 80CON Storms, E.K. Relationship between open-circuit-voltage and heat production in a Pons-Fleischmann cell. in The Seventh International Conference on Cold Fusion. 1998. Vancouver, Canada: ENECO, Inc., Salt Lake City, UT. p. 356.

70LLB 7th International Conference on Cold Fusion (ICCF-7), Vancouver, British Columbia (4/19-24/98). Program Manual and Abstracts, Proceedings, List of Participants As of April 22, 1998

July

50HCR Letters from Entenman. Scanned.Moved from sEt 106. Tub VIII. Set 28.

August

43ZCD 3. Ag on C study. ZIP1. Ron Jacobsen referenced

September

50HCR Correspondence: E-mail prints – Richard Blue CF Debate – S Chubb, Britz, others. Scanned. Storms “Pile 1”. Correspondence. Early period – 1990s. Many letters to CF early “major players”. 8 folders, in original order of pile. Tub V. Set 18B.

October

50HCR Correspondence, 2003-2004. Bockris, Larsen. Scanned. Tub VI. Set 20C.

90BOK Storms invited to Japan for a week of consultation by NHE Laboratory

November

90BOK Storms and McKubre included among 25 persons featured in Wired Magazine: "Those Who Dare..."

December

30WRK Pd#92, 34

30WRK PdB0.75%(Claytor)

30WRK PdB0.25%(Claytor)

43ZCD 105.WORK IN PROGRESS. ZIP1. Attachment F for expanded description.

No Month (13)

- 10PUB Storms, E., Cold fusion revisited. *Infinite Energy*, 1998. 4(21): p. 16-29.
- 10PUB Storms, E.K., Formation of β -PdD containing high deuterium concentration using electrolysis of heavy-water. *J. Alloys Comp.*, 1998. 268: p. 89.
- 10PUB Storms, E., Factors affecting heat production in a Pons-Fleischmann Cell. ICCF-7, April 1998.
- 90BOK Storms left ENECO
- 90BOK Work in Storms' lab supported by Charles Entenmann and Jed Rothwell (1998-2003)

2.11 1999 Activities and Events

January

30WRK Pd#24
 30WRK Ni#6, 7, 8
 43ZCD 11. Digital Pictures. ZIP3. Attachment D for expanded description.

February

30WRK Pd#33, 40, 4
 30WRK Ni#6, 7, 8, 9, 10, 11, 12, 13, 14, 15
 30WRK Pt#11, 12

March

30WRK Pt#13
 30WRK Pd#40
 44ZCD 10. CURRENT ARTICLES. ZIP2. Attachment C for expanded description.
 44CVD Documents – Part 5 of 15. Calorimeter studies 2004.spanded. CURRENT ARTICLES. Developer. Documents. DOE talk. Disk label: Unnamed Collection of PDF Files
 45EHD CURRENT ARTICLES. 215 Files

April

30WRK Pt#1b
 50HCR Storms presentations, lab & equipment photos, experimental results. Scanned.. Tub VIII. Set 22G.
 50HCR Partial Storms paper: Cold Fusion or How to be an Alchemist While Annoying Every Physicist You Know”. Scanned.. Tub VIII. Set 22H.
 70LLB Future Energy: First International Conference on Future Energy (COFE), Washington, DC 4/29/99 – 5/1/99). Proceedings. Integrity Research Institute
 70LLB Collected Information about the New Science of Chemical Nuclear Interaction. Integrity Research Institute. Beltsville, Maryland

August

30WRK No samples specified
 44CVD ISCMNS ICCF 12. Disk label: . REFERENCES RELATED TO LENR. THE PIG HAS FLOWN. version 1.9 8/18/03. Contains 3089 references and 213 papers in full text.
 50HCR Rothwell Vortex Email Papers about glow discharge effect. Scanned. Tub VIII. Set 23O.

September

30WRK Ag-Pd#2
 30WRK Pd-Al#1a
 30WRK Pt#17

43ZCD 8. CALORIMETER STUDY. ZIP1. Incl Design and Stirring Studies

October

30WRK Pd-Al#1a

44CVD ACS October 6-8. Ontario, California. October 8 Friday A.M.. Number 1 of 4 .
Number 4 of 4. Special cold fusion session. Ed gave a paper. Four tapes. Numbers
1 and 2 missing.

70LLB 1999 Pacific Conference on Chemistry and Spectroscopy, Ontario, California.
35th ACS Western Regional Meeting 37th SAS Pacific Conference

70LLB 1999 Pacific Conference on Chemistry and Spectroscopy, Ontario, California.
Archival Video Recording Table of Contents

44CVD Not copied. Twin Cities Cable. Cold Fusion. October 1999

November

30WRK Pt#18, 19, 21

30WRK Ni#16

30WRK Ni-Pd#16

December

30WRK Pt#22, 21

30WRK TDKK0088

30WRK Ag 0-Au-Pd#2

No Month (13)

10PUB Storms, E., My life with cold fusion as a reluctant mistress. Infinite Energy, 1999.
4(24): p. 42.

10PUB Storms, E., Anomalous heat generated by electrolysis using a palladium cathode
and heavy water in American Physical Society. 1999. Atlanta, GA. p.

10PUB Storms, E., Cold fusion: Theory and practice in Japan. 21st Century Sci. &
Technol., 1999. Spring: p. 82.

10PUB Storms, E., Proposal for study of palladium powder at UNM. 1999.

10PUB Storms, E.K., The present status of chemically assisted nuclear reactions. in ACS.
1999. Ontario, CA. p.

10PUB Storms, E.K., New Method for initiating nuclear reactions. in Conference on
Future Energy. 1999. Bethesda, MD. p.

44CVD Not copied. Disk label: . Cold Fusion. Fire from Water .A documentary about one
of the greatest and most controversy all scientific discoveries of all time. New
Energy Foundation. 1999.

44CVD Cold Fusion. Fire from Water. Still in shrink wrap. Based on Mallove's book.
Narrated by Scotty of Star Trek

2.12 2000 Activities and Events

January

30WRK Ag-Au-Pd#2
 30WRK Pt#23, 24, 25
 20UPR (1/9/2000). History of flow calorimeter
 50HCR "Ti Study Dash". 2000. Scanned. Clasp envelope. Storms "Pile 2". Miscellaneous materials. Tub VI. Set 19K.

February

30WRK Pt(1/1/00)
 30WRK Pt
 30WRK Pt#22
 45EHD Ed's stuff. 298 Files

March

30WRK Pt#28

April

44CVD, 70LLB Gene Mallove interview of EKS 160805. Disk label: . Interview of Edmund Storms by Gene Mallove. 4/15/2000. Copied

May

30WRK No samples specified
 10PUB Storms, E, Excess power production from platinum cathodes using the Pons-Fleischmann effect. in 8th International Conference on Cold Fusion. 2000. Lericci (La Spezia), Italy: Italian Physical Society, Bologna, Italy. p. 55-61.
 50HCR Infinite Energy letter Scanned. Tub VIII. Set 23W.
 80CON Storms, E, Excess power production from platinum cathodes using the Pons-Fleischmann effect. in 8th International Conference on Cold Fusion. 2000. Lericci (La Spezia), Italy: Italian Physical Society, Bologna, Italy. p. 55-61. PB45.
 70LLB ICCF8. Lericci, Italy. Participants, Proceedings
 70LLB 8th International Conference on Cold Fusion (ICCF 8), Lericci (La Spezia), Italy (5/21-26/00). List of Participants As of May 26, 2000
 70LLB 8th International Conference on Cold Fusion (ICCF 8), Lericci (La Spezia), Italy (5/21-26/00). Proceedings of the Società Italiana Di Fisica, Editrice Compositori, Bologna, Italy
 44CVD ICCF-8. Tapes 1 to 7

June

30WRK Pt#34
 30WRK Ti#1
 70LLB 13th International Conference on Condensed Matter Nuclear Science (ICCF-13), Dagomys, Sochi, Russia (6/25/00 – 7/1/00). Proceedings

July

30WRK Pt#34
30WRK Pd#36

August

43ZCD 12. Ed's Website. ZIP1. HTML files and many figures.
45EHD Ed's Website. 287 Files

September

30WRK MILEY STUDY STARTED
20UPR (9/12/2000). History of composi
20UPR (9/12/2000). loading based on oil
20UPR (9/12/2000). Pd history
20UPR (9/12/2000). Pd property summary
43ZCD 36. PERSONAL BIO. ZIP1. Two files
45EHD Archive, GENERAL. 268 Files
50HCR History of Miley Tests. Scanned.. Storms "Pile 2". Miscellaneous materials. Tub VI. Set 19M2.

October

30WRK Miley #4C .2
30WRK Miley #4.A.2
30WRK Pt#21
43ZCD 24. MILEY TESTS. ZIP1. Goes with #23.

November

30WRK Pt#21
30WRK Mallove cell
30WRK Pt#212
30WRK Pt#21#8
30WRK Pt#21#9
20UPR (11/10/2000). History of Miley Tests

December

30WRK Pt#22, 23, 26, 27, 31, 24, 27
30WRK Pt#24#1, #22#11, #25#2
30WRK Pd#68
30WRK Ni#1

No Month (13)

10PUB Storms, E., A critical evaluation of the Pons-Fleischmann effect: Part 1. Infinite Energy, 2000. 6(31): p. 10.

- 10PUB Storms, E., A critical evaluation of the Pons-Fleischmann effect: Part 2. Infinite Energy, 2000. 6(32): p. 52.
- 10PUB Storms, E.K., Description of a dual calorimeter. Infinite Energy, 2000. 6(34): p. 22.
- 10PUB Storms, E., The present status of chemically-assisted nuclear reactions. Infinite Energy, 2000. 5(29): p. 26.
- 10PUB Storms, E., Where do we stand on cold fusion? 21st Century Sci. & Technol., 2000. Winter: p. 76.
- 46FLD Set 2: Storms. What ever happened to Cold Fusion? Edmund Storms. Mac disc. 98463 MMH001
- 10PUB Hansen, L.D., S.E. Jones, J.M. Thorne, and E. Storms., Cooperative investigation of anomalous effects in Pd/LiOD electrolytic cells. 2000.

2.13 2001 Activities and Events

January

30WRK Pd#25#2, #27#2
 30WRK Pd#25, 68
 30WRK Pt#27, 68, 3
 30WRK Pt C, D, A
 30WRK Pt B #2
 30WRK Pt C#2
 30WRK Mallove cell
 20UPR (1/20/2001). Progress Report 1/19/01
 20UPR (1/21/2001). Progress Report 1/20/01
 20UPR (1/25/2001). Progress Report 1/25/01

February

30WRK Pt#26#3, #24#3
 30WRK Pt E#3, C#5, A#3, c#6, C#7, 22#12, C#8, C#9
 30WRK Pt C#6, C#9
 30WRK Pt F, G
 30WRK Ag#2, 3
 20UPR (2/1/2001). Progress Report 1/31/01
 20UPR (2/8/2001). Progress Report 2/8/01
 20UPR (2/17/2001). Progress Report 2/16/01

March

30WRK Pt#22#13
 30WRK Pt C#10
 30WRK Pt#26
 30WRK PtC#10
 30WRK Pt#22#13
 30WRK Pt A#4
 30WRK Pt-2-1, 1-1, 2-2, 2-3
 30WRK Pd#68
 30WRK EKS003
 20UPR (3/2/2001). Progress Report 3/2/01
 70LLB Naval Research Laboratory. MRL/MR/6320-01-8526 (3/26/01). Calorimetric Analysis of a Heavywater Electrolysis Experiment Using a pad-B ALBoy Cathode. Miles, Fleishman, Imam

April

30WRK Pt-2-3, 4-1, 4-2, 1-1, 4-3, 2-3, PtF-2
 20UPR (4/15/2001). Progress Report 4/15/01

May

30WRK Pt-1-1, 2-4
 30WRK Pt-3/8/01
 20UPR (5/5/2001). Progress Report 5/5/01
 45EHD RGA application (empty). 0

June

30WRK Pt-1-1, 2-4, 1-2, 1-3, 1-4, 1-5, 1-6, 2-4
 30WRK Pt E-6, E-7

August

30WRK Pt-A-8
 43ZCD 9. Case Study. ZIP1. Les Case Study. Incl data, pictures, costs, progress repts, etc.
 45EHD Case Study. 161 Files
 45EHD Confidentiality Agreement, Grace*
 45EHD Confidentiality Agreement.doc*

September

30WRK Pt-E-8
 30WRK Pt 2-8, 2-4

October

30WRK Case Study Started – system tested gas composition measured

November

30WRK [Begin new method of designating samples and experiments\
 30WRK Cell#1

December

30WRK Cell #1, #2
 20UPR (12/20/2001). Progress Report 12/1/01
 20UPR PROGRESS REPORT. 9/28/01 to 12/21/01. (12/21/2001). Progress 12/21/01
 50HCR Rejection History of the Paper “Cold Fusion: An Objective Assessment”. Scanned. Tub VIII. Set 23Q.
 70LLB Society for Scientific Exploration. Directory 2001

No Month (13)

10PUB Storms, E., Cold fusion: An objective assessment. www.LENR-CANR.org, 2001.
 10PUB Storms, E.K. Ways to initiate a nuclear reaction in solid environments. in American Physical Society Meeting. 2001. Seattle, WA. p.
 10PUB Storms, E.K., Review of paper by Shanahan. 2001.

2.14 2002 Activities and Events

January

30WRK Cell #2
50HCR Case Effect Study. 2001-2002. Progress Report and Emails. Scanned. Tub VIII. Set 29.

February

30WRK Cell #3, #2
30WRK SB B used for Case study [Seebeck]
20UPR Case Study, EKS Progress Report No. EKS 2-1-02 (2/1/2002). Progress 9/01-2/02
N
20UPR [Several anomalous effects were seen.] (2/9/2002). thermal arrests
20UPR (2/14/2002). Progress Report 2/14/01

March

30WRK Cell #2, #3, #1
30WRK EKS001, EKS002
20UPR (3/13/2002). Progress Report 3/13/01

April

30WRK Cell #4, #2, #1, #3, #5
30WRK EKS 0045

May

30WRK Cell #4, #3, #2, #5
30WRK EKS005
70LLB, 80CON 9th International Conference on Cold Fusion (ICCF-9), Beijing, China
(5/19-24/02). Proceedings. Did not attend conference.

June

30WRK Cell #2, #3, #4, #5
30WRK EKS006, EKS008, EKS003
43ZCD 14. Introduction to LENR. ZIP2. Evaluate when opened.
43ZCD 97. STOCK TRADING. ZIP2. Apparently deleted file
45EHD LENR site. 18 Files

July

30WRK Cell #1, #2, #4, #5, #3
30WRK EKS009, EKS010
43ZCD 29. NAE copy. ZIP2. Submitted to Infinite Energy July 2002.
45EHD LENR CD Partial. 208 Files
70LLB The 4th Meeting of Japan CF-Research Society (JCF-4), Morioka, Japan (10/17-18/02). Abstracts, Program

August

30WRK Cell #4, #5, #1
 30WRK EKS010
 20UPR (8/30/2002). 8/30/02 progress report
 43ZCD 13. EXECUTIVE SUMMARY OF LOW ENERGY. ZIP2. Captured for publications in case needed.
 43ZCD 73. Proof and proposal for LENR. ?
 44CVD 17990724_0550 won't read. Disk label: . EV s in Cold Fusion. August 24, 2002. Dash McKubre. Miley Shoulders. Tanzella Storms
 70LLB The Collected Works of Edmund Storms about the Science of Chemically Assisted Nuclear Reactions. Integrity Research Institute. Beltsville, Maryland

September

30WRK Cell #5
 30WRK EKS010
 44CVD 18991030_2005 won't read. Disk label: . EVs IN COLD FUSION. LEN SHOULDERS COPYRIGHT. SEPTEMBER 2002
 44CVD 72 SEM Images for Ed Storms
 45EHD SEM scans of Case samples. 6 Files

October

44CVD Documents – Part 9 of 15. EndNote spanned + 6 folders. 13 items. Disk label:. Britz Collection. Spanned

November

30WRK No notations of cells
 45EHD EndNote. 8 Files

December

30WRK Ptdot1
 30WRK Cell #4
 30WRK EKS010
 30WRK Letts Cell
 20UPR [Letts Study report] (12/18/2002). Labreport2001.efx
 43ZCD 18. LETTS study. ZIP1. No apparent report?

No Month (13)

10PUB Storms, E., Cold fusion, the next big step up the energy ladder. Submitted to 21st Century Science and Technology. June 2002.
 10PUB Storms, E., The nature of the nuclear-active-environment required for low energy nuclear reactions. Infinite Energy, 2002. 8(45): p. 32.821
 10PUB Storms, E., Ways to initiate a nuclear reaction in solid environments. Infinite Energy, 2002. 8(45): p. 45.

90BOK Creation of LENR-CANR.org website by Jed Rothwell
90BOK "Excess Heat: Why Cold Fusion Prevailed" by Charles Beaudette

2.15 2003 Activities and Events

January

30WRK IMRA#38

February

30WRK Letts cell
 30WRK Case Cell
 30WRK McKubre C
 30WRK Letts cell experiments with Case cell
 30WRK Pd#64
 43ZCD 15. LATTICE. ZIP2. Lattice Energy. Incl. Research Plan and Progress Reports
 43ZCD 16. Lawsen. Lawsen means Larsen?
 43ZCD 17. Lawsen 2/25/03. Lawsen means Larsen?
 50HCR "Lattice Energy". 2003-2005. Scanned. Four white envelopes. Storms "Pile 2".
 Miscellaneous materials. Tub VI. Set 19M1

March

20UPR TRIP REPORT, APS MEETING, AUSTIN, TX, 3/6/03-3/8/03(3/8/2003)
 20UPR Evaluation of the Calorimeter Used by G. Miley (3/25/2003). COMMENTS ON
 CALORIMETER OF GM
 43ZCD 38. Pictures. CD2. Image files. Both LENR and family pix.
 43ZCD 74. PROPOSED RESEARCH PLAN FOR LATT. Lattice Energy
 70LLB American Physical Society, Bulletin: Volume 48, Number 1, PART II (3/3-7/03).
 Storms Abstract Z33-3: Why Cold Fusion Has Been so Hard to Explain and
 Duplicate

April

30WRK Case Cell
 30WRK Pd#64+Au, Pd#64+Au#2, Pt64+Au#3
 30WRK Miley Cell
 30WRK Letts Cell
 41SF1 OLD DATA: Calorimeter studies 2004 spanned
 43ZCD 95. Short Course. ZIP2. Valuable write-up
 50HCR Progress Reports. Scanned. Tub VIII. Set 23G.
 44CVD EVS-IN-COLD_FUSI. Disk label: . APS 3/7/03. cold fusion talks
 90BOK Storms joined Lattice Energy as Senior Scientist, invited by Lewis Larsen

May

30WRK Ni screen plated with Pd
 30WRK Pt 64+Au#4
 30WRK Pt+Au+Pd
 30WRK Pt#6, #5
 45EHD PICTURES. 7 Files

45EHD Rejection history of CF, Object*
50HCR “Letters” ~2008-2018. Scanned. White envelope. Moved to Set 18,
Correspondence. Bockris, McConnel, Scanlan, Krivit, Bass, Hagelstein, Nagel,
Rothwell, Koonin. Storms “Pile 2”. Miscellaneous materials. Tub VI. Set 19N.
10PUB Storms, E.K. How to make a cheap and effective Seebeck calorimeter. in Tenth
International Conference on Cold Fusion. 2003. Cambridge, MA: World
Scientific Publishing Co. p. 269.
10PUB Storms, E.K. Use of a very sensitive Seebeck calorimeter to study the Pons-
Fleischmann and Letts effects. in Tenth International Conference on Cold Fusion.
2003. Cambridge, MA: World Scientific Publishing Co. p. 183.
10PUB Storms, E.K. What conditions are required to initiate the LENR effect? in Tenth
International Conference on Cold Fusion. 2003. Cambridge, MA: World
Scientific Publishing Co. p. 285.
10PUB Rothwell, J. and E.K. Storms. The LENR-CANR.org website, its past and future.
in Tenth International Conference on Cold Fusion. 2003. Cambridge, MA: World
Scientific Publishing Co. p. 939.
80CON Storms, E.K. How to make a cheap and effective Seebeck calorimeter. in Tenth
International Conference on Cold Fusion. 2003. Cambridge, MA: World
Scientific Publishing Co. p. 269. PB60. ICCF10. Cambridge, MA, USA. Program,
Abstracts, Proceedings
80CON Storms, E.K. Use of a very sensitive Seebeck calorimeter to study the Pons-
Fleischmann and Letts effects. in Tenth International Conference on Cold Fusion.
2003. Cambridge, MA: World Scientific Publishing Co. p. 183. PB61. ICCF10.
Cambridge, MA, USA. Program, Abstracts, Proceedings
80CON Storms, E.K. What conditions are required to initiate the LENR effect? in Tenth
International Conference on Cold Fusion. 2003. Cambridge, MA: World
Scientific Publishing Co. p. 285. PB62. ICCF10. Cambridge, MA, USA. Program,
Abstracts, Proceedings
80CON Rothwell, J. and E.K. Storms. The LENR-CANR.org website, its past and future.
in Tenth International Conference on Cold Fusion. 2003. Cambridge, MA: World
Scientific Publishing Co. p. 939. PB63. ICCF10. Cambridge, MA, USA. Program,
Abstracts, Proceedings

June
30WRK Pt, Cu
30WRK Ni fiberex
20UPR LENR Reaction Product “Signature”... (6/16/2003). Miley Dr George – Various
chart
20UPR (6/16/2003). Miley spectrum
20UPR (6/16/2003). Miley spectrum(2)
20UPR Memorandum: Replication of the Miley claims (6/16/2003). Miley replication
43ZCD 1. ICCF-10. ZIP1. Presentation preparation. Also Short Course.
43ZCD 32. Papers for ICCF-10. ZIP1. Paper copied to folder
43ZCD 89. Random Thoughts. LENR philosophical work

43ZCD 102. Talk at APS, Tuscon. "Cold Fusion Has Come Out of the Cold". APS Short Course.

43ZCD Cost vs gal for 10K, 15K*

July

30WRK Pt 64+Au#4

30WRK Pt+Pd

30WRK Pd+Au

30WRK Pt-Pd#4

43ZCD 2. ABSTRACTS FOR ICCF-10. ZIP1. At time of conference

43ZCD 30. new SB

43ZCD 33. Patent. ZIP1. A method to generate energy using the electrolytic process

43ZCD 34. Patent, part 2. CD2. A method to generate energy using the electrolytic process

43ZCD 101. Summaries corrected. ZIP2. ICCF-10

45EHD Cluster model.pdf*

45EHD Delong LVEM5.pdf*

45EHD Ken Wolf Commodities. 13 Files

August

30WRK Miley sample

43ZCD 20. MILEY. CD2. Goes with #23.

43ZCD 23. Miley study. ZIP1. Lew Larsen, George Miley. Incl Progress Report 10/03.

43ZCD 98. Storms Introduction. ZIP2. ICCF-10 Short Course introduction

43ZCD 99. storms transcript.doc. Interview by Steve Krivit

45EHD LENR-CANR. 8 Files

45EHD reference electrodes.pdf*

50HCR ICCF-10 Short Course. Scanned. Tub VIII. Set 22A.

50HCR Use of a Very sensitive Calorimeter. Not Scanned. 560/202. Duplicate. Tub VIII. Set 25L.

70LLB 10th International Conference on ColdFusion (ICCF-10), Cambridge, Massachusetts (8/24-29/03). Program and Abstracts, Program Summary, Group Photo, Proceedings

September

30WRK Miley Cell

30WRK M-1, 2, 3

30WRK Pd64+Au#3

30WRK Cu#1

43ZCD 37. Photo ion detector. CD2. Two JPGs

45EHD Photo ion detector. 3 Files

44CVD 030914_1959. Disk label: . ICCF 10 PHOTOS. From Nagel

45EHD EarthChanges2001.pdf*

October

30WRK Miley sample
 30WRK Cu#1
 30WRK Miley 11129003A, 11129005A, 11129004A
 30WRK Ni mesh
 20UPR PROGRESS REPORT. Test of samples prepared by Prof. Miley. (10/25/2003).
 PROGRESS REPORT 10
 20UPR PROGRESS REPORT. 10/25/03 (10/25/2003). Word Work File D 2310
 20UPR PROGRESS REPORT. 10/25/03. Test of samples prepared by Prof. Miley.
 (10/25/2003)
 43ZCD 64. PR#10, 10-25-03(Miley). Lattice Energy Progress Report
 45EHD MILEY DATA. 7 Files
 43ZCD 96. Small SB. ZIP2. Small Seebeck
 45EHD Close spacing cell*

November

30WRK Pt
 30WRK Miley 11129006A
 30WRK Pt(11/21/3)
 30WRK Pd(11/29/3)
 20UPR PROGRESS REPORT. Test of an electrolyte using D2SO4. (11/16/2003).
 PROGRESS REPORT 11
 20UPR PROGRESS REPORT 11/16/03. Test of an electrolyte using D2SO4.
 (11/16/2003. PR#11, 11-03-03(H2SO4))
 43ZCD 65. PR#11, 11-03-03(H2SO4). Lattice Energy Progress Report
 45EHD Close space cell.JPG*
 45EHD SEM COST*

December

30WRK Pt, Pd
 43ZCD 27. My history with cold fusion. ZIP2. See # 28.
 43ZCD 28. My history with cold fusion.pdf. ZIP2. No date in document. Saved for
 Publications.
 43ZCD 68. PR#12, 12-21-03. Lattice Energy Progress Report
 43ZCD 90. SB data. Seebeck?
 44CVD Documents – Part 10 of 15. Important papers spanned. Disk label: EPRI
 Folder spanned
 45EHD WORK IN PROGRESS. 228 Files
 45EHD ChubbSRtheoretica.pdf*

No Month (13)

90BOK Support from Entenmann and Rothwell discontinued

- 10PUB Storms, E. Why cold fusion has been so hard to explain and duplicate. in American Physical Society Winter Meeting. 2003. Austin Convention Center, Austin, TX: unpublished. p.
- 10PUB Storms, E., A student's guide to cold fusion. 2003, LENR-CANR.org.
- 10PUB Storms, E.K. Cold fusion has now come out of the cold. in APS. 2003. p.
- 10PUB Storms, E.K. My history with cold fusion. 2003.

2.16 2004 Activities and Events

January

30WRK No cells or samples specified
 43ZCD 69. PR#13, 1-14-04. Lattice Energy Progress Report
 43ZCD 78. Pt Dot 3. Lattice Energy
 20UPR PROGRESS REPORT. HISTORY OF PT DOT 6 (1/12/2004). HISTORY of Pt Dot 6.doc
 20UPR PROGRESS REPORT 1/14/04 (1/14/2004). PR#13, 1-14-04
 44CVD Archive ARTICLES Part 4 of 5. CALORIMETER STUDY.spanded. Disk label: CALORIMETER STUDY.spanded
 44CVD Documents – Part 4 of 15. Calorimeter studies 2004.spanded
 45EHD hood*
 45EHD Script*

February

30WRK No cells or samples specified
 20UPR A Discussion of Those Variables that Affect the Nuclear Active Environment. (2/1/2004). A Discussion of Those Variables
 20UPR PROGRESS REPORT OF Pt 2/9/04. HISTORY OF EXPERIMENTS STARTING 2/3/04 (2/9/2004). HISTORY OF EXPERIMENTS STARTING
 20UPR Summary of Results. (2/9/2004) . Summary of Results(2/3/04)
 20UPR PROGRESS REPORT. HISTORY OF EXPERIMENTS STARTING 2/3/04. (2/9/2004). Progress Report Pt 3-9-04.doc
 20UPR PROGRESS REPORT. HISTORY OF EXPERIMENTS STARTING 2/3/04. (2/9/2004). Word Work File D 1
 43ZCD 62. PR Pt 2/9/04. Lattice Energy Progress Report
 45EHD Script2*
 45EHD Seebeck converter#1. 14 Files
 45EHD STOCK TRADING*

March

30WRK No cells or samples specified
 30WRK PLATING STUDIES start
 44CVD 080515_1727. Amoco Experiment.pdf + 13 others. Disk 1. Disk label: . Cold fusion documents. May 15, 2008
 44CVD 050516_0859. ICCF7.pdf + 5 others. Disk 2. Disk label: . Cold fusion documents. May 15, 2008
 45EHD Disclosure of interest in LENR*

April

30WRK No cells or samples specified
 44CVD LENR-CANR. Disk label:. LENR-CANR. June 23, 2006
 45EHD Request for Storms Disclosures*

May

20UPR EXAMPLES OF SEM PICTURES (5/16/2004). MEMO, SEM 5-16-04.DOC
43ZCD 19. MEMO, SEM 5-16-04.doc. Examples of SEM Pictures

June

43ZCD 4. Agreement. Lattice Energy
50HCR Lattice Energy Agreement. Scanned.. Tub VIII. Set 30.

July

30WRK Active Pt
30WRK Pt dot 3
43ZCD 50. PR 7/19/04 (Miley). Lattice Energy Progress Report
43ZCD 81. Pt dot 3 SEM. Lattice Energy
20UPR PROGRESS REPORT. HISTORY OF EXPERIMENTS STARTING 2/3/04.
(7/5/2004). PROGRESS REPORT Pt 2-3-04
20UPR PROGRESS REPORT. 7/19/04. Test of samples prepared by Prof. Miley.
(7/19/2004). PROGRESS REPORT, 7-19-04.doc

August

30WRK Cell #1
30WRK Ptdot2
43ZCD 22. Miley pictures. ZIP1. Goes with #23.
43ZCD 51. PR 8-19-04.doc. Lattice Energy Progress Report
43ZCD 52. PR 8-19-04jpg pics.doc. Lattice Energy Progress Report
43ZCD 63. PR#8-29-04.doc. Lattice Energy Progress Report
43ZCD 79. Pt dot 3 all. ZIP1. Lattice Energy
43ZCD 80. Pt Dot 3 pictures. Lattice Energy
20UPR PROGRESS REPORT. 8/19/04. Study of electrodeposition on a Pt surface.
(8/19/2004). PR 8-19-04.doc
20UPR PROGRESS REPORT. 8/19/04. Study of electrodeposition on a Pt surface.
(8/19/2004). PR 8-19-04jpg pics.doc
20UPR PROGRESS REPORT. 8/29/04 (8/29/2004). PR#8-29-04.doc
44CVD DOE CF Review References. Disk label: . DOE CF Review 2004. References
90BOK DOE meeting in Washington, D.C. (8/23/04)

September

30WRK Ptdot4, Ptdot3
30WRK Pt(9-10-4), (9-23-4)
30WRK IMRA#60
43ZCD 58. PR 9/10/04.doc. Lattice Energy Progress Report
43ZCD 82. Pt Dot 4. Lattice Energy
45EHD Pt 2004. 6 Files
45EHD Pt Dot 4. 8 Files

20UPR HISTORY OF PT DOT 4. Run in Cell #2, Small SB #1, Pd anode. Cell cleaned with ... (9/3/2004). HISTORY OF Pt Dot 4.doc
 20UPR PROGRESS REPORT. A collection of questions. (9/10/2004). PR 9/10/04
 20UPR PROGRESS REPORT. 9/20/04. HISTORY OF EXPERIMENTS STARTING 9/3/04 (9/30/2004). PROGRESS REPORT 9(2).doc
 44CVD Papers about LENR . Published papers +. Disk label:. Published Papers about Cold Fusion. 1989-2003
 44CVD Washington Brief 160808. Disk label: Papers backup 11/3/02
 45EHD ICCF-11. 10 Files

October

30WRK PdDot2
 30WRK 3NGFTP
 45EHD Pt Dot 3. 9 Files
 50HCR Unclassified Meeting on Advanced Intelligence Technologies. EKS: Cold Fusion (LENR) Real or Not. Scanned. Tub VIII. Set 22J.
 70LLB The International Society for Condensed Matter Nuclear Science, Marseille France (10/31/04). Agenda for the First Meeting of the Executive Committee
 70LLB 11th International Conference on Condensed Matter Nuclear Science (ICCF-11), Marseille, France (10/31/04 – 11/5/04). Program Abstracts
 70LLB 11th International Conference on Condensed Matter Nuclear Science (ICCF-11), Marseille, France (10/31/04 – 11/5/04). Proceedings. World Scientific, 2006
 10PUB Storms, E. An update of LENR for ICCF-11 (Short Course, 10/31/04). in 11th International Conference on Cold Fusion. 2004. Marseilles, France: World Scientific Co. p. 11.
 80CON Storms, E. An update of LENR for ICCF-11 (Short Course, 10/31/04). in 11th International Conference on Cold Fusion. 2004. Marseilles, France: World Scientific Co. p. 11.. PB67. ICCF11. Marseilles, France. Program, Abstracts, Proceedings
 50HCR An Update of LENR for ICCF-11. Scanned. Tub VIII. Set 22I.
 44CVD 091298_2150. Disk label: . ICCF-11, -12, & -15. From Nagel. DN

November

30WRK Ag-1, Ag#2
 30WRK PdGFTP#2
 30WRK Ag(11/18/4)
 30WRK Ptdot3
 20UPR HISTORY OF PT DOT 3. Seebeck #1 cell #2 with Pd anode and containing... (11/16/2004). HISTORY of Pt Dot 3.doc
 43ZCD 85. Pt study 2004 (empty). ZIP1. Empty folder
 45EHD Summary of studies*

44CVD Advanced Intelligence Technologies Meeting. Presentations. Posted by: James D Corry. jdcorey@sandia.gov. Sandia National Laboratories. Washington, D.C.. October 18, 2004

December

30WRK Ptdot 5, 7, 6, 1
20UPR PROGRESS REPORT 12/21/03) (12/21/2003). PR#12, 12-21-03
43ZCD 66. PR#12-18-04.doc. Lattice Energy Progress Report
43ZCD 67. PR#12-24-04.doc. Lattice Energy Progress Report
44CVD 74 SEM Pictures
44CVD Britz Collection. pdfs folder: books, etc. Disk label: . Britz Collection. as of 12/7/05
50HCR Letter from M Fleischman to Jed Rothwell on Gene Mallove death. Scanned.. Tub VIII. Set 23X.

No Month (13)

45EHD #42, excess- A, 1-7*
43ZCD 72. PROGRESS REPORT(3).doc. Lattice Energy Progress Report. PW.
43ZCD 76. Pt 2004. Lattice Energy
10PUB Storms, E., Calorimetry 101 for cold fusion. 2004, www.LENR-CANR.org.
10PUB Storms, E.K., Study of electrodeposition on a Pt surface, P. Report, Editor. 2004, Lattice Energy.
10PUB Storms, E., Cold Fusion – the Experimental Evidence. 21st Century. Winter 2004-2005.
90BOK "The Rebirth of Cold Fusion" by Steven Krivit and Nadine Winocour
90BOK DOE persuaded to review the subject of cold fusion again

2.17 2005 Activities and Events

January

30WRK Ptdot1, Ptdot6
 43ZCD 77. Pt dot 1 1/2/05(a). ZIP2. Lattice Energy
 43ZCD 83. Pt dot 6 . Lattice Energy
 43ZCD 86. Pt vp Pd #1, 1/29/05(a). ZIP2. Lattice Energy

February

30WRK Pd on Cu
 30WRK Pt #1, #3
 30WRK Pd on Ag#2, Ag#4
 41SF1 OLD DATA: 2005
 43ZCD 41. PR 2/10/05. Lattice Energy Progress Report
 43ZCD 87. Pt vp Pd #2, 2/9/05(a). ZIP2. Lattice Energy
 44CVD 76 SEM Pictures 2
 45EHD Recent data. 35 Files

March

30WRK Pt-S#1
 30WRK Pt3/14/4, 3/6/5, 3/7/5
 30WRK Ptdot3
 30WRK Cu#4
 30WRK Ag 6, 7, 8
 30WRK Ptdot1
 30WRK Pt1.2%Li
 30WRK Pd-Li
 43ZCD 43. PR 3/12/05. Lattice Energy Progress Report

April

30WRK Pt(3/6/5), Pt(4/2/5)
 30WRK Cu#8
 43ZCD 45. PR 4/4/05. Lattice Energy Progress Report

May

30WRK Cu#9, 10, 12
 30WRK Pd(5/9/5)
 30WRK Pd3N GFTP(5/9/5)
 30WRK Pd(5/16/5), (5/17/5), (5/21/5)
 30WRK IMRA #94
 43ZCD 46. PR 5/15/05. Lattice Energy Progress Report
 45EHD Edwards(NMR) 6/2/05*
 45EHD Review of the paper, Shanahan*

June

30WRK IMRA #93
 30WRK Pd(5/21/5), (5/30/5), (5/17/5), (6/12/5), (6/25/5), (6/8/5)
 43ZCD 47. PR 6/10/05. Lattice Energy Progress Report
 43ZCD 48. PR 6/17/05. Lattice Energy Progress Report
 45EHD Graph #1*

July

30WRK Pd(6/8/5), (6/30/5), (7/5/5), (7/8/5), (7/9/5), (7/15/5), (7/15/5)
 30WRK Pd-Al (7/22/5), (7/23/5), (7/16/5), (7/17/5)
 43ZCD 49. PR 7/05(a). Lattice Energy Progress Report

August

30WRK Pd-Al (8/1/5), (8/2/5), (8/1/5)
 30WRK IMRA #80A, #80#2, #80B
 43ZCD 53. PR 8-26-05.doc. Lattice Energy Progress Report
 43ZCD 54. PR 8/6/05.doc. Lattice Energy Progress Report
 43ZCD 55. PR 8/6/05pw.doc. Lattice Energy Progress Report

September

30WRK IMRA #80A, #80B, #79A, #79B, #77B, #63A, #63B
 30WRK Pd-Ag#38
 43ZCD 56. PR 9-2-05.doc. Lattice Energy Progress Report
 43ZCD 57. PR 9-2-05pw.doc. Lattice Energy Progress Report

October

30WRK IMRA #80 B, #77A
 30WRK Cu#3
 30WRK Ni#1
 30WRK Pt-Pt(10/19/5)
 30WRK Pt(10/19/5)A
 30WRK Ag+Pd
 30WRK Pd-W#3
 30WRK Pd-Ag#3
 30WRK Pd-Ca(10/31/5)
 43ZCD 59. PR 10/1/05. Lattice Energy Progress Report
 45EHD Pt-Pd(10-16-05). 6 Files

November

30WRK Pd-Ca (10/31/5)
 30WRK Pt-Pd(10/19/5) , (10-14-5), (10/19/5)A, (10/19/5)B
 30WRK IMRA #60A, #60B
 43ZCD 60. PR 11/1/05. Lattice Energy Progress Report
 43ZCD 88. Pt(10-19-05)A. ZIP12 Lattice Energy

- 44CVD Library references – Part 1 of 2. Disk 1 of 2. Disk label:. Library References. #1
0-400
- 50HCR “NDA – Releases”. Various entities and dates. Scanned. White envelope. Storms
“Pile 2”. Miscellaneous materials. Tub VI. Set 19P.
- 44CVD Britz1. Abel1990.pdf + many others. 2 CDs in one envelope. Disk label:. Britz 1,
Britz 2. June 23, 2006
- 44CVD Britz 2 Collection. Abel1990.pdf + many others. Disk label: . CNF files. D. Britz.
29.11.'07
- 44CVD Britz. Abel1990.pdf + many others. www.iscmns.org
- 80CON Storms, E.K., Description of a sensitive Seebeck calorimeter used for cold fusion
studies. in Condensed Matter Nuclear Science, ICCF-12. 2005. Yokohama, Japan:
World Scientific. p. 108. PB74. ICCF12. Yokohama, Japan. Abstracts,
Proceedings
- 10PUB Storms, E.K., Description of a sensitive Seebeck calorimeter used for cold
fusion studies. in Condensed Matter Nuclear Science, ICCF-12. 2005. Yokohama,
Japan: World Scientific. p. 108.
- 70LLB 12th International Conference on Condensed Matter Nuclear Science
(ICCF 12), Yokohama, Japan (11/27/05 – 12/2/05). Abstracts, Proceedings
- 44CVD ISCMNS ICCF 12. Disk label: . ICCF12 disc. Copyright 2005.

December

- 30WRK IMRA #60B, #60A, #19, #16, #16A
- 43ZCD 61. PR 12-1-05. Lattice Energy Progress Report

No Month (13)

- 90BOK Storms received GIuliano Preparata Medal at ICCF-5
- 10PUB Storms, E., A response to the review of cold fusion by the DoE. 2005.
- 10PUB Storms, E., Cold fusion for dummies. www.LENR-CANR.org, 2005.
- 10PUB Storms, E. Why I believe "cold fusion" is real. in American Physical Society.
2005. Tucson, AZ. p.
- 10PUB Storms, E., Description of a Seebeck calorimeter. 2005: www.LENR.org.
- 10PUB Storms, E., Construction details of a new design for a Seebeck Calorimeter. 2005.
- 10PUB Storms, E., How to cause nuclear reactions at low energy and why you should
care. 2005.

2.18 2006 Activities and Events

January

30WRK IMRA #16 B, #16A, #9, #77B, #6
 43ZCD 39. PR 1/1/06. Lattice Energy Progress Report
 43ZCD 42. PR 3/01/06 . Lattice Energy Progress Report
 43ZCD 70. Progress Report 1-1-06.doc. Lattice Energy Progress Report
 43ZCD 71. Progress Report 1-1-06(PW).doc. Lattice Energy Progress Report

February

30WRK Pd(200) #2, #1, #3
 30WRK IMRA #6
 43ZCD 40. PR 2/1/06. Lattice Energy Progress Report

March

30WRK IMRA #60, #60#5 #60#3
 50HCR Anomalous Heat produced by Electrolysis of Palladium Using a Heavy-Water Electrolyte. Scanned. Tub VIII. Set 24G.

April

30WRK IMRA #15
 43ZCD 44. PR 4/1/06. Lattice Energy Progress Report
 90BOK Storms left Lattice Energy

May

30WRK Pd foil #3
 30WRK IMRA #94, #94A
 44CVD Documents – Part 6 of 15. Britz Collection.spanded. Disk label: Britz collection*
 44CVD Britz2 . Dadd2001.pdf + many others. Disk label: . Britz collection. April 2011.
 Britz Collection. 10/27/2006

June

30WRK Terminated study

August

44CVD Documents – Part 7 of 15. EndNote.spanded. Disk label: Calorimeter
 Movie.spanded
 44CVD Book 8-19-06. Disk 1 of 3. Disk label:. Pdf book 363 pages. front cover – jpg.
 back cover – jpg
 44CVD Untitled CD. Disk 2 of 3. Disk label:. Pdf book 363 pages. front cover – jpg. back
 cover – jpg
 50HCR “Science of Low Energy...”. World Scientific, 2006, 2014. Scanned. White
 envelope. Storms “Pile 2”. Miscellaneous materials. Tub VI. Set 19L.

September

30WRK Pd+xeolite
 30WRK Pd+CaCl₂
 30WRK Pd+CaO
 30WRK Pd+KOH
 44CVD Book, (9/28/06). Disk label: Book 9/28/06
 44CVD Washington tal +book+endnote. Disk 1 of 3. Disk label:. Book& endnote 8/26/06
 44CVD Book(9-20-06) + Endnote 1/04. Disk 2 of 3. Disk label:. Book & endnote 10/20/06
 44CVD Documents – Part 8 of 15. EndNote.spanded. Disk label: Britz*

October

30WRK Pd+SrCl₂
 30WRK Pd+Zr sheet
 44CVD Washinton 2006. Disk label: . Oct 2013. Ed & "Believers"
 50HCR “NRL TRIP, 10/06”. Scanned. Clasp envelope. Storms “Pile 2”. Miscellaneous materials. Tub VI. Set 19F.
 44CVD Book+EndNote. Disk 3 of 3. Disk label:. Pdf book 363 pages. front cover – jpg. back cover – jpg
 44CVD 091298_2150. Disk label: . The Science of the Future Began Yesterday. Fusion Fuels. New Energy News. Journal of New Energy. Full Text of Journal of New Energy,. vol 1-3, 1996-1999. Release 1.0 July 24, 1999. Release 1.1 August 24, 1999. (With 29 October corrections). Fusion Information Center. Salt Lake City, Utah
 50HCR Drafts of parts of 2007 book. Bockris correspondence. Scanned. Tub VIII. Set 22K.

November

30WRK IMRA #60
 30WRK Pd+W+Zr
 30WRK Pd#2, #4
 41SF1 OLD DATA: 2006
 44CVD Book(11-13-06). Disk 3 of 3. Disk label:. Book & endnote 8/19/06

December

30WRK Pd-B 0.75%
 44CVD Book 12/25/06. Disk label: . Book – Washington Talk. endnote 9/30/06. endnote 9/20/06. Book 10/13/06
 50HCR “Glow Discharge”, 2007. Invoices and receipts. Scanned. Clasp envelope. Storms “Pile 2”. Miscellaneous materials. Tub VI. Set 19I.

No Month (13)

10PUB

Storms, E., Comment on papers by K. Shanahan that propose to explain anomalous heat generated by cold fusion. *Thermochim. Acta*, 2006. 441(2): p. 207-209.

43ZCD

100.STORMS~4.PDF. PW

2.19 2007 Activities and Events

January

30WRK PdB#2
44CVD Pd.B NRL Study 1860808. Disk label: Pd.B NRL Study
45EHD Important Papers. 140 Files

February

30WRK Pd melted with Li20
30WRK Pd BNRL #16
44CVD APS Paper. 7/09 Backup
44CVD Science lenr0Storms-(2-27-07). Disk label: . Science of LENR. Storms (2-27-07).
manuscript

March

30WRK Mel Miles sample
41SF1 OLD DATA: 2007
41SF1 OLD DATA: Pd-B
50HCR "Glow Discharge 2007". Not Scanned.. Three volumes. From previous large
black 3-ring binders. Now bound with green plastic "ties" to reduce volume and
allow use of tub. Approximate date ranges: volume 1, 3/30/07 – 6/30/07; volume
2, 6/30/07 – 12/30/07 (not in order); volume 3, 1/7/08 – 3/1/08. Tub IV. Set 17.

April

30WRK Pd-B
41SF1 OLD DATA: Gas Discharge

May

30WRK BN coated with Cu
30WRK Cu rolled with Al2O3
30WRK Zr#1
50HCR Mixture of Various Plots. 2007-2008. Not Scanned. Princeton Gamma Tech and
others. May not be worth keeping. PGT Spectrum Reports and other materials.
Data and plots used to define following steps. Include with large black 3-ring
binders. Tub III. Set 10.

June

41SF1 OLD DATA: Optical Spectrum

August

30WRK Pt coated with Pd

October

- 50HCR “Katania Meeting” 10/07”. Scanned. Clasp envelope. Storms “Pile 2”.
Miscellaneous materials. Tub VI. Set 19H.
- 50HCR “Patent with Brian Scanlan”. 2011. Scanned. White envelope. Storms “Pile 2”.
Miscellaneous materials. Tub VI. Set 19R.
- 70LLB 8th International Workshop on Anomalies in Hydrogen/Deuterium Loaded
Metals, Cannizzaro (CT), Sicily, Italy (10/13-18/07). Book of Abstracts.
Proceedings
- 80CON ICCF-13. Dagomys, Sochi, Russia. Did not attend conference. ICCF13. Sochi,
Russia. Proceedings

November

- 44CVD Britz K3b data project. fusfiles

No Month (13)

- 10PUB Storms, E.K. The science of low energy nuclear reactions. in APS, March
Meeting. 2007. Denver, CO. p.
- 10PUB Storms, E.K., The science of low energy nuclear reaction. 2007, Singapore:
World Scientific. 312.
- 10PUB Storms, E.K. and B. Scanlan. Radiation produced by glow discharge in deuterium
(Part 1). in 8th International Workshop on Anomalies in Hydrogen / Deuterium
Loaded Metals. 2007. Catania, Sicily:
<http://www.iscmns.org/catania07/index.htm>. The International Society for
Condensed Matter Science. p. 297-305.
- 50HCR Letters to 2014 book recipients. Scanned. Also, Appendix and Summary. Storms
“Pile 2”. Miscellaneous materials. Tub VI. Set 19A.

2.20 2008 Activities and Events

January

30WRK Start of journal #7
 30WRK Cu sputter coated with Pd
 41SF1 OLD DATA: 2008

February

30WRK No cells or samples specified
 50HCR "Letters" ~2008-2018. Scanned. White envelope. Moved to Set 18,
 Correspondence. Lomax, Scanlan. Storms "Pile 2". Miscellaneous materials. Tub
 VI. Set 190.

March

30WRK No cells or samples specified
 50HCR "APS, 3/10/08". Scanned. Clasp envelope. Storms "Pile 2". Miscellaneous
 materials. Tub VI. Set 19G.
 50HCR Radiation Produced by Glow Discharge in Deuterium Containing Gas (Part 2).
 Not Scanned. 700/237. Duplicate. Tub VIII. Set 25A.

April

30WRK No cells or samples specified
 45EHD Addresses. 4 Files

May

30WRK GAS LOADING STUDY STARTED
 30WRK Sample #7-SiO₂+Pd(NO₃)₂
 30WRK Sample #8-SiO₂+PdCl₂
 30WRK CaO+0.35 wt% Pd
 30WRK G75E
 30WRK SiO₂#9d

June

30WRK CeO₂+TiO₂#1b
 30WRK SiO₂+Pd(NO₃)₂ #7
 30WRK CeO₂#2, #4

July

30WRK CeO₂+Pd(NO₃)₂
 30WRK ZrO₂+Pd(NO₃)₂
 30WRK ZrO₂
 30WRK Al₂O₃+Pd
 30WRK Al₂O₃
 30WRK CeO₂

30WRK ZrO₂+Al+S
 30WRK ZrO₂+PdCl₂+Al+S
 30WRK ZrO₂+PdCl₂
 30WRK Pd black +Al+S
 30WRK Pd#76515
 30WRK ZrO₂+Al₂O₃+CeO₂
 30WRK Al₂O₃+PdCl₂
 41SF1 OLD DATA: DAQ

August

30WRK Ag electrodeposited in SiO₂
 30WRK Ag electrodeposited using ZrO₂
 30WRK Pd-Al #3
 30WRK Pd+ZrO₂
 30WRK Pd black +ZrO₂
 30WRK Li₂CO₃
 30WRK CdO₂+Pd(NO₃)₂
 30WRK Zeolite from Grace
 50HCR PGT spectrum reports and electrolytic cell data. Not Scanned. Gas discharge experiments with Brian Scanlan. Made with “old” EDX before it failed. Includes “Gas Loading Progress Report, 10/20/09” in back. From Storms. To KivaLab. White 1 inch 3-ring binder? Tub III. Set 12B.
 10PUB, 80CON Storms, E.K. and B. Scanlan. Detection of radiation from LENR. in 14th International Conference on Condensed Matter Nuclear Science. 2008. Washington, DC: www.LENR.org. p. 261-287. PB86. ICCF14. Washington, DC, USA. Proceedings, (2 Volumes) Group Photo, Agenda & Abstract
 10PUB, 80CON Storms, E.K. The method and results using Seebeck calorimetry. in ICCF-14 International Conference on Condensed Matter Nuclear Science. 2008. Washington, DC: www.lenr.org. p. 11-25. PB88. ICCF14. Washington, DC, USA. Proceedings, (2 Volumes) Group Photo, Agenda & Abstracts
 70LLB 14th International Conference on Cold Fusion (ICCF-14), Washington DC (8/10-15/08). Proceedings. Volume 1: Exciting New Science, Potential Clean Energy. Volume 2: Exciting New Science, Potential Clean Energy. Proceedings. Group Photo. Agenda and Abstracts
 44CVD DVD_VIDEO_RECORDER. Disk label: . First Gate 2008. ICCF. Roger Stringham. ICCF 14 '08

September

30WRK Pd on graphite
 30WRK Pd on CaCO₃
 30WRK Pt plated with Pd
 30WRK Pd black mixed with boric acid
 30WRK IMRA #61

44CVD Library references – Part 2 of 2. Disk 2 of 2. Disk label:. Library References. #2
0-400

October

30WRK 3N-GFTP-set 1.1
30WRK Letts #672
30WRK Stirling silver plated with Pd
30WRK Stirling silver plated with Au
30WRK Pt heated red hot in air
Pd#1, #2

November

30WRK Letts 674, 675
30WRK Nicrom wire
30WRK Carbon paper plated with Pd
30WRK Ni ribbon plated with Pd
30WRK Pd-B
30WRK Pd+0.25%B
43ZCD 7. Austin.ppt. ZIP1. Case Study – Cold Fusion

December

30WRK Pd-B 0.5%
30WRK Pd wire rolled flat
30WRK CR39 [radiation detector]
30WRK NaOH+Pd black with Cu
30WRK Pd-B 0.75%
30WRK Zorlite (John Ruelesill)+Pd

No Month (13)

10PUB Storms, E., CASE STUDY – Cold Fusion. Unpublished Presentation. 2008.
10PUB Storms, E.K., How to explain cold fusion?, in ACS Symposium Series 998, Low-Energy Nuclear Reactions Sourcebook, J. Marwan and S.B. Krivit, Editors. 2008, American Chemical Society: Washington, DC. p. 85.
10PUB Storms, E.K. and B. Scanlan. Radiation produced by glow discharge in a deuterium containing gas (Part 2). in American Physical Society Conference. 2008. New Orleans. p.
10PUB Storms, E.K. and B. Scanlan. Radiation produced by glow discharge in a deuterium containing gas (Part 2). in American Physical Society Conference. 2008. New Orleans. p. Presentation.
10PUB Rothwell, J. and E.K. Storms, Report on Arata's paper and lecture about his "solid fusion" reactor. www.LENR-CANR.org, 2008.

2.21 2009 Activities and Events

January

30WRK Cu coated with Pd
 30WRK Letts 675, 676
 30WRK PD wite coated with silicon powder
 30WRK PD on activated carbon
 30WRK Grace catalyst on source
 41SF1 OLD DATA: 2009

February

30WRK Copper plated with Pd and Au
 50HCR "Review of Papers". ~2009-2014. Scanned. White envelope. Storms "Pile 2".
 Miscellaneous materials. Tub VI. Set 19U1.

March

30WRK Sterling silver and Pd plated with Au
 30WRK Ag#3
 30WRK Pd#1A

April

30WRK Pd+Au#3
 30WRK Pd heated in vacuum with Li
 30WRK Pd-Li
 30WRK Sample in Letts cell

May

30WRK Pt#2 plated with Pd
 30WRK Pt#3 flame heated – plated with Pd
 30WRK Pd dot1
 30WRK Pd nanoparticles smeared on copper
 30WRK Li metal wiped on Pd
 30WRK Pd solution plated on Pt
 43ZCD 104.Univ of Missouri.ppt. CD2. "An Informed Skeptic's View of Cold Fusion"

June

30WRK No cells or samples specified
 41SF1 DATA: Laser #2

July

30WRK Pt from Letts cell
 30WRK Start of Journal #8

August

30WRK No cells or samples specified

September

30WRK No cells or samples specified

30WRK October

30WRK Pure Pt

30WRK Cu plated with Pt

30WRK Cu-Pt

30WRK Pd-Ni alloy

30WRK Ni-Pd

45EHD PERSONAL BIO. 3 Files

October

41SF1 DATA: (10/25/09)

41SF1 DATA: Seebeck

50HCR EDX plots and SEM images. Not Scanned. Tub III. Set 12A.

10PUB, 80CON Storms, E.K. and B. Scanlan. Role of cluster formation in the LENR process. in 15th International Conference on Condensed Matter Nuclear Science. 2009. Rome, Italy: ENEA. p. 331-336. Presentation

70LLB 15th International Conference on Condensed Matter Nuclear Science (ICCF-15), Rome, Italy (10/5-9/09). Proceedings. Program, Abstracts, Notes

November

30WRK NI-Pd#2 plated with Pd

41SF1 DATA: 10/30/09

44CVD Gas loading 260808. Disk label: Gas Loading to 7/25/10

44CVD Read. Disk label: . ISCMNS DVD. November 2009

December

30WRK Pd and Zr-Ni

30WRK Ni-Zr-Pd

30WRK Zr-Ni+Pd(NO₃)₂

30WRK Ni-Zr

30WRK CaO mixed with Pd(NO₃)₂

30WRK LiAlO₂ mixed with Pd(NO₃)₂

30WRK SiO₂ colloidal sol + Pd(NO₃)₂

30WRK Nd₂(CO₃)₃ heated with Pd(NO₃)₂

50HCR EDX and Mass Sweep Data. Not Scanned. Nickel-hydrogen studies; includes some pictures. 2008-2012. Gas Loading, Residual Gas Analysis. As in Set 11. Loose materials stuffed into Set 12 Binder. Tub III. Set 13.

No Month (13)

- 10PUB Storms, E.K. An informed skeptic's view of cold fusion. in Vice Chancellor for Research Seminar Series: Excess Heat and Particle Tracks from Deuterium-loaded Palladium. 2009. Univ. of Missouri. p.
- 10PUB Storms, E.K. An informed skeptic's view of cold fusion. in Vice Chancellor for Research Seminar Series: Excess Heat and Particle Tracks from Deuterium-loaded Palladium. 2009. Univ. of Missouri. p. Presentation
- 10PUB Storms, E.K., What is known about cold fusion? www.LENR-CANR.org, 2009.
- 10PUB Storms, E.K. and B. Scanlan. Role of cluster formation in the LENR process. in 15th International Conference on Condensed Matter Nuclear Science. 2009. Rome, Italy: ENEA. p. 331-336.

2.22 2010 Activities and Events

January

30WRK SiO₂+Pd
 30WRK LANL Zeolite
 30WRK Omegabond
 30WRK Carbon Aerogel treated with Pd(NO₃)₂
 30WRK NRL Zeolite
 30WRK Pd(NO₃)₂+Ni(NO₃)₂
 30WRK Li₂CO₃
 30WRK SrCO₃
 41SF1 DATA: THEORY OF LENR
 44CVD ICCF15 Disk 1 (of 4). ICCF-15 Videos. DVD 1. Copied
 44CVD Not copied.. ICCF-15 Videos. DVD 2
 44CVD Not copied. ICCF-15 Videos. DVD 3
 44CVD Not copied.ICCF-15 Videos. DVD 4

February

30WRK Nb₂(NO₃)₃+Pd
 30WRK CaO+FeNdB₄+PdCl₂
 30WRK Nb₂(CO₃)₃+Pd
 30WRK BaTiO₃+Pd(NO₃)₂
 50HCR Kiva Labs: 2010. (Scanlan). Scanned.Tub VI. Set 20B2.

March

30WRK ZrO₂colloid + PdCl₂
 30WRK Magnetic Fe₂O₃ + PdCl₂
 30WRK Fe₂O₃+PdCl₂
 30WRK Fe₂O₃++Pd(NO₃)₂+Nd(NO₃)₃+Li₆
 30WRK Fe₂O₃+Pd(NO₃)₂+Nd(NO₃)₃
 30WRK Pd+Fe₂O₃
 41SF1 DATA: Seebeck design

April

30WRK Pd+Nd₃(CO₃)₂
 30WRK Nd₂(CO₃)₃+Pd(NO₃)₂)₂
 30WRK Nd₂(CO₃)₃+PdCl₂
 30WRK 5% Pd on BaSO₄+D₂
 30WRK 5% Pd on CaCO₃
 30WRK G75E
 30WRK CaO+PdCl₂
 41SF1 DATA: Letts

May

30WRK CaO+Pd+D2O
 30WRK SrTiO3+PdCl2
 30WRK BaTiO3+Pd+D2O
 30WRK Zr+Ni+Pd
 41SF1 DATA: Shanahan

June

30WRK SrTiO2
 30WRK SrTiO3 studied with D2
 30WRK SrTiO3 heated with D2O and D2
 30WRK SrTiO3 reacted with air

July

30WRK SrTiO3 heated in D2O
 30WRK BaTiO3 heated in D2O
 30WRK CaO heated in D2O
 30WRK SrTiO3 studied
 50HCR KivaLabs Progress Reports. Scanned. Tub VIII. Set 23B.

August

30WRK SrTiO3 studied
 30WRK SrTiO3+Pd+D2
 30WRK NRL Zeolyte+1%Pd+D2
 30WRK SrTiO3+PdCl2+D2O

September

30WRK No cells or samples specified

October

30WRK SrTiO3+Pd#2
 30WRK SrTiO3+Pd#3
 30WRK SrTiO3+Pd#4
 44CVD Storms-0203. Disk label: . Proceedings of the. 14th International Conference on. Condensed Matter Nuclear Science. and the. 14th International Conference on Cold Fusion (ICCF-14). Washington, DC. 10-15 August 2008
 45EHD manuals. 26 Files

November

30WRK SrTiO3+Pd#5
 44CVD (1-5-11) SrTi)3#8. Disk 3 of 3. Disk label: Backup 6/25/11
 44CVD (1-5-11) SrTi)3#8. Disk label: Old Data. No date. May be same as "Old Data" in SF files

December

30WRK SrTiO₃+Pd#6
30WRK SrTiO₃+Pd#7
30WRK SrTiO₃+Pd#8

No Month (13)

10PUB Storms, E.K. and B. Scanlan, What is real about cold fusion and what explanations are plausible?, in AIP Symposium Series, J. Marwan, Editor. 2010, Am. Inst. of Phys.

10PUB Storms, E.K., The status of cold fusion (2010). Naturwissenschaften, 2010. 97: p. 861.

10PUB Storms, E., PROGRESS REPORT, SrTiO₃+Pd #1, 9/1/10 to 10/2/10. Unpublished Report. 2010.

10PUB Storms, E.K. and T.W. Grimshaw, Judging the validity of the Fleischmann–Pons effect. J. Cond. Matter Nucl. Sci., 2010. 3: p. 9-30.

50HCR Storms' Paper and Response to Reviewer's Comments: Status of Cold Fusion (2010). Scanned. Tub VIII. Set 23Z.

50HCR Krivit on Naturwissenschaften: Commentary on Storms' "Nuclear Phenomena in Low-Energy Nuclear Reactions". Scanned. Tub VIII. Set 23R.

50HCR What Is Real about Cold Fusion and What Explanations Are Plausible? Not Scanned. 810/N, 830/503. Duplicate. Tub VIII. Set 25B.

10PUB Marwan, J., et al., A new look at low-energy nuclear reaction (lenr) research: a response to Shanahan. J. Environ. Monit., 2010.

2.23 **2011 Activities and Events**

January

30WRK BATiO₃+Pd#1
 30WRK SrTiO₃+Pd#8
 30WRK SrTiO₃+Pd#7
 30WRK SrTiO₃+Pd#9
 30WRK Pd+SiO₂

February

30WRK Pd+SiO₂-800°
 10PUB Storms, E.K. Examination of errors that occur when using a gas-filled calorimeter. in ICCF-16. 2011. Chennai, India: <http://lenr-canr.org/acrobat/StormsEexaminatio.pdf>. p.
 50HCR Studies of Cold Fusion. Scanned. 889. Tub VIII. Set 24I.
 80CON Storms, E.K. Examination of errors that occur when using a gas-filled calorimeter. in ICCF-16. 2011. Chennai, India: <http://lenr-canr.org/acrobat/StormsEexaminatio.pdf>. p. PB100. ICCF16. Chennai, India. Proceedings, Abstracts
 70LLB 16th International Conference on Condensed Matter Nuclear Science (ICCF-16), Chennai, India (2/6-11/11). Abstracts
 70LLB 16th International Conference on Condensed Matter Nuclear Science (ICCF-16), Celebrating the Centenary of the Discovery of the Atomic Nucleus, Chennai, India (2/6-11/11). Proceedings
 70LLB Wiley Encyclopedia of Energy and Technology. Volume 1: Nuclear Energy. Low-Energy Nuclear Reactions: Transmutations. (2/11). Preprint of Chapter

March

30WRK Ni+Pd(NO₃)₂
 30WRK CaO+Ni+Pd
 30WRK CaO+Ni
 30WRK *Ni

April

30WRK *Ni+
 30WRK *5%Pt
 30WRK *Cr
 41SF1 OLD DATA: Pd-Ni-Cu radiation

May

30WRK No cells or samples specified
 50HCR What Is Real about Cold Fusion and What Explanations Are Plausible? Not Scanned. 810/N, 860/546. Duplicate. Tub VIII. Set 2fD.

June

30WRK *CaO+and I (and L 3) 2
 30WRK *CaO
 30WRK *Ni(
 30WRK *NiO
 30WRK *CuO+
 30WRK *Ni(
 44CVD My Disk. Disk 1 of 3. Disk label: Backup 6/25/11
 44CVD 5/28/11. CaO + NiO. Disk 2 of 3. Disk label: Backup 6/25/11
 44CVD ORTV, Spies beneath Berlin. 22.06.11. Dup 51' 58". 16x9 FMA. Post Production.
 (without credits). CEBDS3BB3BXCZXV
 50HCR The Path toward a Plausible Theory of Cold Fusion. Scanned. 887. Tub VIII. Set
 24A.

July

30WRK *Sr
 30WRK *CaO+
 30WRK *CaO+
 30WRK *CaO
 30WRK *CaO
 30WRK *Ni(
 30WRK *Al
 30WRK *CaO
 30WRK *NaOH

August

30WRK *Ni+
 30WRK *CaO
 30WRK *CaO
 30WRK *CaO
 30WRK *CaO
 30WRK *CaO
 30WRK *Ni
 30WRK *NiC
 30WRK *CaO
 30WRK *Sucrose
 30WRK *Sucrose
 30WRK *Ni

September

30WRK *Sucrose
 30WRK *Ni
 30WRK *Ba
 30WRK *Ba

30WRK *Ba
30WRK *C

October

30WRK *Ni
30WRK *C
30WRK *C
30WRK *Ni
50HCR Mass Sweep Plots. Not Scanned. Gas Loading, Nickel-Hydrogen studies. Mass spectrometer plots. 2012. Tub III. Set 14.

November

30WRK *Ni
30WRK *Ni
30WRK *Fe
30WRK *Ni
30WRK *Ni
50HCR EDX Plots. 2010-2011. Not Scanned. Pictures, compositions. Need to relate to Lab Notebooks. White 1 inch 3-ring binder. Tub III. Set 11.

December

30WRK *Ni
30WRK *Nb
30WRK *W
30WRK *Ni
30WRK *Fe
30WRK *Ni

No Month (13)

50HCR The Fall and Rise of Cold Fusion. 885/N. Duplicate. Tub VIII. Set 25N.
10PUB Storms, E.K. and B. Scanlan, What is real about cold fusion and what explanations are plausible? J. Cond. Matter Nucl. Sci., 2011. 4: p. 17-31.
10PUB Storms, E.K., What is now known about cold fusion? (Addendum to the Student's Guide). 2011, www.lenr.org.
10PUB Storms, E., The fall and rise of cold fusion. 2011.
10PUB Srinivasan, M., G. Miley, and E.K. Storms, Low-energy nuclear reactions: Transmutations, in Nuclear Energy Encyclopedia: Science, Technology, and Applications, S. Krivit, J.H. Lehr, and T.B. Kingery, Editors. 2011, John Wiley & Sons: Hoboken, NJ. p. 503-539.

2.24 *2012 Activities and Events*

January

30WRK Ni formate
30WRK *Na
30WRK *Ni

February

30WRK *Ni
30WRK *Ni
30WRK *Ni
30WRK *Ni
30WRK *Ni
30WRK *Ni
30WRK *NiO
30WRK *Ni
30WRK *MWNT
30WRK *eBay NI
30WRK *NiO
30WRK *Cr
30WRK *Zr
50HCR Mass Sweep Plots. Not Scanned. Gas Loading, Nickel-hydrogen studies. As for Set 14. 2011-2012. Tub III. Set 15.
50HCR Mass Sweep Plots. Not Scanned. Gas Loading, Nickel-hydrogen studies. As for Set 14. 2011-2012. Loose papers. Tub III. Set 16.

March

30WRK *MWNT
30WRK *eBay
30WRK *eBay
30WRK *Ni
30WRK *NiO
30WRK *Cr
30WRK *Zr

April

30WRK *Pd#20
30WRK *10-
30WRK *Ni255

May

30WRK *Pd
30WRK *Ti
30WRK *Pd

30WRK *Pd
 30WRK *Pd
 30WRK *Pd
 41SF1 Letts Data

June

30WRK *Pd
 30WRK *Cu
 50HCR EDX Plots. Scanned. Storms "Pile 2". Miscellaneous materials. Tub VI. Set 19D.
 50HCR An Explanation of Low Energy Nuclear Reactions (Cold Fusion). Not Scanned.
 Tub VIII. Set 25O.

July

30WRK *Pd
 30WRK *Pd
 50HCR The Nature of Radiation Emitted from Nickel Exposed to Hydrogen. Scanned.
 960/761? Tub VIII. Set 24B.
 50HCR An Approach to Explaining Cold Fusion. Not Scanned. 980/767. Duplicate. Tub
 VIII. Set Tub VIII. Set 25I.
 70LLB International Low-Energy Nuclear Reactions Symposium (ILENRS-12),
 Williamsburg, Virginia (7/1-3/12). Terrestrial Nuclear Processes. Zero
 Momentum Light Element Reactors

August

30WRK *Ni
 30WRK *Pd
 30WRK *Pd
 30WRK *Ni
 30WRK *Pd
 30WRK *Pd
 30WRK *Pd
 30WRK *Cu
 30WRK *Cu
 30WRK *Cu
 50HCR A Potential Source of Perfect Energy. Scanned. 9/39. Tub VIII. Set 24J.
 80CON ICCF-17. Daejeon, South Korea. Did not attend conference.

September

30WRK *Fused Pd
 30WRK *Cu
 30WRK *Cu
 30WRK *Cu
 30WRK *Cu
 30WRK *Cu

30WRK *Cu
 30WRK *Cu
 30WRK *Cu
 30WRK *G75E
 30WRK *Cu
 30WRK *Ni
 30WRK *Ni
 30WRK *Ni
 30WRK *Ni
 30WRK *Formrex
 30WRK *Ni
 30WRK *Ni
 50HCR Cold Fusion from a Chemist's Point of View. Not Scanned. 940/1151. Duplicate. Tub VIII. Set 25Q.

October

30WRK *EBay
 30WRK *Pd
 30WRK *Ni
 30WRK *Ni
 41SF1 OLD DATA: 10/24/1
 50HCR The Role of Voids as the Location of LENR. Not Scanned. 750/761. Duplicate. Tub VIII. Set 25P.
 50HCR "NASA Contract" 2013-2014. Scanned. White envelope. Storms "Pile 2". Miscellaneous materials. Tub VI. Set 19S.

November

30WRK *Pd
 50HCR A Plausible Explanation of LENR (Cold Fusion). Scanned. 888. Tub VIII. Set 24K.
 50HCR Nature of Energetic Radiation Emitted from a Metal Exposed to H2. Not Scanned. 960/761? Duplicate. Tub VIII. Set 25C.
 50HCR Nature of Energetic Radiation Emitted from a Metal Exposed to H2. Not Scanned. Not Scanned. 960/761? Tub VIII. Set 25H.
 50HCR The Role of Voids as the Location of LENR. Not Scanned. 750/761. Duplicate. Tub VIII. Set Tub VIII. Set 26J.

December

30WRK *Pd
 30WRK *Ni
 30WRK *Ni
 30WRK *Bob Huggins
 30WRK *Ni
 30WRK *Ni

41SF1 OLD DATA: 12/7/2012
41SF1 OLD DATA: 12/7/12 (original)
50HCR Hagelstein Correspondence. Scanned. Tub VIII. Set 23T.
50HCR Sven Thatje email. Scanned. Tub VIII. Set 23V.
50HCR What Is Cold Fusion and Why Should You Care? Scanned. 935. Tub VIII. Set 24H.
50HCR What Is Cold Fusion? Why Should You Care? Not Scanned. 937/N. Duplicate. Tub VIII. Set 25G.

No Month (13)

10PUB Storms, E.K., A student's guide to cold fusion, revised. 2012: www.LENR.org.
10PUB Storms, E.K., An explanation of low-energy nuclear reactions (cold fusion). J. Cond. Matter Nucl. Sci., 2012. 9: p. 85-107.

2.25 **2013 Activities and Events**

January

50HCR A Theory of Low Energy Nuclear Reactions (Cold Fusion). Not Scanned.
Duplicate. Tub VIII. Set 25M.

July

30WRK *Various Pd samples
30WRK *Ni sheet
10PUB Storms, E.K., Explaining Cold Fusion. In 18th International Conference on
Condensed Matter Nuclear Science. 2013. Columbia, MO.
80CON Storms, E.K., 2013. Explaining Cold Fusion. In ICCF-18. Columbia, MO.
ICCF18. Columbia, MO, USA. Program, Participants, Schedule
70LLB International Conference on Cold Fusion (ICCF-18), Columbia, Missouri.
Storms' Paper: An Informed Skeptic's View of Cold Fusion (7/21-27/03).
Conference Program, Participant Roster, Program Schedule. University of
Missouri Fact Sheet.
70LLB National Security Innovation Center (7/21/13). Low-Energy Nuclear Reaction
Introductory Short Course

August

30WRK *Ni
30WRK *Dot8
41SF1 OLD DATA: Dot Ni+cu(8-29-13)

September

30WRK *Nidot3
30WRK *Nidot7
30WRK *Nidot5
30WRK *Pddot1
30WRK *Pddot#2
30WRK *Pddot#4
30WRK *Pd

October

30WRK *Pd
30WRK *Pddot7
30WRK *Pddot#3
30WRK *Ni
30WRK *Pd
44CVD MY FIRST PROJECT. Disk label: . Washington. 10/25/06

November

30WRK *Pd

30WRK *Pd

December

30WRK *Pd

30WRK *Pd

30WRK *Pd

2.26 *2014 Activities and Events*

January

30WRK *Pd
 30WRK *Ni
 50HCR “Cooper Life Sciences” 2014. Scanned. White envelope. Storms “Pile 2”.
 Miscellaneous materials. Tub VI. Set 19Q.

May

30WRK *Pd
 30WRK *Pd
 30WRK *Pd
 30WRK *NI
 41SF1 SEEBECK CALORIMETER STUDY
 50HCR Prometheus Fusion Laboratory Materials. Scanned.. Tub VIII. Set 26A.

June

30WRK *No samples specified
 41SF1 OLD DATA: Ni powder SEM
 44CVD MyDisc. Disk label:. Edmund Storms. 9883673
 44CVD My Disc. Disk label: . Explanation of LENR. June 2014
 50HCR “Infinite Energy Book Contract”. 2014. Scanned. White envelope. Storms “Pile
 2”. Miscellaneous materials. Tub VI. Set 19T.

July

30WRK *Ni
 30WRK *Ni
 30WRK *Ni
 30WRK *eBay
 50HCR LENRGY Laboratory Preparation Materials. Scanned. Tub VIII. Set 26B.

August

30WRK *Ni

September

50HCR NASA SOW and Amendment. Scanned. Storms “Pile 2”. Miscellaneous
 materials. Tub VI. Set B.

October

30WRK *No cells or samples specified
 41SF1 OLD DATA: Pd on Si disc study

November

30WRK *Si+Pd#4
30WRK *Si+Pd#2
30WRK *Si+Pd#1
30WRK *Si -Pd#3
30WRK *Si-Pd#6
30WRK *Si-PdS
30WRK *Pd
30WRK *Pd
30WRK *Ni
41SF1 OLD DATA: sputtering discharge

December

30WRK *Powder B on Pd tube
30WRK *Li
30WRK *Li
30WRK *Pd
30WRK *Pd
30WRK *Pd
30WRK *Pd
30WRK *Pd
30WRK *Pd
30WRK *Cu
30WRK *Cu

2.27 *2015 Activities and Events*

January

30WRK *Pd
 30WRK *Cu
 30WRK *Pd
 30WRK *Ni
 30WRK *Cu

February

30WRK *Ni
 30WRK *Ni
 30WRK *Ni
 30WRK *Dual laser study started
 30WRK *Pd
 41SF1 OLD DATA: Ni-Pd-Al-Li

March

30WRK *Pd
 30WRK *Pd
 30WRK *Pd
 30WRK *Pd
 50HCR Investigation of LENR for Energy Production by LENRGY Collaboration.
 Scanned. Tub VIII. Set 26C.

April

30WRK *Pd#29
 30WRK *Pd#58
 30WRK *Pd#22
 30WRK *Pd#58
 30WRK *Pd#28
 30WRK *Pd#36
 30WRK *Pd#22
 80CON ICCF-19. Padua, Italy. Did not attend conference.

May

30WRK *Pd
 30WRK *Pd
 30WRK *Pd

November

30WRK *Pd

30WRK *Pd

30WRK *Pd

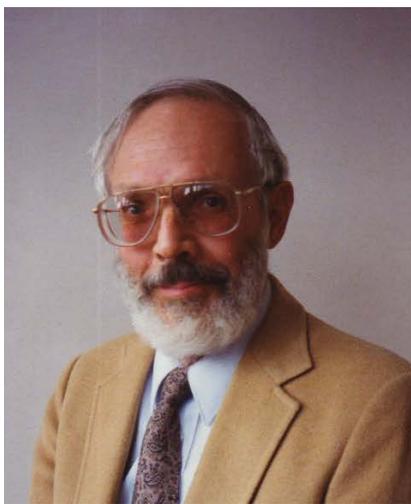
30WRK *Pd

50HCR Comment on Papers by K Shanahan that Propose to Explain Anomalous Heat Generated by Cold Fusion. Not Scanned. 690/012. Duplicate. Tub VIII. Set 25K.

50HCR Paper: "Testing Sputtered Material for Production of Radiation Generated by LENR". Scanned. Tub VIII. Set 23L.

3 **LENR Career Highlights**

The objectives of the Project – to assemble, organize, and report on Dr. Storms' LENR research – are best achieved by establishing an overall context of his career. This context includes both his research at LANL for 30+ years before the 1989 LENR announcement and his LENR research during the following 28 years up to the present. A photo of Dr. Storms that was taken in about 2000, possibly in conjunction with an interview by Eugene Mallove⁸, appears in Figure 4-1.



*Figure 4-1.
Dr. Storms in about 2000*

3.1 Pre-LENR Career at Los Alamos National Laboratory

Dr. Storms' roots are in Pennsylvania, where he received his undergraduate degree. He then went to graduate school at Washington University in St. Louis and received his PhD in radiochemistry⁹. He was employed part-time at LANL during his graduate work, and he became a permanent employee in about 1956 after completing his studies. His main research area at LANL was high-temperature materials, such as the carbides and nitrides. Two of the main efforts that he contributed to were the nuclear rocket (Rover) and nuclear reactors in space (SP-100)

⁸ Mallove, E., 2000. Interview of Edmund Storms. Storms LENR Library, CD in Envelope.

⁹ Storms, E.K., 1957. A Preliminary Study of the Effect of Temperature on High-Vacuum Electrical Conduction. Dissertation. Washington University, Department of Chemistry.

programs¹⁰. One of his major publications during this period was a book on the refractory carbides¹¹. Dr. Storms retired from LANL in 1991, but continued as a consultant until 1993. Additional information on Dr. Storms' pre-LENR research at LANL is provided in Appendix C.

3.2 *LENR Research at LANL*

LANL was one of the earliest preeminent research organizations to attempt to replicate LENR after the 1989 announcement. No fewer than eight research teams conducted different types of experiments for replication. Dr. Storms took an immediate interest in the phenomenon and began research within a few weeks. He focused initially on tritium production as a signature. With the assistance of Carol Talcott, an expert in palladium hydride chemistry (and later Dr. Storms' wife), more than 250 electrolytic cells were explored¹². Anomalous levels of tritium was observed in 13 of the 250 cells. Later at LANL, Dr. Storms conducted additional research with electrolytic cells and a calorimeter, measuring production of excess heat as the LENR signature. Figure 3-2 shows a calorimeter that was used during this research.

Dr. Storms led one of two LANL teams that had success in replicating LENR. During this time he authored or co-authored a number of papers and publications, and he gave testimony on LENR to the U.S. Congress in 1993¹³.

3.3 *Research in Private Laboratory*

After a break to build his home in Santa Fe, Dr. Storms began LENR experimental work in June 1995. This research in his home laboratory has continued up to the present day. During this timeframe, he has also made substantial contributions to explanation of the LENR phenomenon.

¹⁰ “Research at Los Alamos National Laboratory Prior to LENR Involvement”. Memo to Edmund Storms from Tom Grimshaw, September 26, 2015.

¹¹ Storms, E., 1967. *The Refractory Carbides*. New York. Academic Press.

¹² Storms, E.K., 2007. *The Science of Low Energy Nuclear Reaction: a Comprehensive Compilation of Evidence and Explanations about Cold Fusion*: Singapore, World Scientific Publishing, p. 10.

¹³ Storms, E., 1993. Statement of Dr. Edmund Storms before Congress. in *Hearing Before the Subcommittee on Energy of the Committee on Science, Space, and Technology, U. S. House of Representatives, One Hundred Third Congress, First Session*. Washington, C.D.: U.S. Government Printing Office. p. 114.



Figure 4-2.

Calorimeter Used by Dr. Storms at LANL for Early LENR Studies.

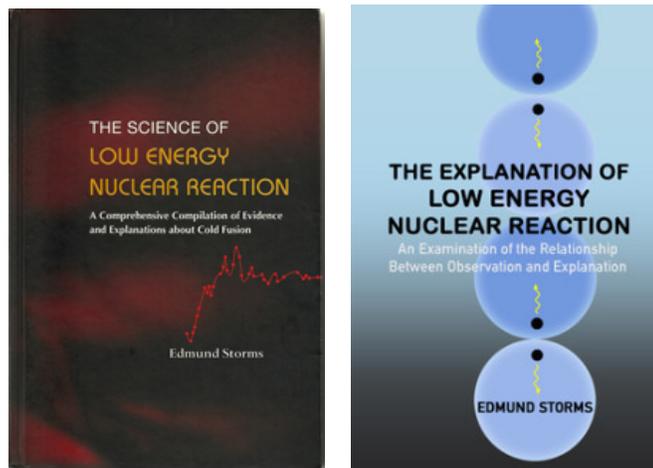
Note the Electrolytic Cell Inside the Calorimeter Near the Bottom. Photo taken April 2016.

Dr. Storms' laboratory was initially set up in the main building of his home, but was subsequently moved to the annex building, where it is currently located. Among the assets of his laboratory are a scanning electron microscope (SEM) with energy-dispersive x-ray (EDX) spectroscopy capability, mass spectrometers, and an optical microscope, as well as a complete shop for constructing experimental apparatus, including metal machining and glass working. The SEM occupies a large room in the main building.

Dr. Storms has conducted many types of LENR experiments, utilizing most of the methods for achieving the effect, including the Fleishman-Pons approach (electrolytic cells) and the gas discharge and gas loading methods. He has also designed and constructed many kinds of calorimeters for measuring excess heat. Although he has collaborated with many individuals and organizations, for the most part he has conducted his private research on an individual basis. Dr. Storms has enjoyed the support of a number of different sponsors during the years of his LENR research.

3.4 Publications and Conferences

Dr. Storms' most prominent publications are two books published in 2007¹⁴ and 2014¹⁵. (Figure 3-3). He has also documented the results of his research in other publicly-available publications and unpublished progress reports. A principal venue has been the conferences dedicated to LENR, the International Conferences on Cold Fusion (ICCFs), of which Dr. Storms attended all but three of the 18 conferences from 1990 to 2015.



*Figure 4-3.
Storms' 2007 and 2014 LENR Books.*

3.5 LENR Library

Dr. Storms has accumulated one of the best libraries of LENR publications, books, and related materials in the world. The library contains more than 5000 electronic files and at least 1700 hard-copy papers (some of which are also in the electronic file collection). The electronic files are maintained in Endnote by Dr. Storms, and copies have been incorporated in the Project folder on Dropbox. The paper copies are on bookshelves (about 30 feet of shelf space) in Dr. Storms'

¹⁴ Storms, E.K., 1997. *The Science of Low Energy Nuclear Reaction: a Comprehensive Compilation of Evidence and Explanations about Cold Fusion*: Singapore, World Scientific Publishing.

¹⁵ Storms, E.K., 2014. *The Explanation of Low Energy Nuclear Reaction: an Examination of the Relationship Between Observation and Explanation*. Concord, NH. Infinite Energy Press.

office in Santa Fe. Dr. Storms' publication collection also formed the "kernel" of an online library, LENR-CANR.org, which was started in about 2002 by Jed Rothwell and Dr. Storms¹⁶.

3.6 Professional Awards

Dr. Storms was honored (along with Michael McKubre) by Wired Magazine in 1998 as one of the 25 people in the US making a significant contribution to new ideas. As noted above, with few exceptions Dr. Storms has participated in in the ICCF conferences. In the 2005 conference he was awarded the Preparata Medal, the most prestigious award of the LENR field, by the International Society of Condensed Matter Nuclear Science (Figure 3-4). In 2013 he received a Distinguished Scientist Award from the University of Missouri for his contributions to the LENR field.



Figure 4-4.
Dr. Storms' Preparata Metal, Which He Received in 2005. Photo Taken April 2016.

¹⁶ Rothwell, J., and E. Storms, 2003. The LENR-CANR Website, Its Past and Future. Proceedings of ICCF-10, p. 939-942. August.

4 *Stage 3 Plan*

As noted in previous sections, in Stage 3 the items of information for the years of Dr. Storms' LENR research presented in Section 3 will be further interpreted. The objective is to define and describe the phases of his work based on objectives, type of research, sponsors, and other factors.

Appendix A. Project Methods

The Storms LENR Research Documentation Project (Project) began in August 2015¹⁷ when Dr. Grimshaw made his first visit for information collection. The overall objective is to collect and organize Dr. Storms' research files and make them more readily accessible. The Project covers the period from March 1989 through December 2015.

Standard project management practices were used for the Project insofar as possible. An incremental approach was used since the full scope of the research materials was not known in advance. The Project is being conducted in three stages - information collection, organization, and documentation (LENR career summary). A report is being prepared for each stage. Much of the work was done at Dr. Storms' home laboratory in Santa Fe, New Mexico. In addition to the work accomplished onsite at Dr. Storms' home lab, tasks were also performed at the Energy Institute, such as scanning of hard-copy materials and preparing Project reports. Trips were made from Austin to Santa Fe for 3 to 7 days at a time to interview Dr. Storms and collect information:

<u>Trip</u>	<u>Date</u>	<u>Trip</u>	<u>Date</u>
1	August 2015	6	February 2016
2	September 2015	7	April 2016
3	October 2015	8	August 2016
4	December 2015	9	March 2017
5	January 2016	10	Planned

During each visit to his home lab, interviews with Dr. Storms took place, and he provided electronic files from several kinds of media, including the hard disk of his current computer, floppy disks, ZIP disks, CDs, and DVDs. He also made available hard-copy files, including LENR publications by himself and other researchers, correspondence files, laboratory notebooks, printed results of experiments, and access to his LENR Library. The hard-copy files are from his office (which includes his LENR Library), his current laboratory, and a basement under his home.

¹⁷ The Project was actually initiated in the Spring 2015 ("Professional Biography Initiative: Next Step". Memo to Ed Storms from Tom Grimshaw, June 10, 2015), but substantive effort began in August.

Parts of the Stage 1 information collection are described in Rounds 1 and 2 (before or after Onsite Visit #8, August, 2016).

Organization

The Project has been organized into the Components shown below based primarily on the source of information. LENR-related conferences attended by Dr. Storms are also included, and a Component has been established for information from Dr. Storms 2007 book¹⁸.

Abbreviations been adopted for the Components in Column 1 of the individual timelines to allow ready recognition of the items (rows) in the Integrated Timeline as follows:

Publications	10PUB
Unpublished Progress Reports	20UPR
Work History	30WRK
Electronic Data Files	40EDF
Storms Computer Files (Round 1)	41SF1
Storms Computer Files (Round 2)	42SF2
ZIP and Round 1 CD Electronic Files	43ZCD
Round 2 CDs, DVD Files and VHS Tapes	44CVD
External Hard Drive Files	45EHD
3-1/2 Inch Floppy Files	46FLD
Hard Copy Records	50HCR
Research Laboratory	60RSH
LENR Library	70LLB
Conferences	80CON
2007 Book	90BOK

File Management and Storage

The electronic files have been organized and copied into a Dropbox folder set up for the Project. The hard-copy files and related materials are in a set of storage tubs in Dr. Storms' home.

The sources of the electronic files are from Dr. Storms' current computer footnote and legacy media. Electronic information has been copied into a Dropbox folder set up for the Project. The

¹⁸ Storms, E.K., 2007. The Science of Low Energy Nuclear Reaction: a Comprehensive Compilation of Evidence and Explanations about Cold Fusion: Singapore, World Scientific Publishing. Chapter 2.

organization of the folder follows the Project Stages and Components¹⁹ as shown below. The floppy disks, CDs, and other legacy media have been placed in the storage tubs as described below.

Stage 1	Stage 2
5 Stage 1 Report	5 Stage 2 Report
10 Publications	10 Publications
20 Progress Reports	20 Progress Reports
30 Work History	40 Electronic Files
40 Data Files from Storms' Computer	50 Hard Copy Files
45 Data Files from CDs & ZIP Disks	60 Research Laboratory
50 Hard Copy Records	80 Conferences
60 Research Laboratory	90 Project Management
70 LENR Library	Stage 3
90 Project Management	5 Stage 3 Report
	90 Project Management

The hard-copy files, as well as materials for other Project Components ,have been placed in hanging folders in storage tubs that are kept at Dr. Storms' home laboratory in Santa Fe. The tub contents are summarized below:

<u>Tub</u>	<u>Description</u>	<u>Sets</u>
I	Files from Basement	1-3
II	Files from Basement	4-8
III	Files from Basement	9-16
IV	Files from Basement	17
V	Files from Office	18
VI	Files from Office	19-21
VII	Retired	Sets Moved to Other Tubs
VIII	Files Added or Reorganized	22-32
IX	Lab Notebooks and 2014 Book (Preprints)	--
X	Extra Copies of LENR Magazines	--
XI	ZIP Disks, CDs, DVDs, Floppy Disks	--
XII	Filing Supplies	--

Tubs I to VIII contain the Sets of hard-copy files described for Component 50HCR.

Reporting

The two primary means of reporting were memos prepared to record progress and the reports for Stages 1, 2, and 3. The Stage 1 report was prepared as a Preliminary Draft on March 19, 2016, as

¹⁹ “Dropbox Organization and Collected Memos Volume for Storms LENR Research Documentation Project”. Memo to Edmund Storms from Tom Grimshaw, July 10, 2016.

a Draft on June 16, 2016, and as a Second Draft on April 18, 2017. A Preliminary Draft of this Stage 2 report was submitted on July 29, 2016. The Stage 3 report is in preparation.

Approximately 50 memos were prepared to document progress during Round 1 (June 2015 to June 2016) and about __ memos for Round 2 (July to __). A printed compilation of the memos has been placed in ring binders. The contents of both compilations have been scanned and placed in the Project Dropbox folder.

Appendix B. Stage 1 Summary

The records collected for Dr. Storms' LENR research during Stage 1 included both publicly-available publications and unpublished information such as laboratory notebooks, electronic data files, hard-copy files, and other materials. Information was also collected in each of the Project Components, which are described in Appendix A and in the Stage 1 report, which also includes timelines for each Component. Summaries of the Stage 1 descriptions of the Components are provided below.

B.1 Publications

Dr. Storms' principal publications are his two books, one published in 2007²⁰ and the other in 2014²¹. He also contributed to the LENR field by reporting the results of his research in publicly-available publications. About 125 papers were prepared from 1989 to 2015. PDF copies of the publications (Component 10PUB) have been placed in the Project Dropbox folder. The publications have also been assembled into "Collected Works" (three volumes) in both electronic and hard-copy form²². The PDFs of the Collected Works are also in the Dropbox folder.

B.2 Unpublished Progress Reports

During the same timeframe that he was authoring publicly-available publications, Dr. Storms was also documenting his LENR research results in unpublished internal reports. These reports were often prepared to demonstrate progress and show results to sponsors of his work. Approximately 111 documents have been found for the Project (Component 20UPR). They span a range from 1995 to 2015. A "Collected Progress Reports" (two volumes)²³ has also been prepared in electronic and hard-copy form in a similar manner to the Collected Works for the Dr.

²⁰ Storms, E.K., 2007. *The Science of Low Energy Nuclear Reaction: a Comprehensive Compilation of Evidence and Explanations about Cold Fusion*: Singapore, World Scientific Publishing.

²¹ Storms, E.K., 2014. *The Explanation of Low Energy Nuclear Reaction: an Examination of the Relationship Between Observation and Explanation*. Concord, NH. Infinite Energy Press.

²² Edmund Storms LENR Research Papers, Collected Works, 3 Volumes. April 2016.

²³ Edmund Storms LENR Research Papers, Collected Progress Reports, 2 Volumes. May 2016.

Storms' publications. The individual reports and the scans of the Collected Progress Reports are available on Dropbox.

B.3 Lab Notebooks (Work History)

As Dr. Storms performed his LENR experiments, he kept careful records in laboratory notebooks. Ten notebooks covering the period June 1995 to November 2015²⁴ have been prepared. They are listed below.

<u>No.</u>	<u>Period Covered</u>	<u>Topic</u>	<u>Notebook Description</u>
1	JUN95 – DEC96	Electrolytic Cells	Black w/ maroon trim. "Shaw's".
2	JAN97 – MAR98	Electrolytic Cells	Reddish, plain. "Blueline".
3	DEC98 – SEP01	Electrolytic Cells	Maroon, mottled. No Brand.
4	SEP01 – JAN04	Electrolytic Cells	(Case Effect). Black & white mottled. "Mead".
5	FEB04 – SEP05	Electrolytic Cells	Black. "Cambridge Executive".
6	AUG04 – JUN08	Gas Discharge	Black. "Cambridge Executive".
7	FEB08 – JUL09	Gas Loading	Blue w/ black trim. "Office Depot". "Records".
8	AUG09 – FEB14	Gas Loading	Blue-green w/ black trim. Tall vertical. "Office Depot".
9	MAY14 – MAY15	Gas Loading	Tall vertical. Dark blue. "Foray".
10	1AUG15 – 15NOV15	New Calorimeter	Black with white stripe. "Foray".

The "overlap" of notebooks 5 and 6 from August 2004 to September 2005 occurred because two different types of experiments (electrolytic cells and gas discharge) were taking place during the same timeframe.

The notebooks, also referred to as "Work History", were carefully reviewed by Dr. Storms from August 2015 to January 2016. During this review, he summarized the lab activities as one-line entries in a spreadsheet. The resulting file has more than 2750 lines in the file. The spreadsheet (Component 30WRK) has been placed in the Project Dropbox folder. The lab notebooks are in the storage tubs.

B.4 Electronic Data Files

As Dr. Storms performed LENR experiments and made entries in the lab notebooks, the data generated were recorded in electronic files. These files were obtained from Dr. Storms' computer and from legacy media located in his office (Component 40EDF). In addition to experimental

²⁴ Dr. Storms has continued to perform experiments and record the results in lab notebooks since November 2015, but the cutoff date for this part of the Project has been set at that time.

data, these files include published papers, progress reports, copies of emails, photos of lab equipment and experimental setups, and other files related to LENR research. The electronic files have been copied into the Project Dropbox folder. The files obtained from Dr. Storms' computer and various legacy media are described in six subcomponents below.

B.4.1 Storms Computer, Round 1 (41SF!)

Dr. Storms provided files from his current computer during both Round 1 and Round 2 of Stage

1. The files obtained in Round 1 are in five folders:

- OLD DATA
- DATA
- Letts Data
- SEEBECK CALORIMETER STUDY
- Study using new calorimeter

B.4.2 Storms Computer, Round 2 (42FS2)

The files added to the Project by Dr. Storms from his computer in Round 2 include the following folders:

- (4/17, 29-16)
- 9/7/15 A
- Current Science_files
- ICCF-19
- Reports (gas discharge)
- SEEBECK CALORIMETER STUDY
- Study using new calorimeter

The folders “SEEBECK CALORIMETER STUDY” and “ Study using new calorimeter” appear to be the same as the folder in 41SF1.

B.4.3 ZIP Disks and CDs (Round 1) (43ZCD)

The ZIP disks and first set of CDs were obtained for the Project in Round 1. The files are in two sets of media (4 ZIP disks and 6 CDs). The files have been grouped by the source ZIP disk or CD as shown below.

- ZIP Disk Z1 PD Study
- ZIP Disk Z2 Work in Progress
- ZIP Disk Z3 ZIP 100

- ZIP Disk Z4 Carol
- Round 1 CD1 (No Name)
- Round 1 CD2 Documents 1/3/04
- Round 1 CD3 Documents – Part 12 of 15
- Round 1 CD4 SEM Data
- Round 1 CD5 My Disk
- Round 1 CD6 My Disk

B.4.4 CDs (Round 2), DVDs, and VHS Tapes (44CVD)

The LENR-related CDs, DVDs, and VHS tapes in this subcomponent are in eight sets:

- CV1 Storms Generated LENR Research Files (18 CDs)
- CV2 Storms 2007 Book, Cold Fusion References, Etc. (29 CDs)
- CV3 ICCF Conferences, Cold Fusion Movies, Etc. (18 CDs)
- CV4 Miscellaneous Cold Fusion Related Topics (4 CDs)
- CV5 Application Software Discs (6 CDs)
- CV6 DVDs from LENR Library (13 DVDs)
- CV7 CDs Containing SEM Images (3 CDs)
- CV8 VHS Tapes (6)

B.4.5 External Hard Drive (45EHD)

This subcomponent includes files from a LaCie 8900 external hard drive. The folders are shown below.

- | | |
|------------------------|-----------------------------|
| - Addresses | - manuals |
| - Archive ARTICLES | - MILEY DATA |
| - Archive, GENERAL | - Pd STUDY |
| - CAROL (Selected) | - PERSONAL BIO |
| - Case Study | - Photo ion detector |
| - CURRENT ARTICLES | - PICTURES |
| - Ed's stuff | - Pt 2004 |
| - Ed's Website | - Pt Dot 3 |
| - EndNote | - Pt Dot 4 |
| - High Temp Data set | - Pt-Pd(10-16-05) |
| - ICCF-11 | - Recent data |
| - Important Papers | - RGA application |
| - Ken Wolf Commodities | - Seebeck converter#1 |
| - LENR CD Partial | - SEM scans of Case samples |
| - LENR site | - WORK IN PROGRESS |
| - Lenr-canr | |

B.4.6 Floppy Disks (46 FLD)

Another subcomponent of electronic files is from two sets of 3 1/2-inch floppy disks, one from various locations in Dr. Storms' office and the other from a carousel designed for discs of this size. The labels and files of the disks from the carousel are shown below.

- FLD1	1d to now	Pd #1d to now
- FLD 2	Calibration	Calibration Test #1-22
- FLD3	calorimeter	Calorimeter drawings, calorimeter graphs
- FLD4	calorimeter data	excell, calibration, Pt Test #1-19 + Summary
- FLD5	CF data	cold fusion data folder, 1991 Tritium Production
- FLD6	CF text archives	Cold Fusion Text archives, 10
- FLD7	Cold Fusion Letters	1989 - 1993
- FLD8	Cold fusion talk	<i>Cold Fusion talk</i>
- FLD9	J#4	2/29 – 9/5
- FLD10	J#4-2	J#4, 3/29 – graphs & summary
- FLD11	Papers	Effect of Hydriding – Paper & data, Electrolytic Tritium – Paper & data
- FLD12	papers2	28 th Intersociety CANR-Paper, ICCF-4, Minsk conf., Review-1991, Electrolytic heat
- FLD13	Pd #24-12c	Excell data, Pd #24 to 12c, Excess volume
- FLD14	Pd charging #1-10	Excell data, Pd charging Pd #1 - #10
- FLD15	Progress	Cold Fusion, Progress & emos & proposal
- FLD16	Star C	Star C*Cold Fusion Text Archives
- FLD17	Talks	Various CF Talks
- FLD18	tritium study	Tritium Data

The contents of the disks from the office are shown below.

- FLD19	Cold Fusion	Cold Fusion, archives data
- FLD20	backup	Physical Study, Data Index 1990
- FLD21	Hypervard	Backup
- FLD22	Letters	Cold Fusion Letters, 1984-patterson data
- FLD23	21 Century	Cold Fusion, An Outcast of Science, E. Storms 9/97, 97401 DC _001, Mac disc, FullWrite, Text only, MacWrite 5.0. II
- FLD24	LABS PROPOSAL	→Ed Storms, from Steve Jones PROPOSAL, LABS
- FLD25	storms	What ever happened to Cold Fusion? Edmund Storms, Mac disc, 98463 MMH001
- FLD26	(Not readable)	How to produce P-F effect, FP Award, When to listen, ICCF-4 photocopy

B.5 Hard Copy Records

The hard-copy files are from Dr. Storms' office and a storage area in his basement. The files, which include materials from his early LENR research at LANL, have been organized into 32

Sets and have been placed in storage tubs with hanging folders. The Sets and their sources as well as their locations in the storage tubs are listed below.

<u>Set</u>	<u>Source</u>	<u>Tub</u>
1 – 3	Basement	I
4 – 8	Basement	II
9 – 16	Basement	III
17	Basement	IV
18	Storms' Office	V
19 – 21	Storms' Office	VI
None	Retired; Files Moved to Other Sets	VII
22 – 32	Files Added or Reorganized	VIII

An inventory of the files indicates that there are approximately 100 items in the 32 Sets. However, many of the items include a number of individual components. A principal objective of the Project is to make the research records as accessible as possible. An effort has therefore been initiated to scan the hard copy files into electronic (PDF) form. Because of the large volume of the files, they are being scanned on a prioritized basis. The PDF files have been copied into the Project Dropbox folder.

B.6 Research Laboratory

Dr. Storms has developed a sophisticated operation for LENR experiments in his home laboratory in Santa Fe. He has conducted experiments using almost all methods for achieving the LENR effect, including the electrolytic, gas loading, gas discharge, and other methods. The lab consists of a flexible apparatus for preparing samples and performing experiments as well as a sophisticated scanning electron microscope (SEM).

B.7 LENR Library

During his long research career, Dr. Storms accumulated one of the best libraries of LENR publications, books, and related materials in the world. The library is located in Dr. Storms' office. The library consists of electronic files (5000 LENR papers and similar items), hard-copy papers (at least 1700 papers, some of which are also in the electronic file collection), and over 120 books and similar items. The electronic files are maintained in Endnote by Dr. Storms. The hard-copy papers are on the bookshelves (about 30 feet of shelf space).

The books, which are on four bookshelves adjacent to the hard-copy papers, include conference proceedings, books on LENR, journals (Infinite Energy, 21st Century Science & Technology, Journal of Fusion Technology), and other paper copies of LENR materials. Particularly noteworthy in this collection is an almost complete set of materials obtained by Dr. Storms during his attendance at most of the International Conferences on Cold Fusion (ICCFs). This is one of the most complete collections of these materials available, as they are not routinely obtained and stored by mainstream libraries. These materials are described in the next section.

B.8 Conferences

Dr. Storms attended all but three of the ICCF from 1990 to 2013 as shown below. He gave presentations and prepared papers at most of the conferences, and he collected the abstracts, proceedings, and related materials has placed them in his LENR Library as noted above.

<u>ICCF#</u>	<u>Year</u>	<u>Location</u>
1	1990	Salt Lake City, Utah
2	1991	Como, Italy (Storms did not attend)
3	1992	Nagoya, Japan
4	1993	Lahaina, Hawaii
5	1995	Monte Carlo, Monaco
6	1996	Hokkaido, Japan
7	1998	Vancouver, British Columbia
8	2000	Lerici, Italy
9	2002	Beijing, China (Storms did not attend)
10	2003	Cambridge, Massachusetts
11	2004	Marseilles, France
12	2005	Yokohama, Japan
13	2007	Dagomys, Sochi, Russia
14	2008	Washington, DC
15	2000	Rome, Italy
16	2011	Chennai, India
17	2012	Daejeon, South Korea (Storms did not attend)
18	2013	Columbia, Missouri

B.9 Timelines of Project Components

Timelines were developed in Stage 1 for the Project Components and Subcomponents. They were prepared with a consistent format of six columns as shown below:

- Component (Comp)
- Number (No)
- Year
- Month (Mon)
- Item or Event
- Notes

This uniform format was established so that the timelines could readily combined and sorted for the Integrated Timeline in Stage 2. To provide additional context, a timeline was added that is derived from Dr. Storms 2007 book²⁵.

²⁵ Storms, E.K., 2007. The Science of Low Energy Nuclear Reaction: a Comprehensive Compilation of Evidence and Explanations about Cold Fusion: Singapore, World Scientific Publishing. Chapter 2.

Appendix C. Pre-LENR Research at Los Alamos National Laboratory

Dr. Storms' research at LANL was primarily in high temperature materials, such as the carbides and nitrides. He authored or contributed to many LANL reports as well as U.S. patents (Table C-1). One of his major publications was a book on the refractory carbides²⁶.

Table C-1. Storms Publications and Contributions at LANL

- Storms, E.K., 1959. The variation of lattice parameter with carbon content of niobium carbide. LANL Report LADC-3755
- Pretzel, F. E., 1960. Properties of lithium hydride. I, Single crystals. Contributions by E.K. Storms. LANL Report LA-DC-4356.
- Kempton, C. P., 1960. Lattice dimensions of NbC as a function of stoichiometry. Contributions by E.K. Storms. LANL Report LADC-4478
- Storms, E.K., 1962. Critical review of refractories. Part 1. Selected properties of group 4a, -5a, and -6a carbides. LANL Report LAMS-2674.
- Storms, E.K., 1962. Critical review of refractories. Part 2, Selected properties of group 4a, -5a, and -6a nitrides. LANL Report LAMS-2674-pt.2
- Storms, E.K., 1964. A critical review of refractories. LANL Report LA-2942
- Sandenaw, T.A., 1965. Heat capacities of NbC_[0.702], NbC_[0.825], NbC_[0.980] and Nb_[2]C below 320°. Contributions by E.K. Storms. LANL Report LA-3331.
- Storms, E.K., 1967. The refractory carbides. LANL Library TA418.26.R43x v.2
- Storms, E.K., 1968. Uranium--carbon and plutonium--carbon systems. LANL Report LA-DC-9724.
- Storms, E.K., 1982. An analytical representation of the thermal conductivity and electrical resistivity of UC_{1±x}, PuC_{1x}, and (U_yPu_{1-y})C_{1±x}. LANL Report LA-9524.
- Holley, C. E., 1984. The actinide carbides. Contributions by E.K. Storms. LANL Library QD172.A3 C45 pt. 6.
- Clark, W.M., 1988. Liquid metal ion source and alloy. Contributions by E.K. Storms. US PATENT 4,775,818.
- Clark, W.M., 1987. Liquid metal ion source and alloy for ion emission of multiple ionic species. Contributions by E.K. Storms. . US PATENT 4,670,685
- Storms, E.K., 1992. Behavior of ZrC_(1-x) and U_(y)Zr_(1-y)C_(1-x) in flowing hydrogen at very high tem. LANL Report LA-12043-MS
- Bozack, M J., 1999. Enhanced-wetting, boron-based liquid-metal ion source and method. Contributions by E.K. Storms. US PATENT 5,871,848.

Dr. Storms contributed to high-temperature materials aspects of the Rover program, whose objective was to develop a nuclear thermal rocket. The program ran at LANL from 1955 to 1972 and had three phases – Kiwi, Phoebus, and Pewee²⁷ (Figure C-1). It involved NASA and the

²⁶ Storms, E., 1967, The Refractory Carbides. New York. Academic Press.

²⁷ Fishbine, B, et al., 2011. Nuclear Rockets: To Mars and Beyond. Los Alamos National Laboratory, National Security Science, Space Science Special Edition. Online. Available: <https://www.lanl.gov/science/NSS/issues/NSS-Issue1-2011.pdf>.

Atomic Energy Commission and was managed by the Space Nuclear Propulsion Office of the Executive Branch.



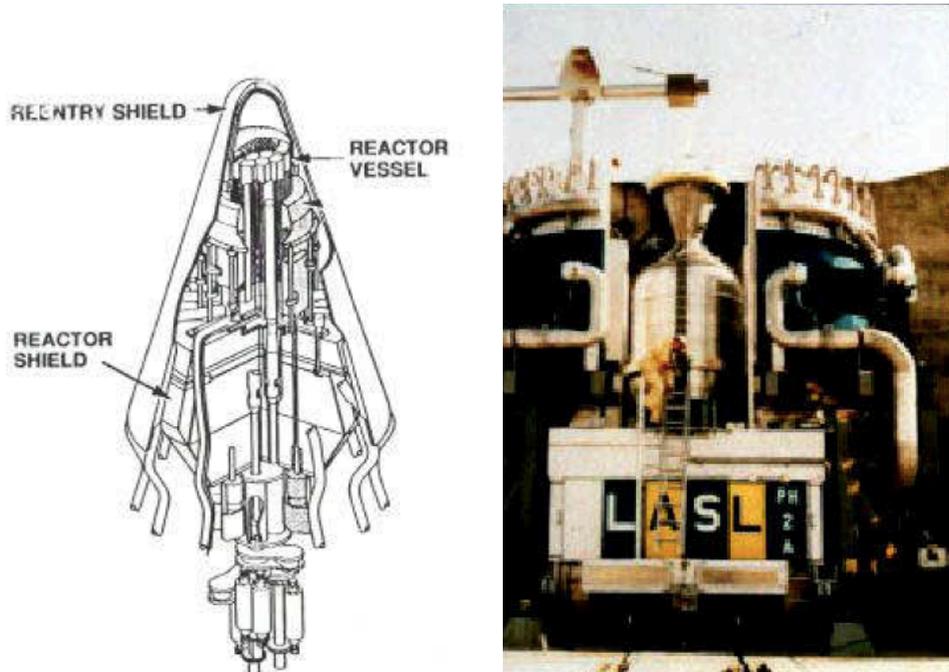
Figure C-1.
Nuclear Rocket Test Equipment from LANL's Rover Program.
The equipment from the first phase (Kiwi) is on the left. Equipment from the second phase (Phoebus) is on the right.

Subsequently, Dr. Storms participated in LANL's efforts to develop nuclear reactors for use in space, the SP-100 (for Space Power 100 kWE) program²⁸ (Figure C-2). The program originated in the 1980s as a space-based power supply for Star Wars weapons. Later it evolved into a flexible design capable of space-based, lunar-based, and Mars-based power applications. It continued until the early 1990s.

The advanced research in refractory materials is evident in the two programs. The Rover design, for example, utilized nuclear reactors that had a solid cores. The high temperatures of operation (over 4300°F) of the solid core reactors required the use of refractory materials with very high

²⁸ DeMuth, S., and M. Parker, 2000. SP-100 Space Reactor Pictorial Design Introduction, Rev. 0. Los Alamos National Laboratory Report LA-KUR-00-6011, December. Online. Available: https://www.researchgate.net/profile/Scott_Demuth/publication/283292466_SP100_Space_Reactor_Pictorial_Design_Introduction/links/5630fa5e08ae13bc6c354d2a.pdf?inViewer=0&pdfJsDownload=0&origin=publication_detail.

melting points. The refractory materials were used to protect the reactors from corrosion caused by very high temperature hydrogen that was used for propulsion.



*Figure C-2.
Cross-Section Diagram and Test Unit Photo of the SP-100 Nuclear Reactor Device*

